TECHNICAL SESSION 4

Riding the crypto wave

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Overview

This technical paper is not intended to be a comprehensive guide to the taxation issues relating to digital assets. The law impacting on the use of blockchain technology, cryptocurrency and other digital assets continues to develop with the evolving nature of the underlying technology. This paper aims to provide a background on the development of cryptocurrency and digital assets, an insight into the basics of blockchain technology, an overview of the taxation and regulation of cryptocurrency and digital assets in Australia.

The views expressed in this paper are those of the author and should not be construed as the provision of taxation or financial advice.

Introduction

Cryptocurrency is a digital currency built on a blockchain technology that only exists online. Cryptocurrency was first introduced in 2008 by a computer programmer, or computer programmers, known by the pseudonym Satoshi Nakamoto. In 2014 another cryptocurrency was introduced, Ethereum. Ethereum not only providing a cryptocurrency alternative to Bitcoin, but also alternative advanced distributed ledger technology enabling applications known as 'smart contracts' to run on the Ethereum blockchain. The Ethereum network continues to be the main blockchain network for smart contracts, non-fungible tokens and decentralised finance platforms.

The rapid adoption of cryptocurrency, non-fungible tokens and decentralised finance by Australians, and the commitment of the Federal government to developing Australia's role in the digital space means tax practitioners must have at least a basic understanding of the underlying technology and the tax (and other) issues that arise as a result.

Historical development – the basics of Bitcoin and Blockchain

In 2008, a computer programmer, or computer programmers, known by the pseudonym Satoshi Nakamoto, released a white paper titled 'Bitcoin: A Peer-to-Peer Electronic Cash System'. Satoshi Nakamoto's paper set out a proposal for a peer-to-peer electronic cash system that would allow payments to be made directly from one party to another, without the need for a financial institution intermediary. Satoshi Nakamoto proposed an electronic payment system based on cryptographic proof, rather than a trusted third party, would provide a solution to double spending.

The introduction of an electronic coin (Bitcoin) as a chain of digital signatures would provide time-stamped, immutable, computational proof of a chronological order of transactions. The digital signatures forming the chain each requiring verification of a transaction by multiple nodes on a network using a proof-of-work system.

Blockchain technology – the basics

Blockchain technology plays a crucial role in cryptocurrency and digital asset systems. A blockchain is essentially a distributed ledger database shared between multiple anonymous 'nodes' on a network. Blockchain is decentralised in that nodes can exist in multiple jurisdictions at any time and once a transaction is verified, the same information exists on each node or computer in the network providing what is essentially a 'single source of truth'.

Cryptocurrencies use a system of cryptography to facilitate peer to peer transactions. The system allocates a unique cryptographic code to both a person's public key and private key. The public key allows a person to communicate or publicise their 'address' which enables them to transact with another person on the blockchain. To transact with cryptocurrency, the person digitally 'signs' a transaction with their private key and then broadcasts the transaction on the network. The proof of work system attaches a 'hash' style cryptographic code to the transaction which, once broadcast on the network, 'miners' use their computational power to

accept, authenticate and solve what is essentially a complex mathematical puzzle.[1] Once verified, transactions are grouped into a block with each new block is 'chained' to the previous block in chronological order, forming an ongoing immutable chain of data. Records are only added to the blockchain with the consensus of independent nodes using a consensus mechanism (of which there are many).[2] The decentralised nature of blockchain means the data entered on the chain is immutable (except in very limited circumstances) meaning transactions are permanently recorded, and publicly available and cannot be reversed.

The original 'proof of work' system requires a substantial amount of computational power and with it, energy. It currently takes around 600 seconds to mint a new bitcoin and the annual power used by the bitcoin network is greater than that of some small countries.[3]

The newer 'proof of stake' system uses a consensus mechanism of validating transactions on blockchain and securing the ledger. Proof of stake reduces the computational power required to verify transactions on the blockchain which may address the energy issues faced by the traditional 'proof of work' system. The 'proof of stake' system verifies transactions using the machines of coin owners. Coin owners who 'stake' their coins become eligible to be the validators of transactions on the network.

While blockchain technology was introduced in 2008, the use of the technology continues to develop at a rapid rate. Arguable, the full potential of the technology is yet to be realised both from an alternative currency and financial transaction perspective, but also the potential

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[1] Marina Koulouri-Fyrigou, 'Blockchain Technology: An Interconnected Legal Framework for an Interconnected System' (2018) 9 Case Western Reserve Journal of Law, Technology and the Internet 2.

[2] Nathan Fulmer, 'Exploring the Legal Issues of Blockchain Applications' (2018) 52(1) Akron Law Review 161; Australian Government, Department of Industry, Science, Energy and Resources; 'The National Blockchain Roadmap: Progressing towards a blockchain-empowered future. (2020) ('National Blockchain Roadmap').

[3] Eugene Kim, Bitcoin mining consumes 0.5% of all electricity used globally and 7 times Google's total usage, new report says (Web Page 7 September 2021) <https://www.businessinsider.com/bitcoin-mining-electricity-usage-more-than-google-2021-9#:~:text=Bitcoin%20mining%20consumes%20around%2091,from%20just%20five%20years%20ago.>

application to non-financial transactions such as self-executing smart contracts,[4] anti-counterfeiting mechanisms[5] and the use by land registries in the management of land and real estate transactions.[6]

Taxation and regulation in Australia

Currently there are no specific provisions under *Income Tax Assessment Act 1997* (ITAA 1997) that deal with the taxation of cryptocurrency and or digital assets in Australia. In Australia cryptocurrency is typically taxed both as a capital asset and as ordinary income. The ultimate tax consequences however, determined by reference to the underlying cryptocurrency or digital asset transaction, the intention and/or use by the taxpayer and any rights or obligations attached to the cryptocurrency or digital asset.

The rapid development of cryptocurrencies and digital assets and emergence of new blockchain applications post the launch of the Ethereum network in 2015 means there is a lack of both practical guidance on the application of Australian taxation law to cryptocurrency and digital asset transactions and relevant Australian case law.

In 2014 the ATO issued four Taxation Determinations each dealing with a separate but common taxation issue associated with bitcoin transactions including foreign currency,[7]

[4] Sebastian Peyrott, 'An Introduction to Ethereum and Smart Contracts' (Web Page, accessed 27 March 2022) <https://auth0.com/resources/ebooks/intro-to-ethereum?utm_content=dynamicresources&gclid=EAIaIQobChMIq8q8h53l9gIVbJNmAh00agNREAAYASAAEgKZlfD_BwE>.

[5] 'Get Real: Preventing Counterfeit Product with Blockchain' The National Law Review Volume XII, Number 86, 13 October 2021.

[6] Curtin University, Blockchain Research and Development Lab, 'Research Report: Land Registry Blockchain' <https://research.curtin.edu.au/businesslaw/wp-content/uploads/sites/5/2019/10/Land-Registry-Blockchain.pdf>.

[7] TD 2014/25 – Income tax: is bitcoin a 'foreign currency' for the purposes of Division 775 of the Income Tax Assessment Act 1997?

capital gains tax (CGT),[8] trading stock, [9] and fringe benefits tax (FBT).[10] And in 2021, the ATO updated their website to include guidance on the ATO's view on the taxation of non-fungible tokens (NFT's), however the guidance is limited, and the examples provided [11] do not necessarily capture the typical use of NFT's or the impact of the various rights attached.

There is currently no ATO public guidance on the taxation implications arising from Decentralised Finance (DeFi) transactions.

