Review of the Tax Treatment of Digital Assets and Transactions
The Board of Taxation
The Treasury
Langton Crescent
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By email: TaxDigitalAssets@taxboard.gov.au

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Dear Sir / Madam

Review of the Tax Treatment of Digital Assets and Transactions

PricewaterhouseCoopers (PwC) appreciates the opportunity to provide comments on the consultation questions raised in the Consultation Guide (August 2022) to the Board of Taxation (Board) Review of the Tax Treatment of Digital Assets and Transactions.

We welcome the Board's Review of the Tax Treatment of Digital Assets and Transactions as this has been an area of uncertainty for some time. The features and characteristics of digital assets and transactions challenge fundamental concepts in Australia's taxation laws, making it different to ascertain the correct or appropriate tax outcomes under the current law. This uncertainty has a number of potential consequences, including low levels of compliance, high compliance costs, and it may act as a barrier to the adoption of new technologies in Australia. Given the high mobility of capital that may be deployed in digital transactions, an uncertain tax outcome, or an aggressive tax system, can result in capital being shifted out of Australia.

In our submission, we have focused on developing a broad framework against which amendments to current tax law can be assessed. We believe that this requires multiple steps (outlined below), some of which can be actioned immediately, and others that require further consultation with the Government and regulators. In summary, we make the following primary points for the Board's consideration:

1. The framework for assessing the appropriateness of the existing tax laws, and the need for any amendments should be based on a foundational principle of neutrality between digital assets / transactions and conventional assets / transactions (where they are clearly comparable), to ensure that there is no after-tax arbitrage for the use of digital assets vs conventional assets. This may require the use of deeming rules, particularly in relation to certain topics such as decentralised finance, where the intention of a digital arrangement may be to mirror a non-digital financial transaction.

2. There is an unacknowledged but significant technical question as to whether some digital assets (and related transactions) are capable of being on capital account for tax purposes. We believe the ATO's stated view is simplified in regard to some digital assets (including bitcoin), and it is not clear whether this view would be upheld by a Court. (For example, how is the value of bitcoin realised but through resale?) If the ATO view aligns to desired policy, it may be necessary to legislate to confirm that these assets are capable of being on capital account.

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3. The first step in clarifying the tax law for digital assets involves determining what they “are” for tax purposes. A detailed token mapping exercise, which groups different types of tokens into key ‘buckets’, and outlines the features and uses of tokens within each bucket, identifies a proximate conventional or non-digital asset, and sets out the current tax treatment of the token as well as that of the proximate asset, should prove to be very useful in developing an appropriate tax framework for these assets. This can be used to identify alignment/misalignment between digital and non-digital assets. Where misalignment exists, consideration should be given to the reasons for this and whether this is an appropriate outcome from a tax policy perspective. A hierarchy will also likely be required as some tokens will contain features of more than one type of token. TOFA could solve many issues, but there needs to be clarity as to whether these assets can be in TOFA.

4. The second step has two components, and shifts the focus to transactions. It is here that it will be more critical to look at the intention of a particular event or arrangement:

    a. Considering the current tax treatment of actions that happen to the digital asset (such as wrapping, airdrops, chain splits, etc), akin to “corporate actions” in relation to non-digital assets (e.g. share splits, rights issuances, etc). These are instituted by the **issuer**[1] of the asset (which may be a legal entity, but could also be a blockchain that is operated by a DAO, a smart contract, etc).

    b. Considering the current treatment of actions that are instituted by the **holder** (such as simple buy sell transactions, and using digital assets as part of a decentralised finance (DeFi) arrangement. Once the current position has been confirmed, this can be assessed against the principle of neutrality and the desired outcome from a policy perspective.

5. The final step can happen concurrently as it focuses on the institutions that support and interact with the digital asset space. There are a range of issues that should be considered to ensure that the tax law does not hinder the development of the funds management industry with regards to digital assets and transactions. This goes further than addressing specific tax law barriers, and requires a deep understanding of the funds management industry. The Board should consult with funds management experts to ensure any proposals are appropriately calibrated. At the moment the tax laws (MIT, Div 6C, LIC, IMR) **do not facilitate onshore activity** and **incentivise digital businesses to structure offshore**, as local incentives are unavailable and our broader rules (e.g. CFC) are arguably inactive in taxing offshore digital activity.

We elaborate on these points in the Appendices.

Whilst we commend the Government and the Board for its work to date in this area, in our view, the timeframe for this review is too short. There are a number of policy decisions that are required, many complexities and opportunities to be considered, and the current short time frame does not appear to be sufficient for a comprehensive consideration of all relevant issues, and the development of a framework for the taxation of digital assets and transactions in Australia. In addition, some aspects may require global cooperation (for example, a global reporting regime for digital asset transactions).

[1] With apologies that this is an oversimplified description of what actually happens, but a helpful framework/dichotomy between things that are within and outside of the holder’s control.

As such, we recommend the Board work be broken down into different phases, with the first phase (due to be delivered by 31 December) to focus on delivering a roadmap for the development of a comprehensive tax framework for digital assets and transactions in Australia.

PwC are happy to discuss our comments and responses with you further.

Yours sincerely

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Appendix A: Detailed Comments

A model for the taxation of digital assets and transactions

The current tax treatment of digital assets and transactions is a complex area of the law. The existing principles that underpin Australia's taxation system may not be fit to cater for these new and emerging assets and transactions. Notwithstanding an admirable effort by the Australian Taxation Office (**ATO**), since as early as 2014, to provide guidance on the taxation of digital assets, there remain many areas of uncertainty. We have highlighted key areas of uncertainty in Appendix C of our submission.

The ATO is to be commended for providing guidance on emerging issues relating to digital assets and transactions. Given the uncertainty on these issues, taxpayers often rely on this as if it were law. However, ATO guidance is, of course, not law, only an interpretation of the application of the law, and in most cases, has been produced in a non-binding form as website guidance.

In our view, the uncertainties regarding the tax treatment of digital assets and transactions can only be addressed by tax law amendments which are developed with a full and proper consideration of the desired tax policy outcome. Certainty on these issues is a key requirement for the continued adoption of these new technologies in Australia. However, certainty alone is not enough - there needs to be a balance between maintaining the integrity of Australia's taxation system, minimising compliance costs for taxpayers and attracting and retaining business in Australia.

The Board of Taxation (**Board**) has been tasked by the Government to outline changes to Australia's taxation laws for taxation of digital assets and transactions. At the outset, we acknowledge that a model that builds upon existing law, rather than creating an entirely new taxing regime, would be simpler to implement. Many comparable jurisdictions, such as the USA, UK, and Japan, have opted to implement a model of taxation for digital assets and transactions that builds upon existing tax frameworks due to the relatively simple and expedient implementation. Alternatively, a streamlined regime for the taxation of digital assets and transactions would differentiate Australia on a global scale and offer the level of certainty that many mature institutions are seeking when transacting with digital assets. However, given the diversity in transactions and uses for blockchain technology, it may not be possible to develop a "one size fits all" tax regime that gives appropriate outcomes in all cases.

Proposed reform options should consider these competing priorities, and this is a policy decision for the Government. For the purposes of our submission, we have focused on proposing amendments to the existing structures in the tax law as we believe would be the quickest and simplest way to gain certainty on these issues. We have proposed a four-step framework to identify areas of the law that required reform:

- Step 1: Establish foundational principles
- Step 2: Token mapping & hierarchy to characterise the digital asset
- Step 3: Assess the tax impact of actions that "happen to" the digital asset (i.e. either initiated by the issuer of the asset, a DAO connected to the asset, a blockchain or a smart contract).
- Step 4: Determine the tax treatment of actions that are instituted by the holder, in relation to the digital asset. While buy/sell are simple, wrapping, staking, and DeFi are more complex.

Separate work will be required in relation to the digital assets industry, and requires policy input. This includes whether existing concessions such as IMR, MIT, etc should be extended to digital assets.

Whilst our comments generally focus on income taxes, they should also be taken as applying to all Federal taxes including goods and services tax (**GST**) and fringe benefits tax (**FBT**).

Step 1: Establish foundational principles

In order to build on existing structures in the tax law, it is first necessary to acknowledge that digital assets do not fit neatly into the types of property or transactions that are addressed in the tax law. The legal and equitable character of, for example, bitcoin, as an asset remains debatable (some treat the token as 'property', others treat the property as a right as against the world at large to spend an 'unspent transaction output', and others treat this as a right to use software that subsists only as long as the relevant blockchain continues to validate transactions). To overcome these issues, we propose the following "foundational principles" to underpin any proposed reform models:

Principle	**Description**
Neutrality between digital and conventional assets	Any tax law amendments should conform to an overarching principle of "neutrality" between digital transactions and "other" transactions. This should be a key feature of any tax law amendments to ensure that the tax law does not encourage or discourage substitution from digital assets to other assets, or vice versa. It is likely that this needs to be considered after the *nature* of the digital asset has been agreed (including by the use of deeming rules suggested below). It is only after there is a clear view on what the digital asset ideally represents/is most proximate to, that we can then try and achieve neutrality with the tax outcomes for other similar assets. For example, if we treat a digital asset as an alternative to another investment (e.g. securities), then in line with this principle, the tax laws should mitigate tax arbitrage opportunities between similar transactions entered into with digital assets versus other traditional securities.
Use of deeming rules to identify the nature of relevant asset and features of the transactions	As noted above, the first step in "binding" digital transactions to "conventional" transactions may require deeming rules given the uncertainty as to the nature of many digital assets and transactions. For example, the tax law might deem a bitcoin to be an unit of property that is represented by a digital token rather than a right to use software or a series of unspent transaction outputs. This may seem simplistic, but it is fundamental. If these steps are not taken, the character of the asset (and therefore its taxation) will remain subject to challenge because the laws on the nature of digital transactions are not fully developed. There are some features of digital assets that should not require clarification via deeming rules. For example, it is not expected that

	the law would need to clarify that ERC20 tokens, or native tokens built on blockchains, are fungible for tax law purposes and similarly, that ERC721 tokens, or NFTs, are not fungible for tax law purposes. It may also be necessary to deem that there is a counterparty to a transaction that involves a digital asset, as asynchronous transactions (e.g. blockchain “pushes” an update to the token, or a smart contract automatically executes) might otherwise be incapable of correct tax treatment (note the language in the CGT regime which refers to interactions between the taxpayer and another entity, e.g. in respect of CGT event D1). Questions of source of transaction for these deemed events may be more complex, but need to be addressed in due course.

In addition to these two foundational principles, we consider that before moving onto the next steps in developing a tax framework for digital assets, it is necessary to explicitly address what we have called the “capital assumption” for the purposes of this submission. The “capital assumption” refers to the current view, implied by the ATO in its website guidance and tax determinations, that the majority of transactions involving digital assets are on capital account under the current tax law, and there is limited scope for revenue account treatment. We believe that, having regard to the features of some digital assets, the current position in the tax law is unclear and there is a risk that this outcome could be challenged by the Courts, fundamentally disrupting the character of losses across the community and in some cases, removing access to the CGT discount. If this issue is not addressed, taxpayers will continue to rely on the potential that digital assets may be on capital account without understanding that, at least in respect of some digital assets (e.g. bitcoin), this may be impossible.