ATO Data matching

The ATO cryptocurrency data matching program has been in place since April 2019,[12]enabling the ATO to obtain data relating to cryptocurrency trades starting from the 2014-15 year from cryptocurrency designated service providers (DSP's). Notice of the extension of the data matching program to include 2020-21 and 2021-22 data was published by way of a notice in the Federal Register of Legislation gazette on 09 June 2021.[13]

The ATO identifies cryptocurrency designated service providers by using a principles-based approach including the following:

- The data owner and or its subsidiary operates a business in Australia, or through a permanent establishment of the provider in Australia and the business is governed by Australian law

[8] TD 2014/26 – Income tax: is bitcoin a 'CGT asset' for the purposes of subsection 108-5(1) of the Income Tax Assessment Act 1997?
[9] TD 2014/27 – Income tax: is bitcoin trading stock for the purposes of subsection 70-10(1) of the Income Tax Assessment Act 1997?
[10] TD 2014/28 – Fringe benefits tax: is the provision of bitcoin by an employer to an employee in respect of their employment a property fringe benefit for the purposes of subsection 136(1) of the Fringe Benefits Tax Assessment Act 1986?
[11] As at the date of writing this paper.
[12] Australian Taxation Office, Cryptocurrency 2014-15 to 2022-23 data-matching protocol (Web Page accessed 25 March 2022) <https://www.ato.gov.au/General/Gen/Cryptocurrency-2014-15-to-2022-23-data-matching-program-protocol/>.
[13] Gazette notice: Commissioner of Taxation – Notice of a data-matching program.

- The data owner operates a cryptocurrency designated service that proves a platform for individuals and businesses to buy/sell/trade/exchange cryptocurrency assets.

- The data owner operated the service in the years subject to the data matching program

Digital currency exchange providers (DCE's) are currently regulated under the *Corporations Act 2001*, *Anti-Money Laundering and Counter-Terrorism Financing Act 2006* (AML/CTF) and AUSTRAC. In 2017, a definition of a digital currency 'designated service provider' was inserted into the AML/CTF by way of the *Anti-Money Laundering and Counter-Terrorism Financing Amendment Act 2017*. The definition pursuant to item 50A of section 6 of the AML/CTF includes the provision of a designated service of:

> *'…exchanging digital currency for money (whether Australian or not) or exchanging money (whether Australian or not) for digital currency, where the exchange is provided in the course of carrying on a digital currency exchange business.'*

It is not clear from either the ATO data matching principles or the definition of a 'digital currency designated service' pursuant to the AML/CTF whether advanced digital asset transactions (including certain transactions on decentralised finance platforms or NFT's) are captured under the data matching program. It is also unclear the extent of the ATO data collection powers where Australian taxpayers use a DSP/DCE or decentralised finance platform governed in a foreign jurisdiction for cryptocurrency trades or digital asset transactions.

Capital Gains Tax – Meaning of CGT Asset

Section 108-5 of the *Income Tax Assessment Act 1997* (ITAA 1997) contains the exhaustive definition of a "CGT asset" in contrast to its predecessor. Specifically, it provides:

> ***CGT assets***
>
> *(1) A CGT asset is:*

(a) any kind of property; or

(b) a legal or equitable right that is not property.

(2) To avoid doubt, these are CGT assets :

(a) part of, or an interest in, an asset referred to in subsection (1);

(b) goodwill or an interest in it;

(c) an interest in an asset of a partnership;

(d) an interest in a partnership that is not covered by paragraph (c).

Note 1: Examples of CGT assets are:

- *land and buildings;*
- *shares in a company and units in a unit trust;*
- *options;*
- *debts owed to you;*
- *a right to enforce a contractual obligation;*
- *foreign currency.*

Note 2: An asset is not a CGT asset if the asset was last acquired before 26 June 1992 and was not an asset for the purposes of former Part IIIA of the Income Tax Assessment Act 1936 : see section 108-5 of the Income Tax (Transitional Provisions) Act 1997 .

The first element of the definition is that a CGT asset is "any kind of property" which is further extended by the second element to include any "legal or equitable right that is not property"; therefore, the meaning of "property" is fundamental to the CGT provisions.

"Property" is not defined within ITAA 1997 and therefore, the term's takes on its ordinary meaning. It is apparent across various definitions of the term that concepts of ownership or possession, in addition to assignability or alienability underpin its meaning. Definitions of 'property' include:

1. **Cambridge Dictionary**: a thing or things owned by someone; a possession or possessions; and

2. **The shorter Oxford English Dictionary**: The condition of being owned by or belonging to some person or persons; hence, the fact of owning a thing; the holding of something as one's own; the right (i.e., the exclusive right) to the possession, use or disposal of anything; ownership, proprietorship.

Case law provides further definitions of the term 'property'. Cases referenced over time have applied the term to general law, as well as in the context in niche areas of Australian statutory concepts; most of which are derived from English common law.

In *McCaughey v. Commissioner of Stamp Duties*[14], the definition of property was expanded, denoting that property includes both the object of the proprietary right or the proprietary rights themselves. It was stated that proprietary rights may exist in relation to physical objects as well as to intangibles such as debts and patent rights. In *Yanner v Eaton*[15] the High Court provided extensive analysis of what is 'property' and considered the issue of the nature of the relationship of proprietary interests. At paragraph 17, the Full Court said:

> *"…."property" does not refer to a thing; it is a description of a legal relationship with a thing. It refers to a degree of power that is recognised in law as power permissibly exercised over the thing. The concept of "property" may be elusive. Usually it is treated as a "bundle of rights".*

Each separate piece of property consists of a bundle of proprietary rights relating to a particular object, including rights of administration and rights of enjoyment. The totality of these rights may be vested in a single person or may be divided among a number of persons, as for example when they are shared by several who together own them all, jointly or in common.

[14] (1914) 18 CLR 475.
[15] (1999) 202 CLR 351.

Is cryptocurrency property?

The underlying nature of the distributed ledger technology that supports cryptocurrency and digital assets raises the question of whether cryptocurrency is 'property' for the purposes of not only taxation law, but also insolvency law, succession law and family law. In the absence of judicial guidance, determining what are the rights underlying cryptocurrency and digital assets (if they exist) and whether those rights constitute a 'thing' that might be the object of property rights presents a challenge.[16]

The answer to the question of whether the rights underlying cryptocurrency and digital assets may be found by applying the Ainsworth test. The Ainsworth test, or more specifically the question of whether a right could give rise to an interest in property was considered in *R v Toohey; Ex Parte Meneling Station Pty Ltd*[17] where Mason J quoted Lord Wilberforce in *National Provincial Bank Ltd v Ainsworth*.[18]

> *"Before a right or an interest can be admitted into the category of property, or of a right affecting property, 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."*

The Ainsworth test, whilst not the only definition applied by academics and judicial officers when considering the issue 'what is property', sets out four requirements for a property interest. The 4 requirements include:

1. Identifiable subject matter
2. Identifiable by third parties
3. Capable of assumption by third parties

[16] Lyria Bennett Moses, 'The Applicability of Property Law in New Contexts: From Cells to Cyberspace', Sydney Law Review Vol 30:639.
[17] (1982) 158 CLR 327 at [27].
[18] *National Provincial Bank Ltd v Ainsworth* (1965) AC 1175 at pp 1247-1248.

4. Some degree of permanence or stability

Noting, assignability is not an essential characteristic of a property interest.[19]

Whilst there is a lack of Australian judicial guidance on the question of whether cryptocurrency or digital assets are property for Australian tax purposes, the issue has been considered in a number of cases in comparative foreign jurisdictions. In determining the key issue of whether cryptocurrency was property, the Ainsworth test was applied in *B2C2 Ltd v Quoine Pte Ltd* [2019] 4 SLR 17 (*Quoine)* with the parties agreeing that whilst cryptocurrency did not take the form of property in the traditional sense, it fell within the general definition of property. Thorley J at 142 said:

> "*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."*

The issue was not explored further by the parties in the subsequent appeal to the Singapore High Court as the parties each agreed cryptocurrency was property.[20]

The issue of whether cryptocurrency satisfied the definition of property was considered recently in the New Zealand (NZ) High Court case of *David Ian Ruscoe and Malcolm Russell Moore v Cryptopia Limited (In Liquidation)* [2020] NZHC 728 (*Ruscoe v Cryptopia)*.[21] The NZ High Court judgement in *Ruscoe v Cryptopia* provides an extensive analysis of the question '*What is "property"'* in the context of cryptocurrency, this involved consideration of the existing authorities, including consideration of the Singaporean *Quione* decision discussed above and the English High Court decision in *AA v Persons Unknown*.[22]

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[19] *R v Toohey; Ex Parte Meneling Station Pty Ltd* (1982) 158 CLR 327 [29].

[20] *Quoine Pte Ltd v BC2 Ltd* [2019] SGHC (1) 03.

[21] *David Ian Ruscoe and Malcolm Russell Moore v Cryptopia Limited (In Liquidation)* [2020] NZHC 728 (*Ruscoe v Cryptopia).*

[22] *Ruscoe v Cryptopia* [50]-[133].

In *AA v Persons Unknown*[23]the UK High Court determined cryptocurrency was property under English law. In finding cryptocurrency was property under English law the court recognised the difficulties in treating cryptocurrency as a form of property, notably because they are neither a chose in possession or a chose in action.[24] In *AA v Persons Unknown* the UK High Court said cryptocurrency meet the four criteria set out in Lord Wilberforce's classic definition of property which is known as the 'Ainsworth test'.[25]

In *Ruscoe v Cryptopia*, Glendall J before applying the four requirements under the Ainsworth test said "*…I need to say at the outset that I am satisfied the criteria for Lord Wilberforce's definition of "property" are clearly met in this case."*[26] Justice Glendall's analysis of the application of the Ainsworth test are summarised below:

1. **Identifiable subject matter** – the unique string of characters allocated to an accountholders public key are readily identifiable.[27]

2. **Identifiable by third parties** – satisfied by the existence of the private key which is allocated only to the account holder and both the public and private key is required in order to make a transaction with a particular cryptocurrency.[28]

3. **Capable of assumption by third parties** – satisfied on the basis cryptocurrencies can be and are the subject of active trading markets.[29]

4. **Some degree of permanence or stability** – satisfied on the basis the blockchain methodology deployed by cryptocurrency assists in giving stability to the digital asset. The entire life history of the cryptocoin is available in the public recordkeeping of the blockchain network.[30]

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[23] [2021] EWHC 2529 (QB)
[24] Ibid [55].
[25]Ibid [59].
[26] *Ruscoe v Cryptopia* [102].
[27] Ibid [111].
[28] Ibid [112].
[29] Ibid [116].
[30] Ibid [118].

Whilst the issue of whether cryptocurrency is property for the purposes of section 108-5 ITAA 1997 remains untested by Australian courts, the judicial authority discussed above provides some direction and is consistent with the ATO view expressed in Taxation Determination TD 2014/26.

The ATO view

TD 2014/26 outlines the ATO's view on cryptocurrency as a CGT asset for the purposes of subsection 108-5(1) of the ITAA 1997. In TD 2014/26 the ATO take the view the following factors are relevant to determine the relationship between cryptocurrency and property:

a. the object or thing, bitcoin, being the digital representation of value constituted by three interconnected pieces of information; and

b. the bundle of rights ascribed to a person with access to the bitcoin under the Bitcoin software and by the community of Bitcoin users.[31]

In arriving at its conclusion that cryptocurrency holding rights are proprietary in nature, it is noted that the most compelling factor is that bitcoins and other cryptocurrencies are valuable, transferable items of property by a community of users and merchants. There is an active market for trade in bitcoins and substantial amounts of money can change hands between transferors and transferees of bitcoins.

The ATO also take the view the disposal of Bitcoin to a third party will usually give rise to CGT event A1 and as such taxpayers will be assessed on any capital gains that arises. It must be noted however, that even if cryptocurrency is "property" the treatment of digital asset transactions for Australian taxation purposes will be dependent on a number of factors including the method of acquisition and or disposal of the digital asset, the intent of the

[31] Taxation Determination TD 2014/26, 'Income tax: is bitcoin a 'CGT asset' for the purposes of subsection 108-5(1) of the Income Tax Assessment Act 1997?' at 8.

taxpayer, the use of the cryptocurrency by the taxpayer and the rights (if any) attached to the cryptocurrency or digital asset. The taxation treatment will also be dependent on whether the taxpayer is carrying on a business or merely investing in a capital asset.

Personal use asset

The ATO take the view that cryptocurrency will rarely be a personal use asset.[32] The ATO have expressed the view to be a personal use asset the asset must provide an individual with a 'source of pleasure or relate directly to that individual.[33] The ATO have also expressed the view that where an individual keeps cryptocurrency for a period of time with the intention of selling the asset (or part of an asset) at an opportune time based on favourable rates of exchange, this will not be personal use.[34] In TD 2014/26 the ATO take the view that Bitcoin kept or used mainly to make purchases of items for personal use or consumption ordinarily will be kept or used mainly for personal use, however in practice, there are very few occasions where taxpayers have obtained favourable PBR's with that outcome. A key factor in the ATO view cryptocurrency is not a private use asset because the inherent nature of the digital asset means it is generally used as a means of exchanging it for something of value or keeping it as a speculative investment.[35] Another relevant factor being whether the taxpayer is required to convert the cryptocurrency to fiat currency (e.g., Australian dollars) to acquire the items for personal use or consumption.

Section 108-20 ITAA 1997 provides that personal use assets are CGT assets, other than collectables, that are used or kept mainly for the personal use or enjoyment of you or your associates. Section 108-20(2)(b) ITAA 1997 provides an option or right to acquire a CGT asset of that kind is also a personal use asset. The CGT provisions were originally enacted under the

[32] Australian Taxation Office, 'Tax treatment of crypto-currencies in Australia specifically bitcoin – Transacting with cryptocurrency' (Web page accessed 26 March 2022) <https://www.ato.gov.au/general/gen/tax-treatment-of-crypto-currencies-in-australia---specifically-bitcoin/?page=2#Transacting_with_cryptocurrency>.
[33] PBR 5010060075585 dated 28 June 2019.
[34] Ibid.
[35] TD 2014/26.

Income Tax Assessment Act 1936 (ITAA 1936), personal use assets included clothing, white goods, furniture, sporting equipment, cameras, and boats. Society and technology have developed significantly since the CGT provisions were first enacted, and what constitutes a personal use asset in 2022 is very different to that in 1936. The development of advanced and unique applications and platforms including play to earn (PTE) games, NFT's and crypto games requires careful analysis of the facts and circumstances of each case to determine if the digital asset satisfies the criteria to be considered a personal use asset. The specific manner in which these applications function and, the rights that may be attached require careful and considered analysis of the inherent rights attached to the particular digital asset, the use and the intent of the taxpayer to determine whether or not it is a personal use asset for the purposes of section 108-20 ITAA 1997.

The question of whether cryptocurrency itself can be a personal use asset may be enlivened with the announcement by the ANZ bank on 24 March 2022 that it has minted its own stable coin, A$DC which is linked to the Australian dollar.[36] The stable coin which is backed by Australian currency been used to send $30 million from family office Victor Smorgon Group to Melbourne based crypto asset manager Zerocap using the Ethereum network.[37] The landmark issue of the stable coin raises the question as to whether A$DC will become a mainstream alternative for bank customers to fiat currency bank accounts.

[36] James Eyers, 'ANZ the first bank to mint an Australian dollar stablecoin, the A$DC' (Financial Review, 24 March 2022) <https://www.afr.com/companies/financial-services/anz-the-first-bank-to-mint-an-australian-dollar-stablecoin-the-a-dc-20220323-p5a743>.