There are steps that can be taken to address this issue under existing tax law:

- The ATO could approve funding for a test case to provide judicial guidance on whether digital assets such as bitcoin that have no utility, and where a return can only be realised through sale, can in fact be held on capital account. Alternatively, a taxpayer with a loss may take this on.
- ATO guidance should be clear that the characterisation of any transaction depends on specific circumstances, including the intention of the holder of that asset. If a test case proceeds, this guidance would need to be updated following any decision of the Court.

If the Government or policy makers decide that a test case on this matter would be an unproductive use of time and they believe that the capital assumption is critical from a policy perspective, tax law amendments should be considered to provide additional certainty and/or change the tax law outcome. This could include, for example, some form of written capital account election (if the desired outcome is to ensure access to the CGT discount), or loss quarantining (if the desired outcome is to protect the revenue base from the volatility of digital assets). There are precedents for both within the current tax law.

In addressing the “capital assumption” the principle of neutrality discussed above should be maintained.

Step 2: Token mapping & hierarchy to characterise the asset

We welcome the Government's announcement that Treasury will prioritise token mapping work in 2022, to assist with regulatory reforms in relation to crypto assets. We consider that this exercise will also form a key part of the development of a model for the taxation of digital assets.

Broadly, we expect this exercise will result in at least five designations or buckets into which tokens can be placed: payment tokens, utility tokens, securities, governance tokens and NFTs. In the table below, we have provided a high level example of various buckets and a suggested proximate asset.

Token type	Proximate asset
Security token or an asset that is designated as a security by a regulator	Equity interest or security as defined by the Corporations Act (and therefore subject to the traditional securities and qualifying securities provisions) or potentially TOFA financial arrangement (although the latter is more complex).
Payment token (e.g. bitcoin, stablecoins issued by non-government e.g. USDC)	Foreign currency; however, there are policy reasons why this treatment is inappropriate and therefore we must acknowledge that neutrality is not possible. For stablecoins, while these are very similar to derivatives, they are unlikely to be derivative financial arrangements as there is actual rather than notional principal. In the absence of a proximate asset for payment tokens we expect they are likely to be treated similarly to property.
Utility token	Commodity - i.e. capable of use or sale. For example electricity. Likely to be similar to treatment of property.
Governance token	No proximate asset; this is a right to vote on a protocol and participate in its governance, and may not approximate a right to participate in strategic decisions or indeed all decisions - i.e. it does not necessarily confer control rights.
Non-fungible token (NFT)	Property

However, the mapping exercise should go further than aggregating different type of tokens into buckets if it is to be useful in developing an appropriate tax framework for these assets. In addition, the mapping exercise should also consider:

- The current tax treatment of each bucket
- The features of tokens that fall within each bucket
- The various uses for tokens within each bucket, and

- The tax treatment of the proximate asset.

Once this exercise has been completed, this can then be used to identify alignment/misalignment between digital and non-digital assets. Where misalignment exists, consideration should be given to the reasons for this and whether this is an appropriate outcome from a tax policy perspective.

One of the challenges with this approach is that there are likely to be overlaps between these categories of token and it is possible for a token to be transient and move between these designations. Where a token takes on multiple characteristics, a hierarchy may help to clarify treatment. For example, the hierarchy might outline that if a *fungible* digital asset is capable of falling into multiple categories, its tax treatment is determined according to a hierarchy below:

- Category A - Security Token - if a token meets the tax law definition of an equity interest or is designated as a security according to **Australian**[2] corporations law, it should be characterised as either an equity interest or it may be characterised as a "security" under Division 16E of the Income Tax Assessment Act 1936 (ITAA 1936).

- Category B - Payment Token - if a token is highly liquid, traded on multiple digital asset exchanges, and commonly used as a method of payment (indicia might include common use in decentralised finance products), the token should be treated as a payment token even if it has other features. This would capture bitcoin, ether, stablecoins and could potentially include several tokens issued in relation to defi transactions (e.g. forms of wrapped ETH, etc).

- Category C - Utility Token - if a token can perform a utility and is not commonly used as a payment token, even if listed on an exchange (e.g. POWR), it is a utility token.

- Category D - Governance Token - if a token provides governance rights and is not also a utility token or a payment token, then it is classified a governance token.

For NFTs, we do not consider that specific token mapping rules / hierarchies will be required provided that the tax law clarifies that these are proprietary assets that the holder has, as against the world. The mapping exercise may wish to recognise/note that rights to NFT IP (per the smart contracts relating to the NFT, other terms and conditions, etc) can vary greatly and are not well understood in the market.

For security tokens, it is likely that existing rules will appropriately tax those assets. The key risk here is confirming when an asset is a "security" - we suggest that this is done by reference to Australian securities laws (and in alignment with Corporations Act requirements) rather than - say - by reference to the US Howey Test (which is being applied very broadly).

For utility tokens, there may be reasons to explore concessional taxation because a taxpayer has acquired the token for a particular purpose or to support a particular project. Of course, if the utility token is also highly liquid, this treatment may actually be inappropriate. This could be considered further in due course and we would suggest that utility token issuers may have views on what would

[2] The US SEC has designated a broad range of assets including Ripple, a payment token, to be securities. Taking such a broad view could significantly change the Australian tax landscape and create inequities between similar types of digital asset. Aligning the Australian tax treatment to the Australian corporations law is more appropriate and reduces the risk of inadvertent consequences arising under our tax law, as a result of international changes in policy (e.g. El Salvador making bitcoin legal tender). This is particularly important as matters like the SEC's dispute with Ripple are currently with the US Courts.

be appropriate to facilitate the use of their tokens, as intended on their platforms, without adverse tax noise.

Step 3: Assess the tax impact of actions that "happen to" the digital asset

Before looking at what an entity can do "with" their token, it is necessary to consider the tax treatment of actions that happen to/with a token, which are outside of the holder's control.