[37] (Web page accessed 27 March 2022) <https://stockhead.com.au/cryptocurrency/anzs-adc-stablecoin-believed-to-first-ever-issued-by-a-bank/>

Taxation of Cryptocurrency and Digital assets – Common scenarios

This paper will now consider some of the common applications of cryptocurrency and digital assets and the potential taxation consequences that may arise from transactions. As the various methods of transacting with cryptocurrency and digital assets are extensive, this paper is limited to a high-level overview of carrying on a business versus investment and common transactions including staking rewards, initial coin offerings, airdrops, decentralised finance (DeFi) transactions and non-fungible tokens.

Transacting with Cryptocurrency

The ATO take the view a CGT event will occur when a taxpayer disposes of cryptocurrency or other digital assets. Common examples include:

- Sale or trade of cryptocurrency
- Use of cryptocurrency to acquire goods and or services
- Exchange of one cryptocurrency for another cryptocurrency or to acquire a digital asset such as an NFT
- Conversion of cryptocurrency to fiat currency (e.g., Australian dollars, US dollars)
- The disposal of cryptocurrency assets obtained as staking rewards or via airdrops or chain splits
- Transfer of cryptocurrency under a Family Court order or Will
- Loss or theft of cryptocurrency

If the disposal is made in the ordinary course of carrying on a business any profits made on disposal will be treated as ordinary income and not a capital gain.

Carrying on a business or Investment

Whether or not a taxpayer is carrying on a business or investing in cryptocurrency and or digital assets will be dependent on a number of factors and the individual facts and

circumstances of the case. The criteria set out in Taxation Ruling TR 97/11[38] have been applied in several Private Binding Ruling applications involving cryptocurrency with the ATO considering:

- The existence of a profit-making purpose
- Whether the taxpayer had more than a mere intention to engage in business
- The existence of an intention to make a profit or a genuine belief a profit would be made
- The size, scale and permanency of activities
- The repetition and regularity of the activities
- Whether the activities were carried out in a systematic and organised manner
- Whether the activities could be better described as a hobby, form of recreation or sporting activity.

In PBR 1051901680634 the taxpayer was working in a business run with their spouse. The taxpayer ceased working in the business temporarily and commenced trading in cryptocurrency. The taxpayers trading activities were funded by way of trust distributions, the only equipment they used was a laptop and the only records they maintained were those issued by the trading account provider. The taxpayer had an intention to profit and had previous experience in banking and finance, however the ATO took the view they were not carrying on a business and any gain or loss from cryptocurrency trading should be returned on capital account.

In contrast, in PBR 1051762426252 the ATO took the view the taxpayer was carrying on a business of cryptocurrency trading. The key differences in the facts and circumstances being the taxpayer in PBR 1051762426252 was trading extensively, both in volume and value and they spent between 40-60 hours per week conducting trading activities, analysis and research. The taxpayer also used expert analytics and software that had functionality to automatically scan and compare prices on different cryptocurrency exchanges. The taxpayer also conducted their activities in a dedicated room in their home.

[38] TR 97/11 Income tax: am I carrying on a business of primary production.

Whilst PBR's are specific to the taxpayer and cannot be relied on by the public, they do provide valuable insight into the way the ATO applies the law to different factual scenarios. A comparison of the circumstances in the PBR's discussed above demonstrate that just because an activity happens regularly and the taxpayer has an intention to profit, does not necessarily mean there are sufficient indicators the taxpayer is carrying on a business of cryptocurrency trading and as such, able to return gains and losses on revenue account.

Non-Fungible Tokens (NFT's)

NFT's are just what their name indicates – non-fungible. In the context of cryptocurrency and digital assets, cryptocurrency (e.g., Bitcoin, Ethereum, Binance coin) is fungible, NFT's are non-fungible in that despite being part of the Ethereum blockchain, they have unique identifying codes that makes them finite in supply. The technology underpinning NFT's is commonly being used to create digital assets that represent real-world objects such as artwork, music, videos, digital avatars, GIF's, collectibles, and in-game items. NFT's are also being used to represent digital assets in the meta verse such as land or say, a digital 'pass' to attend an exclusive virtual online party hosted by a celebrity.[39]

NFT's may be one of a kind (e.g., only one is minted) or part of a limited run (e.g., only 100 minted). NFT's may have rights attached included including rights to online communities, a right to exclusive reproduction of the artwork the NFT represents or provide NFT owners access to special membership deals (e.g., sporting paraphernalia, access to exclusive events etc).[40] Some NFT's will have a price floor set by the NFT community, meaning NFT's cannot be sold (or purchased) below a community agreed floor price. NFT's may also provide owners with exclusive rights to airdrops of new crypto coins associated with the NF 'community' or to

[39] Kylie Logan, 'Snoop Dogg is developing a Snoopverse, and someone just bought a property in his virtual world for almost $500,000.' (Web page, 10 December 2021) <https://fortune.com/2021/12/09/snoop-dogg-rapper-metaverse-snoopverse/>.

[40] 'The importance of community in the NFT space' (Web page accessed 26 March 2022) <https://iso.500px.com/the-importance-of-community-in-the-nft-space/>.

contribute to the decision making within an associated decentralised autonomous organisation (DAO).[41]

As an example, the Bored Ape Yacht Club (BAYC) is a collection of 10,000 limited edition NFT's and a status symbol popular with celebrities, athletes and venture capitalists.[42] The token doubles as both the limited edition NFT digital artwork and membership to the BAYC.[43] In March 2022 the ApeCoin DAO launched a new digital token, ApeCoin. BAYC NFT owners were among the recipients of the ApeCoin launch (15%) and received their respective interest by way of airdrop. The ApeCoin token providing token holders with a right to participate in the ApeCoin DAO.

As can be seen by the rights attached to BAYC NFT's, the question arises as to whether the NFT is a personal use asset where the intent is to access membership of a private community, or whether the underlying intention is to hold the NFT as an investment in the hope it can be sold at a profit in the future. Arguably there is little to no value in the digital artwork representing the NFT itself as the artwork can easily be found online and downloaded to personal devices by a simple right click with a mouse. Whilst there may be inherent intellectual property rights that prevent the commercial use or reproduction of the digital artwork, the ability of the general public to view the artwork is generally not prevented.

As an alternative example, a new NFT collection was launched in March 2022, 'The List: Australia's Richest'. The NFT's are digital artworks created by illustrator Rebel Challenger and were launched to raise funds for the St Vincent de Paul Society's Flood Appeal. Each NFT represents a digital representation of one of Australia's richest individuals and includes NFT's

[41] Taylor Locke, 'Bored Ape Yacht Club just dropped an 'ApeCoin' token to its NFT holders. Some made tens of thousands of dollars in hours' (Web page 18 March 2022) <https://fortune.com/2022/03/17/nft-bored-ape-yacht-club-dropped-token/>.
[42] Hannah Miller, 'Bored Ape's New ApeCoin Puts NFT's Power Problem on Display' (Web Page 19 March 2022) <https://www.bloomberg.com/news/articles/2022-03-19/nft-bored-ape-yacht-club-s-apecoin-benefits-backers-like-andreessen-horowtz>.
[43] https://boredapeyachtclub.com/#/.

representing Kerry Stokes, Lindsay Fox, Gina Reinhart and Andrew Forrest.[44] The rights attached to the NFT's are extremely limited, with owners limited to *"…displaying the work digitally in a personal, non-commercial environment, on one screen only*" with no rights to edit, use the NFT as a digital identifier, to communicate the work to the public or to commercialise the work. Given the limited rights attached to the NFT's it may be arguable the NFT is a personal use asset or a collectable for Australian taxation purposes. Ultimately, the taxation treatment determined by consideration of the individual facts and circumstances of the NFT owner.

NFT's acquired to use as in-game items, however, are likely to fall within the category of personal use assets, particularly where they are acquired by an online game player to expend within the gaming platform. Again, the taxation treatment will be dependent on a number of factors including whether the NFT is in fact expended, or whether the value is able to be increased due to the way it is used in the 'game' and if it is able to be exchanged either for cryptocurrency or into fiat currency.