The ATO has provided website guidance on a number of these actions, e.g. hard and soft forks, airdrops, etc. We believe that the impact of corporate actions should be confirmed either via fully documented, technical and binding ATO guidance (with reference to case law) or, where there is doubt as to the potential impact of these actions or an inappropriate outcome having regard to the foundational principles, by legislation. While these actions *can* be driven by a token issuer (e.g. Power Ledger might do an airdrop), they can also be driven by a smart contract or a DAO-run blockchain. In these cases, some of the simpler aspects of the CGT law do not apply clearly, as many of the rules relating to CGT events look to the behaviour of a holder and an issuer. There are equally questions of residency and source that need to be addressed, which are not currently acknowledged in ATO guidance.

Where the current tax treatment is not neutral with other types of assets (for example, the ATO's guidance suggests the tax implications of a chain split is not consistent with share splits) the reasoning requires deep examination before the principle of neutrality is applied. However, the principle of neutrality may be the simplest way of ensuring that individuals can assess the appropriate tax treatment.

Deeming rules would be a simple approach to streamline the application of the CGT rules - e.g. an airdrop is 'deemed' to be issued by another person such that the rules can apply.

We have outlined some of these actions, current tax treatment, plus additional actions that require clarification, in Appendix C. We recommend the ATO consult with the industry to ensure that the nuances of these actions are understood, and provide a proposed list of actions to be ruled on, before proceeding with this exercise. We are happy to provide further feedback if this would be helpful.

Step 4: Determine the tax treatment of actions that are "instituted by the holder"

While the foundational principles and token mapping help to confirm *what the asset is*, they may not necessarily inform how or when it should be taxed. As noted above, we consider that security tokens and NFTs can be dealt with separately, and the more difficult issue is determining the appropriate tax treatment of payment, utility and governance tokens.

For payment tokens, even if they can be held on capital or revenue account, treating the token as the asset means that each exchange of the token (or a "unit" of the token, e.g. 0.00001 BTC) is likely to trigger a potential taxing point (if on capital account) or is taxable as part of a series of transactions (on revenue account, particularly as a profit making undertaking or plan). This may not be an appropriate outcome for certain types of digital asset transactions.

Simple realisation transactions (buy, sell)

The tax laws typically determine the treatment of an event by reference to the holder's intention at the time of acquiring the asset. Share traders are deemed to hold equities as trading stock (TR 92/3) and it would be logical to apply a similar reasoning to transactions involving digital assets. This can help to deal with the simpler types of transactions that take place day to day, such as trading, buying/selling cryptocurrency.

As outlined earlier in this paper, a principle of neutrality should apply. That is, in respect of an acquisition or sale of cryptocurrency, as a general rule the tax treatment of that transaction should follow what would be the case if the asset were not a digital asset but were instead an item of property. This preserves capital versus revenue treatment, allows for treatment of trading stock, etc. However, it may not allow for TOFA treatment without further legislative change.

Putting aside the current bias towards capital account treatment evidenced in ATO guidance to date, for simple realisation transactions, this is largely aligned with the current tax position. That is, the tax treatment for these transactions is largely determined by the holder's intention.

Decentralised finance (DeFi) transactions

DeFi transactions often involve several steps. Applying the existing tax rules dealing with simple realisation transactions may give rise to inappropriate outcomes in relation to these transactions, as it would likely mean that most steps in the process trigger a taxing point. This may be undesirable from a policy perspective for several reasons:

- This may be counter to the individual's intention - for example, an individual may "wrap" their ETH in order to use it to enter into a transaction on another blockchain, but may not actually have a desire to realise the underlying economic value in the ETH.
- An individual can manufacture losses when the market is low through actions such as wrapping or moving a digital asset across platforms to realise losses (for example, staking ETH with LIDO as wstETH), without changing their underlying economic exposure to the asset.
- In a gain scenario, the individual has not actually realised a gain or loss in that they may still be unable to access the economic benefit of the increased value of the asset. For example, an individual wraps ETH and deposits it in a MakerDAO vault, in order to borrow against it. Any increase in the value of ETH is unrealised until the vault is released, even though the individual is using the ETH as collateral.

DeFi transactions are perhaps the most difficult matter to address from a tax point of view because the current tax laws would suggest there is a taxing point at every stage of the transaction, for some protocols. For other protocols, it can be more complex. Under existing tax law, even if the individual was intending to do the same thing, because the protocol's code and processes may be different, the tax outcomes may change. It's possible that none of this will be visible to the participant, who simply interacts with an app.

If a policy of neutrality is desirable to avoid tax arbitrage (as compared to traditional financing transactions), then the task of determining out *when* a DeFi transaction should be taxed is required. In addition, there are other tax issues that need to be considered, including whether participants in DeFi transactions hold their digital assets on capital or revenue account, timing of derivation of returns for participating in DeFi staking and lending arrangements, and source of income.

There are a number of approaches that could be adopted to develop appropriate tax outcomes for DeFi arrangements, including a 'by-protocol' approach, a 'by-transaction' approach, and by deeming a specific outcome based on considered policy objectives.