Where the NFT artist retains a right to a commission on the subsequent sale or commercial use of the NFT, the commission is likely to be treated in the artists hands as ordinary income.[45] Where the commission is received in cryptocurrency as opposed to fiat currency, the income required to be returned by the Artist would be the determined with reference to the market value of the commission received (e.g., calculated as a percentage of the AUD equivalent of the NFT sale price). Depending on how the Artist holds the cryptocurrency received the subsequent disposal of the asset representing the commission may be returned on either revenue or capital account.[46]

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[44] 'The List: Australia's Richest' <https://opensea.io/collection/the-list-australias-richest-nfts?__cf_chl_tk=dFBeAL_zfoo_5arsmuA_hFwpXcI71hERnqOlFiMTw3E-1648295724-0-gaNycGzNCv0>.

[45] Australian Taxation Office, 'Tax Treatment of non-fungible tokens: Income tax treatment of non-fungible tokens' (web page accessed 26 March 2022) <https://www.ato.gov.au/Individuals/Investments-and-assets/In-detail/Cryptocurrencies/Tax-treatment-of-non-fungible-tokens/>.

[46] Ibid.

The ATO updated their web guidance on NFT's in July 2021, however the examples provided are very basic and do not necessarily reflect how NFT are commonly being used.[47] What is key however, is that in determining the Australian taxation consequences, taxpayers and their advisers must turn their mind to questions including:

- Was the NFT acquired as an investment asset or as part of carrying on a business?
- Were there any rights attached to the NFT and if so what are they?
- Are there any limitations on the use and or subsequent sale of the NFT?
- Did the NFT holder receive any rewards as a direct result of owning the NFT? If so, what were they and what were the circumstances in which they were received? (i.e., did they have to do anything in order to receive the reward?)

Initial Coin Offerings

Initial coin offerings (ICO) operate in a way similar to how an initial public offering (IPO) operates for shares. An ICO is the first time a particular crypto asset is available to the public and are sometimes used as a way to generate funding for a separate project inherently associated with the cryptocurrency issued under the ICO.

The rights associated with the token or cryptocurrency issued under the ICO may typically be found in the crypto asset 'white paper'.[48] ICO's are not limited to the issue of new cryptocurrency, they may also involve a financial product such as a managed investment scheme, derivatives, securities or non-cash payment facilities.[49] The nature of the crypto asset obtained under the ICO will ultimately be determined with reference to the rights which are attached to the crypto asset. Where the rights attached to the crypto asset are similar to those attached to a share (e.g., voting rights, ownership rights, other decision-making rights)

[47] Ibid see examples.
[48] ASIC, Digital Transformation 'Crypto-assets' (Web page accessed 27 March 2022) <https://asic.gov.au/regulatory-resources/digital-transformation/crypto-assets/#part-c>.
[49] Ibid.

the crypto asset is likely to be a security or a share.[50] In contrast, where the funds raised by the ICO are pooled and crypto asset holders are entitled to a proportionate share of a return of profit linked, but the crypto asset holder has not rights to contribute to the decision making or control of the scheme offered under the ICO, the crypto asset is more likely to have the form of managed funds.[51]

From an Australian taxation perspective, where the issuer of the ICO is an Australian tax resident or has sufficient nexus with Australia the proceeds from the ICO may be required to be returned as assessable income. For investors in crypto assets, the underlying crypto asset is likely to be a CGT asset and any gain or loss on disposal returned as a capital gain or loss.[52] Where the individual or entity that acquires the crypto asset is carrying on a business of trading in crypto assets, the crypto asset acquired under the ICO is likely to be considered trading stock for the purposes of subsection 70-10(1) ITAA 1997.[53]

Airdrops

Airdrops are essentially the release or 'drop' of new tokens to existing token holders of a particular crypto asset. The ATO take the view the market value of an established token received through an airdrop is ordinary income in the hands of the recipient at the time it is derived.[54] The subsequent disposal of the crypto asset being subject to either the trading stock provisions or a CGT event, dependent on the how the crypto asset was held. The acquisition cost or 'cost base' of the crypto asset acquired generally determined with

[50] Ibid.
[51] Ibid.
[52] TD 2014/26 – Income tax: is bitcoin a 'CGT Asset' for the purposes of subsection 108-5(1) of the Income Tax Assessment Act 1997.
[53] TD 2014/27 Income tax: is bitcoin trading stock for the purposes of subsection 70-10(1) of the Income Tax Assessment Act 1997.
[54] Australian Taxation Office, Tax treatment of crypto-currencies in Australia specifically bitcoin – Transacting with cryptocurrency (Web Page accessed 27 March 2022) <https://www.ato.gov.au/general/gen/tax-treatment-of-crypto-currencies-in-australia---specifically->bitcoin/?anchor=Transactingwithcryptocurrency#Stakingrewardsandairdrops>.

reference to the market value of the asset at the time it was received.[55] Determining the market value of the crypto asset received may prove challenging, particularly where the airdrop is of a newly minted crypto asset, where the crypto asset has rights attached (e.g., right to influence decision making in a DAO) or where there are disposal restrictions where the crypto asset or token received cannot be disposed until certain milestones are satisfied (and these conditions are built into crypto asset similar to a self-executing smart contract).

The takeaway for taxpayers and advisers is that determining the taxation consequences of crypto assets received by way of an airdrop are not straight forward and will required consideration of the facts and circumstances specific to each case.

Staking Rewards

Staking is essentially a way of earning a reward for holding a certain cryptocurrency. In cryptocurrency terms, staking is where the cryptocurrency network allows 'proof of stake' as a verification method as opposed to the original 'proof of work' system introduced with Bitcoin. In more simple terms 'proof of stake' uses the power of existing coins to verify transactions on the blockchain, whereas 'proof of work' uses a substantial amount of computational power. Proof of stake is more environmentally friendly as it uses less power. As 'proof of stake' requires coins to generate rewards for verifying transactions (the reward set by the blockchain network). Staking rewards enable cryptocurrency owners to allow a 'staking pool' to use their cryptocurrency for a set return, similar to interest on a bank account.

As the beneficial ownership of the cryptocurrency remains with the owner, a CGT event does not occur when the cryptocurrency is 'staked'. The resulting return, which is based on an agreed percentage is recognised by the ATO as ordinary in the hands of the cryptocurrency owner. Depending on how the owner holds the cryptocurrency received, as a staking reward the subsequent disposal of the asset representing the staking reward may be returned on either revenue or capital account.

[55] Section 116-30 ITAA 1997.

Like airdrops, staking rewards may be subject to restrictive disposal conditions, and this may impact on the market value of the crypto asset received as a staking reward. Where taxpayers are staking their crypto assets across multiple platforms, additional enquiry may be required to determine if any of the staking rewards received are subject to any trading restrictions, or if other rights are obtained with the staking rewards (e.g., voting power in a DAO) and if this impacts on the market value of the crypto asset at the time of receipt.

Decentralised Finance (DeFi)

Decentralised finance (DeFi) is a term used to describe platforms akin to traditional financial services that run on distributed ledger technology (mainly Ethereum). DeFi platforms can offer a decentralised service exchange that provides services such as lending, borrowing, saving, derivatives and contracts for exchange.

DeFi lending platforms can facilitate lending between borrowers and lenders without a central regulated intermediary. How the lending is facilitated may vary from platform to platform however as an example, on the DeFi Saver platform which hosts a select few DeFi apps, a cryptocurrency owner can 'lend' their cryptocurrency to a 'borrower' and as security for the exchange, they are provided with a 'token'. From an Australian taxation perspective, if there has been a disposal of both the legal and beneficial ownership of the underlying cryptocurrency asset, and a right to enforce repayment obtained by receipt of a separate security 'token' arguably a CGT event arises on the disposal, with the cost base of the 'token' received being equal to the market value of the cryptocurrency 'lent' to the borrower. The return received by the lender similar to interest, and in some cases will be classified as 'interest' on the DeFi platform.