Approach	Description
By-protocol	This is aligned with the current approach, that requires an understanding of the way that the protocol's code operates, the sequence of transactions involved (e.g. the number of asset exchanges etc), and then determining the tax treatment. In almost all cases this involves multiple transactions being triggered, most likely without the taxpayer even knowing these steps are occuring. In our view the 'by-protocol' approach is (1) the correct technical approach under current tax laws and (2) impractical, if not impossible, to apply and administer. If it remains necessary to undertake this analysis to determine the tax treatment of transactions, it is unlikely that it will be applied by individuals or even institutions due to the cost of compliance. In practice, we have seen limited evidence of taxpayers seeking to analyse the tax outcomes of DeFi arrangements by protocol, and we note the ATO has equally struggled to conclude on the appropriate treatment under our law. If the 'by-protocol' approach remains, there are also tax arbitrage opportunities between the different protocols, because they each work differently. More recently, some protocols have purposely introduced functions that seek to allow users to potentially defer the timing of derivation of income.[3] Practically, the only way to provide certainty with the 'by-protocol' approach would be for the ATO to provide guidance on how it believes each protocol should be taxed, or for the tax implications of each protocol to be litigated upon through test cases. We believe that this would be a waste of the ATO and tax community's time particularly given the transient nature of the digital asset space, which means that popular protocols today may collapse tomorrow. The application of the current tax rules in a 'by-protocol' approach may give rise to inappropriate outcomes. An analysis which seeks to identify a series of CGT events is not only complex, it does not reflect the economic substance of the transaction or what was intended by the participants, that is, to lend an asset, to provide liquidity, etc. There is also a question as to whether all DeFi transactions are on revenue account because the intention is most likely to gain through later withdrawal of a digital asset at a higher value.
By-transaction	This approach would involve grouping together types of transactions (e.g. entering into a liquidity pool, lending, etc) and using these groupings to develop principles for when the most appropriate taxing point should be (ideally by reference to the principle of neutrality, albeit acknowledging that this may not always be possible). A 'by-transaction' approach could provide a level of flexibility while supporting

[3] https://www.howtopulse.com/end-staking-vs-good-accounting/ .

	the overarching intention of the taxpayer; that is, if a taxpayer uses a “lending’ protocol such as Compound or AAVE to achieve similar outcomes to a peer-to-peer lending arrangement, the law could “look-through” each of the token exchanges involved in this arrangement to treat it like a loan. This overcomes the tax arbitrage opportunities that may present themselves when considering each protocol separately, but implies a degree of homogeneity that may be inappropriate. That is, there is a policy trade-off that may be necessary to provide certainty. An important question is whether each of these transactions are actually taxed inappropriately under the current law. Where revenue account treatment applies, this may allow the taxpayer to look at the overall arrangement (i.e. as a profit making undertaking or plan), and potentially tax the entity on an accruals/derivation (or realisation) basis as appropriate without any tax law amendments. There is a need to clarify whether a DeFi transaction is capable of being on capital account. If it is not, or if it is implied that a taxpayer that is entering into a DeFi transaction is doing so to derive a return, current tax laws may actually be appropriate. However, this would also allow for the conversion of capital assets (if digital assets can be held on capital account) to revenue assets, and for manipulation of tax outcomes to generate revenue losses or manufacture capital gains by moving assets in/out of DeFi. The most simplistic “by transaction” approach would be to treat the situation similar to a taxpayer engaging in securities lending with shares. This is why we believe a reductive approach that simplifies DeFi transactions into categories, and then outlines how the tax laws will “look-through” the transaction to achieve an economic outcome, would be the most pragmatic answer. That law may also need to preserve the underlying character of the asset as revenue or capital unless the action taken by the taxpayer is clearly misaligned to this (which may be the case where, say, the taxpayer contributes their asset into an automated market maker). The Board of Tax and ATO could undertake an exercise with industry to categorise DeFi transactions, determine the economic impact of these transactions, and identify the most ‘neutral’ tax alignment. This would not be perfect as DeFi changes every day, but a set of principles might be developed (and possibly even a heirarchy) to cover the most common form of DeFi arrangements. Chain analytics could be used to identify the most common DeFi arrangements so that certainty can be provided for both the ATO and taxpayers. To facilitate this, we believe that wrapping ETH or BTC for the purposes of entry into a DeFi protocol would need to be ignored for tax purposes (possibly requiring a tax law amendment).

Realisation	The simplest approach could involve deeming that crypto transactions are not taxable until the digital asset is converted into fiat currency. This is fundamentally a realisation approach and is inappropriate for many larger taxpayers, however it could provide a safe harbour for smaller taxpayers.

The above illustrates the complexity surrounding the tax treatment of DeFi transactions. None of these approaches is perfect because the area is so nascent and the tax character of the asset is untested at law. Even test cases will not resolve these issues unless conducted per asset and per protocol.

For this reason, the “realisation” safe harbour may be a pragmatic solution to ensure compliance, or at least encourage this for smaller taxpayers. This solution might only tax the entity upon conversion of a crypto asset into fiat currency.

We imagine that chain analysis would be able to track realisation points rather than having to look at every step of the protocol, meaning that compliance would be simpler and potentially giving the ATO an easier path to review transactions.

Adopting a realisation safe harbour would not, however, achieve neutrality in the treatment of digital assets versus with non-digital assets. The policy question that must be answered here is whether this divergence is necessary to provide certainty and enhance compliance. This should be balanced against the risk of tax arbitrage versus traditional products.

A realisation safe harbour may also be inappropriate for institutional taxpayers (discussed further below). However, those taxpayers are more likely to be in TOFA or on revenue account in any event (with the possible exception of those electing into capital account treatment for MITs, if such treatment were extended to digital assets in the future). To address this, the realisation safe harbour could be limited to those holding digital assets on capital account, or below a dollar threshold.

Institutional transactions

Institutions are more likely to be taxed on revenue account or as trading stock. Serious consideration should be given to including DeFi transactions within the scope of the TOFA rules. The TOFA rules were developed to adapt to emerging financial markets and have principles that could be extended here. Accruals and realisation are essentially the right questions to be asking; if the gain or loss has ‘come home’ to the taxpayer it should be taxed, but if it is uncertain or volatile, it is only on realisation of the asset that the taxation should be appropriate.

To facilitate the TOFA analysis, we expect that the DeFi arrangement would need to be viewed as one single financial arrangement, which is then subject to the accruals or realisation method. The related financial arrangements rules could allow the various components of the transaction to be aggregated together to achieve an economically appropriate result.