Difficulties arise in determining the Australian taxation consequences of transactions performed on a DeFi platform where the financial products and services offered are not clearly relatable to a traditional financial product. Essentially this means that taxpayers and their advisers must look at each transaction that has taken place on the DeFi platform and identify

the nature of the rights, whether or not there has been a change in the legal and beneficial ownership[56] of the cryptocurrency and where a digital asset such as a token has been received in exchange, the circumstances surrounding the provision of that token, any obligations or rights attached and its market value. The ATO may take the view income returned on the cryptocurrency 'loan' will be ordinary income in the hands of the taxpayer 'lender', however there is no clear guidance from the ATO as to whether this is their preferred approach, or how the return should be disclosed in taxpayer income tax returns.

Loss of crypto assets

The rapid development of blockchain technology and cryptocurrency, the initial anonymity associated with distributed ledger technology and the lack of a centralised regulator has provided opportunity for fraud and scams.

Similarly, the unique code attached to a crypto asset holders public and private key can present a challenge for recovery of crypto assets where passwords are lost, crypto assets are transferred to the wrong wallet, a wallet is corrupted and the crypto assets not recoverable.

The Australian taxation consequences arising from the loss of crypto assets will be dependent on the individual facts and circumstances of each case and determining if the crypto asset is in fact unrecoverable may present a challenge.

Where a taxpayer has traded or exchanged crypto assets on a DSP/DCE, triggered a CGT event, but is unable to recover the crypto assets either by way of transfer to a wallet or another DSP/DCE or conversion to fiat currency because the DSP/DCE is involved in a scam or other fraudulent activity, section 116-60 ITAA 1997 may apply to reduce any capital gain equal to the amount misappropriated.[57]

[56] CGT Event A1 requires a change in both legal and beneficial ownership, *Ellison v Sandini Pty Ltd* [2018] FCAC 44.
[57] PBR 1051882521018.

An alternate view is that contractual rights are acquired on entering into an arrangement with the DSP/DCE and the contractual rights are CGT assets for the purposes of section 108-5(1)(b) ITAA 1997.[58] Where the taxpayer makes multiple attempts to get the DSP/DCE to perform their obligations under the contract (i.e., to return the investment either in crypto or fiat currency) and the DSP/DCE makes no attempt to comply, it may be able to be inferred from the conduct of the parties the contract has been abandoned.[59] Where the contract has been abandoned, CGT event C2[60] may occur and the taxpayer may be entitled to a capital loss equal to the value of the investment lost.

Ultimately, the Australian taxation consequences where crypto assets are lost or diminished as the result of a fraud or scam will be dependent on the individual facts and circumstances of each case and will be dependent on a number of factors. Where litigation is on foot to recover crypto assets held by a DSP/DCE an impacted taxpayer may not be able to claim a capital loss until such time the litigation is finalised, and the extent of any loss determined.

Wash Sales

In June 2022 ATO issued a media statement warning taxpayers not to engage in 'asset wash sales.' The media release stating that where a taxpayer disposed of cryptocurrency just before the end of the financial year, and after a short period of time after, reacquires the same or substantially similar assets, this may indicate a 'wash sale'.[61] The ATO further stating, where a taxpayer disposes of and reacquires an a asset for the deliberate purpose of realising a capital gains loss with the intent of obtaining an 'unfair' tax benefit, the ATO may deny the capital gains loss.[62]

There is currently no published ATO guidance that considers the ability of taxpayers to claim losses on a revenue basis (where the taxpayer has profit making intent but is not carrying on

[58] PBR 1051893989711.
[59] Ibid; *Fitzgerald v Masters* (1956) 95 CLR 420 at 432.
[60] Section 104-25 ITAA 1997.
[61] https://www.ato.gov.au/Media-centre/Media-releases/Wash-sales--The-ATO-is-cleaning-up-dirty-laundry/
[62] Ibid.

a business) consistent with the *Myer Emporium*[63] principle and the decision in *Greig v Commissioner of Taxation* [2020] FCAFC 25 ('*Greig*'). There is also no published ATO guidance that considers the potential application of Part IVA ITAA 1936 or TR 2008/1[64] to cryptocurrency trades. Noting, the ATO guidance on the taxation of cryptocurrency issued in 2014 has not been updated to reflect advancements in blockchain technology and the advanced ways in which the technology is now used, or to take into account the Full Federal Court decision in *Greig*.

In TR 2008/1 the ATO characterise a 'wash sale' as "...the disposition of an asset [that] occurs without an intention of ceasing to hold an economic exposure to the asset". Cryptocurrency, whilst widely accepted as property for CGT purposes, cryptocurrency differs to traditional securities such as shares and units. Cryptocurrency's property characteristics are connected to the private and public keys required to make a transaction, the stability and permanency of the underlying blockchain technology and the fact cryptocurrency can be traded either directly between parties or on a public trading platform for value.

These unique characteristics, combined with the lack of regulation and volatility of cryptocurrency trading markets makes the way holders of cryptocurrency 'trade' or 'exchange' cryptocurrency holdings very different to traditional securities. This raises the question of whether a holder of cryptocurrency can even have an 'economic exposure' to the underlying cryptocurrency 'asset'. The volatility in cryptocurrency markets combined with the ability to make short term gains from real time, rapid trades of large volume more likely to be a driver of taxpayer behaviour than an intention to hold any form of traditional 'ownership' in an underlying 'asset'.

The ATO may face a real challenge if they seek to apply Part IVA, in particular section 177F(1) ITAA 1936, to cancel the benefit of losses incurred on cryptocurrency trades. Part IVA requires the Commissioner to make a that the transactions entered into by the taxpayer were a 'scheme' to 'obtain a tax benefit'. The volatility of cryptocurrency markets is a feature that arguably contributes to an increase in the frequency of circumstances where cryptocurrency

[63] *Federal Commissioner of Taxation v Myer Emporium Ltd* (1987) 163 CLR 199 ('Myer Emporium').
[64] Australian Taxation Office, Taxation Ruling TR 2008/1 Income tax: application of Part IVA of the Income Tax Assessment Act 1936 to 'wash sale' arrangements.

holders trade in real time with an intention of maximising short term increases in value of cryptocurrency assets by selling when the market is high and 'buying the dip'. It may be arguable that taxpayer behaviour driven by an intention to make short term profits from market volatility is more likely to be connected with a profit-making intention (as opposed to investment purposes), and not a scheme with a tax avoidance purpose.

The taxation of cryptocurrency is not straightforward, and practitioners are cautioned against applying a 'one size fits all' approach to clients. The taxation treatment of cryptocurrency and digital assets will be highly dependent on the intention of the taxpayer, the way the cryptocurrency has been used/traded/exchanged and the contemporaneous evidence held by the taxpayer.

Self Managed Superannuation Fund ('SMSF') – Cryptocurrency

Key issues associated with cryptocurrency and digital assets and SMSF's include (but are not limited to) the SMSF investment strategy, the sole purpose test, collectables and personal use assets and record keeping and TASA[65] compliance.

Trust Deed and Investment Strategy

The starting point when addressing the question of whether an SMSF can invest in cryptocurrency and or digital assets is the arguably the Trust Deed ('Deed'). Where an SMSF Trustee wishes to acquire cryptocurrency and or other digital assets in the fund, legal advice may be required on whether the Deed permits the Trustee to invest in such assets. If the Deed does not permit the Trustee to invest in cryptocurrency and or other digital assets, the Deed may need to be varied.

If the Deed does permit the Trustee to invest in cryptocurrency and or other digital assets, the Trustee must update the SMSF investment strategy to provide for investment in such assets.[66]

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[65] *Tax Agent Services Act* 2009 (TASA) section 30-10 Code of Conduct.