For completeness, TOFA elections (e.g. fair value method and financial reports method) could be available to align tax and accounting treatment for institutional taxpayers.

Interest withholding tax

There is a question as to when “interest” is paid or derived as part of a DeFi transaction, and if interest withholding tax can be applied. It will be very difficult to prove out that a lending transaction (or a more sophisticated defi arrangement) is **not** with an offshore counterparty (where indeed it is with a counterparty at all and not with an autonomous protocol).

Imposing interest withholding tax on Australian participants in DeFi transaction is likely to be impractical, as the protocol will not automatically impose and remit that tax, and therefore the remission back to the ATO is dependent on the taxpayer separately identifying a withholding tax liability and remitting that back to the ATO. This presents clear arbitrage opportunities between digital assets and non-digital assets. To our knowledge, no other countries have investigated this issue in detail.

As DeFi protocols can be initiated anywhere and may be autonomous, there is no point in trying to ask those protocols to impose Australian interest withholding tax or to write this into their code. Banning Australians from using these protocols is impractical and may actually be impossible without significant time and expense on behalf of the Australian community.

There is a policy question as to whether interest withholding tax can or should be policed in this scenario. In our view, this requires policy makers to opine, however we believe there should be a consistent position for institutional investors and other participants in digital markets, because the challenges with collection and remission are the same. If an additional requirement is imposed on institutional participants, it is likely that they will simply choose to deploy their (mobile) capital into DeFi from outside Australia.

The role of the ATO

The ATO has an important role to play as the tax law relating to digital assets and transactions continues to develop. Australia is seen globally as an early mover in this space, with the ATO being one of the first revenue authorities to provide guidance on digital assets as early as 2014.

The PwC global network has developed the PwC Crypto Tax Index to help illustrate and compare the level of comprehensiveness of tax guidance between jurisdictions. Covering over 19 different areas relevant to the taxation of crypto assets, the Crypto Tax Index measures whether a particular issue is addressed by existing guidance of each jurisdiction, with a score being derived based on the average of the areas that are relevant for that jurisdiction. Based on the most recent report published in 2021[4], Australia ranks second behind Liechtenstein in terms of the comprehensiveness of tax guidance available, and well ahead of many comparable jurisdictions.

The ATO is to be commended for providing timely guidance on emerging issues, and should continue to play an active role in this space. Education, guidance and awareness is critical to improving compliance in relation to digital assets and transactions as, given the nature of digital assets and their transactions, it is likely to be difficult for the ATO to ever gain a full picture of the transactions that taxpayers undertake through their compliance and data-matching activities (discussed further below). Accordingly, we make the following recommendations to ensure that ATO guidance continues to meet and balance the objectives of ensuring taxpayers comply with their obligations whilst also minimising compliance costs by providing certainty:

- To date, much of the ATO's guidance has been delivered via non-binding website guidance. Whilst this approach ensures that the guidance is easily accessible, it is not binding on the

[4] https://www.pwc.com/gx/en/insights/pwc-annual-global-crypto-tax-report-2021.pdf

pwc

Commissioner. It is also frequently updated, and there is currently no mechanism for taxpayers and tax professionals alike to be notified of updates or to track the history of these changes. Accordingly, we recommend that the ATO consider moving the bulk of this guidance into binding guidance products, which will not only add rigour to the development of these guidance products, but also provide an opportunity for public consultation on these issues.

We acknowledge that the ATO does not have unlimited resources, and to date these issues might have been too niche to warrant large investment by the ATO. In addition, this Board of Taxation review itself may suggest that now is not the appropriate time for the development of binding ATO guidance on these issues. However, in our view there is an opportunity to combine enhanced certainty (which can happen now) with clarity on what tax laws genuinely require amendment. The process of the ATO working through rulings and the technical detail of positions, to a binding level, is likely to test out some of the conclusions we have noted in this paper and will help confirm which issues genuinely require policymakers to opine or intervene. Active consultation with industry could help to prioritise which matters require binding guidance and to direct the ATO's attention towards the most meaningful topics.

- Given the high-level nature of the existing website guidance, the technical basis for the ATO's conclusions is often not clear. Similarly, it is not clear if the outcomes highlighted would apply to all digital assets, transactions and scenarios. For example, the UK HMRC has distinguished the tax implications of airdrops between those that are receive in return for, or in expectation of, a service (subject to income tax), and those that are received without doing anything in return, and not as part of a trade or business involving crypto asset exchange tokens or mining[5] (not subject to income tax). It may be appropriate or even necessary for the ATO to expand their guidance to highlight different outcomes based on different facts and circumstances, or at least acknowledge that the outcomes outlined in their guidance may not apply in all circumstances.

- Binding ATO guidance should be supplemented by targeted education campaigns for both taxpayers and tax agents, which should go beyond advocating for taxpayers to simply submit their crypto tax returns. It is important that the potential complexity of crypto taxation and the need to engage with professionals is clear and understood, throughout the community. Or, where the ATO decides that simplicity/compliance is preferred over complete technical accuracy, administrative powers such as safe harbours could provide immediate relief to smaller taxpayers.

Reporting and transparency for digital assets

The increasing use of digital assets for investment and financial activities, and the general lack of awareness surrounding the tax implications of these transactions, suggests there may be a need to develop a new tax reporting framework for digital assets and/or to amend the existing international tax transparency initiatives.

There are a number of potential options that could be adopted in Australia to provide the ATO with information regarding digital asset transactions undertaken by taxpayers with Australian tax obligations:

[5] https://www.gov.uk/hmrc-internal-manuals/cryptoassets-manual/crypto21250

- data matching programs which request information from digital asset exchanges / intermediaries
- expand existing international tax transparency initiatives such as the Common Reporting Standard (CRS) to cover digital asset transactions, or
- introduce a new bespoke reporting regime for digital asset intermediaries.