[66] *Superannuation Industry (Supervision) Act 1993* (Cth) ('SISA'), section 31(1); *Superannuation Industry (Supervision) Regulations 1994* ('SISR'), regulation 4.09.

It is not sufficient the Trustee merely specify an investment range for this class of investment, the Trustee must have regard to the whole of the circumstances of the fund including (but not limited to):

- The risk involved in making, holding and realising investments, including any likely return
- The composition of the SMSF's investments as a whole and the risks from inadequate diversification
- The liquidity of investments, having regard to cash flow requirements; and
- The ability of the SMSF to discharge existing and prospective liabilities.[67]

The wild volatility of cryptocurrency which has been amplified in recent months, highlights the risk involved in cryptocurrency and the reality, cryptocurrency investments can collapse in the matter of hours.[68] To illustrate, the value of TerraUSD 'stable coin' which was purported to be backed by US fiat currency, plunged dramatically in May 2022, triggering the equivalent of a crypto 'bank run' on digital exchange platforms.[69] In response, some digital exchange platforms placed temporary restrictions on TerraUSD holders from exchanging the investment either for another crypto asset or to fiat currency.

The lack of regulation of cryptocurrency markets and digital exchange platforms on a global basis, combined with the absence of any real barriers to access may increase risk of scams and fraud. To add to the risk, holding SMSF crypto investments on a third party DCE, may also increase risk of loss where the DCE itself faces liquidity issues due to market volatility and is forced into liquidation or administration.[70] An alternative may be for SMSF trustees to hold SMSF cryptocurrency investments in a custodial wallet.

[67] SISR regulation 4.09.

[68] See the collapse of supposed stable coin TerraUSD in May 2022.

[69] David Chau, ''Evil genius' may have caused Terra and Luna cryptocurrencies to crash in a 'death spiral'', Forbes (Web Page, 13 May 2022).

[70] Martyn Ziegler, 'Fans face big cryptocurrency losses after platform goes into liquidation', The Sunday Times (Web Page, 26 January 2022); Hamza Shaban, 'Crypto broker Voyager Digital files for bankruptcy as industry falters', The Washington Post (Web Page, 6 July 2022).

Sole Purpose Test

The sole purpose test found in section 62 SISA, provides in broad terms that investments of the fund are maintained for the sole purpose of providing benefits to members on retirement, or to their dependents on the members death before retirement.

Regulation 4.09A SISR provides money and other assets must be kept separate from any money and assets held by the trustee personally or held by members of the fund.

The sole purpose test and the requirement SMSF trustees keep assets separate from those held personally by the trustee and or members, may present a challenge for SMSF trustees investing in cryptocurrency or digital assets. Cryptocurrency can be exchanged directly between cryptocurrency wallets (hardware or soft) or traded/exchanged/held on DCE's. A hardware wallet is a secure physical device sold by a number of manufacturers. Hardware wallets may resemble a USB stick or a credit card, the latter designed to be stored in a classic wallet or purse. When hardware wallets are set up, they may be linked to the manufacturer website, providing a separate web-based log in to the physical log in on the crypto wallet. The registration process involves setting up an account in the name of a holder along with a personal identification number ('PIN') and back up 'seed phrase'. The 'seed phrase' is a string of random words (commonly 12 words) which are generated by the hardware wallet with a requirement the owner of the hardware wallet physically record the 'seed phrase' on a separate card or piece of paper. The words making up the 'seed phrase' are then verified using the hardware wallet and serve as a 'back up' if the wallet owner forgets or loses the PIN. If both the PIN and 'seed phrase' are lost, the hardware wallet will be inaccessible, and any cryptocurrency stored on the wallet lost.

Accounts held on cryptocurrency exchanges are commonly accessed via smartphone apps, stored on a smartphone owned and controlled by the person authorised to access the exchange. Where an SMSF trustee invests in cryptocurrency both in an account held in their personal name, and one purportedly held in the name of the SMSF, challenges may arise in objectively proving ownership of the account held with the DCE. An arguably greater challenge arises when attempting to demonstrate objectively, a hardware wallet, with no features identifying the owner other than a private key (long string of unique characters) is an asset of the SMSF.

To address these issues, steps may be required to be taken by the SMSF trustee at the time of establishing an account with an DCE or purchasing a hardware or soft wallet to obtain third party documentation evidencing ownership by the SMSF. In the absence of any clear guidance from the ATO on what may constitute objective evidence of ownership of DCE accounts, hardware or soft wallets by an SMSF trustee, caution is strongly advised as proving ownership to an SMSF auditor may prove a challenging task.

Unique challenges may arise from the investment by an SMSF trustee in NFT's, particularly where additional rights are attached to the NFT such as the right to download/use digital art, membership to exclusive online clubs and discord communities. Where the rights attached to an NFT provide more than an incidental benefit to a member of the fund, the trustee may contrive section 62 SISA. Whether or not rights attached to an NFT are merely incidental or not, requires careful consideration and analysis of the surrounding facts and circumstances of each case. ATO Self Managed Superannuation Funds Ruling SMSFR 2008/2[71] may provide SMSF trustees and advisors with some guidance as to when the provision of benefits may be merely an incidental benefit, however, as the ruling does not specifically address the unique nature of NFT's and the various rights that can attach to them, advisers should exercise extreme care when determining whether there has been a breach. This may present additional challenges where documentation is not readily available to evidence the rights attached to a particular NFT and how (if at all) the rights have been exercised.

Collectables and personal use assets

SMSF's are not prohibited from holding collectables and personal use assets, however even where such assets are held for genuine retirement purposes, the assets cannot be used by related party or stored/displayed in the private residence of a related party. The rules pursuant to section 62A SISA and regulation 13.18AA SISR must also be satisfied where an

[71] Self Managed Superannuation Funds Ruling SMSFR 2008/2: *Self Managed Superannuation Funds: the application of the sole purpose test in section 62 of the Superannuation Industry (Supervision) Act 1993 to the provision of benefits other than retirement, employment termination or death benefits.*

SMSF trustee acquires collectables or personal use assets consistent with the SMSF investment strategy.

Whilst it is the ATO view that cryptocurrency would rarely be classified as a collectable or personal use asset for CGT purposes, the question requires careful analysis of the individual facts and circumstances surrounding the acquisition of the cryptocurrency including the intention and use by the owner. Where cryptocurrency is held by an SMSF with the intention the asset be held or exchanged for an increase in underlying value, the asset will arguably correctly be classified, and taxed as, an CGT asset.

In contrast, some NFT's may be appropriately classified as a collectable or personal use asset. In particular, NFT's which are represented by either a unique digital artwork, or by an underlying physical piece artwork (or other physical asset) are likely to be collectables or artwork. Where NFT's are acquired by an SMSF trustee, and the NFT is either digital artwork, or a combination of digital and physical artwork, the requirements under regulation 13.18AA SISR must be satisfied. Noting, artwork is defined in accordance with section 995-1 ITAA 1997 which provides artwork means:

(a) A painting, sculpture, drawing, engraving or photograph; or
(b) A reproduction of such a thing; or
(c) Property of a similar description or use.

An NFT essentially consists of two components; blockchain encoded cryptographic ownership record of an object (the token) and a digital, and sometimes underlying physical, asset (the asset). Digital artworks associated with NFT's are typically represented as PNG, JPEG or GIF pictures, similar to photographs. Various intellectual property rights associated with the token may be embedded into the code stored on the blockchain, this may or may not include exclusive copyright rights and rights to commission on resale of the token.