To date, we understand that the ATO has principally relied on data matching programs to obtain this information for its compliance activities. However, the problem with the current approach is the ATO has limited tools to compel an offshore exchange to provide the information it seeks, even assuming the exchange collects the information that would be required. A new bespoke regime would likely face similar issues, which would limit the amount of useful information obtained from this approach.

Accordingly, we consider that the best approach is to expand existing international transparency initiatives to cover digital asset transactions. This has the best likelihood of eventually providing the ATO with information regarding transactions undertaken both within, and outside of, Australia (although, as discussed below, it is unlikely to ever give a complete picture). In the interim, the ATO's data matching program should continue to be used to help digital asset investors meet their tax obligations.

In March 2022, the OECD released a public consultation paper concerning the new Crypto-Asset Reporting Framework (**CARF**), as well as proposed amendments to the Common Reporting Standard (CRS) for automatic exchange of information on transactions in Crypto-Assets. The proposed framework seeks to impose reporting obligations on intermediaries facilitating Crypto-Asset exchange transactions, as those intermediaries are expected to have the best access to the details of the transactions carried out on their platforms.

The OECD proposed framework should provide a good starting point for improving the reporting transparency for digital assets. However, even this approach will fail to provide a complete picture of digital transactions undertaken by Australian taxpayers, due to "gaps" in the information that could potentially be reported under this framework.

Firstly, the concept of an intermediary may not apply to decentralised exchanges, e.g., Uniswap. Decentralised exchanges are peer-to-peer marketplaces where users can trade digital assets without the need for an intermediary to facilitate the transfer and custody of funds (and possibly even trading against smart contracts). Given that there is no intermediary between users, and the decentralised exchange is often administered by a DAO, it is unclear who would be responsible for reporting the transactions on the decentralised exchanges under the proposed framework.

One may argue that decentralised exchanges currently have a relatively small market share (*approximately 0.0041% as at September 2022*[6]) compared to centralised exchanges, so the proposed framework is able to capture the majority of digital asset exchange transactions. Nevertheless, we suggest that a comprehensive reporting framework should be future-proof. We have seen a technological shift from centralised to decentralised exchanges in the market, as decentralised exchanges are able to facilitate transactions faster and more affordable than centralised counterparts by eliminating the intermediaries. Moreover, imposing reporting obligations on centralised exchanges

[6] https://coinmarketcap.com/rankings/exchanges/dex/

will increase the relevant compliance costs, driving up the gas fee charged to the end users. This may lead to more users switching from centralised to decentralised platforms due to the increasing transaction costs.

Secondly, the enforcement of the OECD framework is challenging. The OECD paper does not elaborate on the enforcement issue, so it is difficult to see what the incentives or penalties for exchange service providers would be to comply with the reporting requirements.

To address non-compliance, Australia might insert an enforcement provision in its domestic law, for example, imposing high administrative penalties on unreported Crypto-Asset transactions. However, for such provision to be effective, all relevant jurisdictions should incorporate it into their domestic law collectively. Otherwise, imposing high non-compliance penalties will render Australia less attractive to intermediaries, and discourage the development and innovation of the digital asset industry. Even if all jurisdictions that have implemented the CRS adopt the proposed CARF and introduce penalties for non-compliance, intermediaries may choose to establish their operations in jurisdictions that have not implemented the proposed CARF.

Our recommendation is that the Board of Tax assess the likely implementation of the CARF and whether it would meet the ATO's information reporting requirements. If so, it may be sensible to transition towards this framework rather than creating a separate regime. Even if imperfect, we believe that a consistent and global reporting regime should be preferred to a standalone solution.

Appendix B: Funds management industry issues

Investment assets in Australia are predominantly held through collective investment arrangements, commonly superannuation funds and collective investment vehicles.

Specific funds management tax considerations, when taken into account as the taxation of new assets and arrangements are developed, can mitigate tax impediments that harm Australia's competitiveness to execute on policy to make Australia a leading market in given sectors.

To be a leading market in digital assets and transactions, Australian market participants should be able to export services and import mobile capital without unnecessary tax complexity and uncertainty. Over the past 15 years, tax impediments in the funds management industry have taken too long to identify and correct.

One way to mitigate this is to ensure that funds management considerations are incorporated early into the development of the taxation framework for digital assets and transactions, ideally at the outset.
This entails a broader and deeper discussion. The following table summarises some of the matters that could be further discussed.

Funds aspect	Implications	Example
Tax distortions - timing and character mismatches	Direct and indirect investment have different outcomes	Capital v revenue account
Unintended outcomes	Double taxation	CFC rules – requires commercial risk
Reliance on third party tax information providers	Standardised reporting does not cater for bespoke or new assets and transactions	TOFA – manual overrides
Operational taxes - software developers only commence build when law enacted	Confusion on best practice and lack of consistency	AMIT – delayed adoption
Uncertainty and risk frameworks for product development	Likelihood v consequence	CCIV accounting profit threshold for flow through taxation
Failure to mitigate systemic tax limitations at the outset	Complexity creates competitive disadvantage	Source and PE, IMR
Reputational issues and DDO disclosures and TMDs	Product rulings unresolved	Capital protected products
Evidentiary issues and tracing of interests	Tracing of ownership interests, immutability of intent	Background factual data on DLTs