This raises an interesting question from the context of SMSF compliance if the SMSF is in fact, only acquiring ownership of the underlying code recorded on the blockchain and not the digital artwork. Asset ownership becomes clearer where the artist selling the NFT also provides the NFT owner with exclusive ownership of an underlying physical piece of artwork,

or the right to acquire a physical reproduction of the artwork.[72] Ultimately SMSF trustees, advisers and auditors will need to consider the rights attached to each digital asset acquired by an SMSF combined with any contemporaneous evidence to determine whether the asset is a collectable, artwork, membership, or personal use asset.

In-specie transfers from related parties

Section 66 SISA prohibits an SMSF from acquiring assets from related parties, unless the asset falls within one of the exceptions to the provision. The exceptions under section 66 SISA include listed securities, business real property and in-house assets, however the statute does not extend to cryptocurrency or digital assets. This means the transfer of cryptocurrency from a DCE account held in the name of a related party, or a cryptocurrency wallet held in the name of a related party to the SMSF is prohibited, even where the transfer is at market value.

Identifying whether the transfer of cryptocurrency from one wallet directly to another is in breach of section 66 may prove challenging, as would objectively proving the transfer was not from a related party. This is because wallet to wallet transfers are facilitated using the wallet owners unique private key. Private keys as mentioned earlier, are represented by a long line of characters (e.g., letters, numbers and symbols) and are used to authorise and digitally sign transactions, private keys do not have features which identify the underlying legal owner.

Record Keeping

The very nature of blockchain presents unique challenges for SMSF trustees, advisers and auditors alike and a number of challenges have already been discussed in this paper. Section 35AE SISA imposes several conditions on SMSF trustees in relation to record keeping, including a requirement the SMSF trustee must ensure:

- Accounting records are kept that correctly record and explain transactions; and

[72] See the Johnny Depp 'Never Fear Truth' NFT collection.

- In a way that enables the preparation of reporting documents and the auditing of those documents; and
- The records are kept in Australia; and
- The records are kept in writing in English language or in a form that is easily accessible and readily convertible into writing in the English language.

Cryptocurrency transactions occur and are recorded on blockchain. The very nature of distributed ledger technology means the transactions are verified by a network of anonymous nodes on a network. The record of the cryptocurrency transaction which exists on blockchain is represented by code and is not supported by contemporaneous documentation, other than that provided by the DCE or platform used to facilitate the transaction. Currently there are no Australian statutory or regulatory requirements regulating the registration of ownership of private keys or of cryptocurrency/digital asset ownership. Third party platforms or DCE's may provide transactional reports or provide access for account holders to download transactions in csv file format. Some foreign registered platforms may not provide any downloadable transactional reports, meaning evidence of transactions may only be available visually via an internet website or smartphone app. Many DCE's partner with cryptocurrency tax calculator platforms (e.g., Koinly, Crypto Tax Calculator), however as discussed below, these reports are based on user data and data uploads/transfers may be limited depending on membership level and third-party partnership agreements between platforms.

Crypto tax calculators

Many DSP/DCE's provide account holders with transaction and tax reports based on their relevant foreign jurisdiction. Specialised crypto tax calculator platforms such as Koinly[73] and Crypto TaxCalculator[74] also provide a platform for cryptocurrency users to either link directly with their DSP/DCE account, or the ability to upload transaction reports in a comma-separated value (CSV) format sourced from their DSP/DCE account (where available).

[73] Koinly – Crypto Tax Calculator, <https://www.koinly.io/ato-crypto-tax>.
[74] Crypto TaxCalculator, <https://www.cryptotaxcalculator.io/>.

Whilst crypto tax calculator platforms are no doubt helpful, the provision of tax reports generated by these platforms should not substitute specific client related advice provided by tax agents during the tax return preparation process. The tax treatment applied by the generalist crypto tax calculator platform may not take into account the individual facts and circumstances surrounding the client's use of a DSP/DCE and, where the client is uploading transactions manually to the crypto tax calculator platform, there is risk they may not capture all transactions. The risk of not capturing all transactions is increased where the DSP platform is not linked to share information directly with the crypto tax calculator (or does not provide an option to download trades in a csv format) or the client uses multiple platforms. Relying solely on a tax report generated by a crypto tax calculator, without making further enquiry to ensure tax laws have been applied reasonably may place a tax agent at risk of breaching the requirements under the Tax Agent Services 2009 Code of Conduct.[75] From an SMSF record keeping perspective, these reports are not independently audited so cannot be relied on by SMSF trustees, advisers or auditors.

International tax

The inherent nature of distributed ledger technology, and the fact DSP/DCE's may be registered/hosted in a foreign jurisdiction (with no connection to Australia) may increase risk of double taxation where transactions are recognised as having taken place in a foreign jurisdiction. This may also raise the question of whether existing double taxation agreements (DTA's) adequately recognise cryptocurrency and digital asset transactions.

Risk

With any new and emerging technology there is risk. Whilst the distributed ledger technology itself may reduce risk of fraud in respect of data stored on the blockchain, the technology itself is decentralised, there is no central body or organisation that regulates its use or operation. In Australia there is a degree of regulation of DSP/DCE's under the Corporations Act 2001,

[75] TASA Code of Conduct section 30-10.

AML/CTF and AUSTRAC, however most DSP/DCE's are private or public organisations meaning there may still be a risk to cryptocurrency owners where they hold their cryptocurrency on a digital currency exchange (DCE) platform and the platform goes into liquidation. The inherent risk is demonstrated in a current case in the Supreme Court of Victoria, *Chen v Blockchain Global Ltd; Abel & Ors v Blockchain Global Ltd* (Blockchain Global).[76] In Blockchain Global, the developer of the failed cryptocurrency exchange trading platform known as Blockchain Global entered voluntary administration and a dispute ensued between former partners over a locked hard drive containing almost $10 million in bitcoin belonging to investors.[77] To access the locked hard drive seed phrases (passwords) known only to Mr Chen and Mr Guo are required, Mr Guo gave evidence that his seed phrase is written on a piece of paper which he stored in a confidential location in China and that because of COVID-19 restrictions he has been unable to travel internationally to check on the piece of paper.[78] Mr Guo has claimed he is unable to comply with a Court order to provide the seed phrase until he visits China to retrieve it and that until he visits the location where the piece of paper is stored (and ascertains it is still there) the bitcoin held on the hard drive remains unrecoverable.[79]

The Blockchain Global case demonstrates the challenges the decentralised nature of blockchain technology and the lack of adequate regulation both in Australia and overseas presents with the risk of losing access to cryptocurrency assets forever because of lost or forgotten passwords and the lack of an effective regulatory regime to provide a mechanism for recovery of lost assets.

[76] *Chen v Blockchain Global Ltd; Abel & Ors v Blockchain Global Ltd* [2022] VSC 92 (Blockchain Global).
[77] James Frost, 'Failed crypto company collapse owing $21m' (Web page 3 November 2021) <https://www.afr.com/companies/financial-services/failed-crypto-company-collapses-owing-21m-20211103-p595n3>.
[78] *Blockchain Global* [11]-[17]
[79] Ibid [15]

Conclusion

Australia's rapid adoption of cryptocurrency and blockchain technology and the mainstream adoption of the technology by finance institutions and the Australian government means advisers have no choice but to learn how the technology works and how it impacts on their client base.

In the absence of clear administrative and judicial guidance on the tax implications of cryptocurrency and digital assets, obtaining a reasonable understanding the technology and the potential tax consequences may seem overwhelming. What is apparent is that advisers must ask their clients the question "do you have cryptocurrency or other digital assets" and if the answer is yes, consider the facts and circumstances of the use of the assets in order to determine the potential tax consequences.

Additional challenges face SMSF trustees, their advisers, and auditors because of the underlying nature of blockchain technology, the various rights that may be attached to digital assets, the rapid and ongoing development of digital assets and difficulties in obtaining compliant accounting records. In the absence of specific legislative and regulatory change to address the unique issues facing SMSF ownership of cryptocurrency and digital assets, trustees who invest in these assets will arguably continue to face a higher compliance burden.