Income equalisation mechanisms	Investor equity mechanisms distort tax	Converting capital to income and vice versa
When law is obscure and cash flows difficult to track	Deem the outcome – entity classification and characterization of receipts	Div 6C, CCIVs, Div 5A, Div 830, Div 275, Superannuation,
Reliance of flow through taxation	Australian tax reporting is the world's most complex	Franking credits, FITOs and discount capital gains through trusts - complexity
Tax reporting and investment administration systems –pricing	Unit pricing processes not considered	Write back of provisions and unit pricing errors and rectification
Clawback mechanisms	Unable to recover overly generous concessions	RBLs, TRIS, Death duty
Policy priorities	Be a leading market or tax integrity	IMR
Cross border distribution	Consider tax at the beginning, not the end	Asia Region Funds Passport
DAOs and smart contracts	New forms of collective investment	Inability invest via existing CIVs
Product rationalisation	Lifecycle of CIV not contemplated	Legacy products can't be wound up
Perception of Australia as an investment market	Uncompetitive tax framework – not agile	Johnson Report recommendations
Funds market mechanisms	Informs development of digital assets	ETF market maker arbitrage mechanisms, money market fund stable dollar pricing – Terra/Luna stable coin

Appendix C: Key areas of the current tax law requiring clarification

Issue	Description and examples
Capital / revenue distinction	As noted in Appendix A, the ATO has implied, through website guidance and tax determinations, that most transactions involving digital assets are on capital account, and there is limited scope for revenue treatment. We consider that, having regard to the features of some digital assets (in particular, for some digital assets, a return can only be derived through resale - similar to gold), the current position in the tax law is unclear and there is a risk that this outcome could be challenged by the Courts.
CGT personal use assets	Consideration should be given to whether, and when, digital assets may be personal use assets for CGT purposes. Current ATO guidance suggests there are limited circumstances where a digital assets may be a personal use asset, including a “crypto asset you acquire and use in a short period of time to buy items for personal use or consumption”. However, there may be other circumstances where digital assets are acquired for personal use, for example NFTs acquired on an online gaming platform.
Tax treatment of specific blockchain events	The ATO has provided guidance as to the tax implications of the following events: • Staking rewards - according to ATO guidance, the money value of additional token received as staking rewards is ordinary income at the time you receive the token. The guidance does not, however, address the source of this income or provide any additional clarification regarding the timing of derivation of income (see further below). There are also multiple types of staking (e.g. staking on a DeFi protocol vs staking on a proof of stake network) which require separate consideration. • Wrapping - the ATO has provided informal guidance (via its community FAQ forum), on the tax implications of wrapping, indicating that this results in the disposal of one asset in return for another (e.g. disposal of ETH and acquisition of wrapped ETH). • Forks / chain splits - according to ATO guidance, the value of the new asset is not treated as ordinary income or a capital gain at the time it is received. The cost base of the new asset

	received as a result of a chain split is zero. This can be contrasted with similar transactions, such as share splits, where the cost base of the original share is split between the two shares held after the split occurs. • Airdrops - according to ATO guidance, the money value of an established token received by airdrop is ordinary income at the time it is received. (refer to UK treatment). Each of these events should be analysed against the foundational principles in the framework above. Where there is a divergence between the tax implications of these digital asset transactions and other economically similar transactions, consideration should be given to the reasons for these differences, and whether this reflects a well-considered policy position which is intended to achieve a specific outcome. The tax treatment of ETH following the Ethereum merge, and of ETHW (i.e. the ETH that is now mined on the ongoing proof of work version of the Ethereum protocol), is a material industry event and requires express consideration by the ATO and guidance on tax treatment before 30 June 2023.
Source of income from blockchain events	As noted above, there is currently no guidance on the source of income arising from blockchain events (e.g. staking rewards, gas fees, gains on disposal of digital assets where the asset is held on revenue account). While these are only limited situations where this would impact the tax outcome (for example, where the relevant taxpayer was a non-resident and the income is sourced in Australia), it is unclear whether it is even possible to identify a source for this type of income, where it is not possible to identify: • a counterparty to the transaction • the location of the counterparty if one can be identified, or • the location where a smart contract is executed. In a recent lawsuit in the USA, the Securities and Exchange Commission (SEC) claimed that all transactions on the Ethereum network took place in the US, as the transactions are validated by nodes on the Ethereum blockchain, and those nodes are clustered more densely in the US than in any other country. This position (if held to be correct) is likely to have implications as to the source of income earned from transactions taking place on the Ethereum network, and highlights the needs for globally aligned rules dealing with source of income from digital assets and transactions.

Timing of derivation of income from blockchain transactions	Whilst ATO guidance indicates that certain blockchain transactions give rise to ordinary income, there is a lack of clarity regarding the actual timing of derivation of that income. For example, the ATO guidance states that staking rewards are "ordinary income at the time you receive the token". However, it is not clear when the taxpayer is taken to "receive the token". The timing of derivation of income may also be different depending on the type of reward received - for example, staking rewards for verifying transactions on a proof-of-stake blockchain versus rewards for participating in DeFi staking and lending arrangements. Each protocol may be different, and some may include features that allow the participant to defer the timing of derivation of income.
Application of Taxation of Financial Arrangements (TOFA) provisions	The potential application of the TOFA provisions to digital assets and transactions requires clarification, and in some cases, law amendments may be appropriate to widen the scope of TOFA to capture some digital asset transactions (for example, refer to our comments in Appendix A regarding DeFi transactions). Under the current provisions, the application of TOFA may depend on the specific transaction and assets used. The ATO has provided its views on the application of TOFA to some digital transactions in at least one Private Binding Ruling that we are aware of (see PBR Authorisation Number: 1051972615838[7]). In this PBR, the ATO concluded that whilst transactions to buy and sell cryptocurrency using an arbitrage function where financial arrangements as defined, they were carved out of TOFA by the application of the exception for short term arrangements involving the acquisition or disposal of non-money amounts.
Tax barriers to creation of collective investment vehicles (CIVs) investing in digital assets	In addition to the other issues highlighted in this submission, there are a number of specific tax issues that give rise to barriers to the creation of CIVs investing in digital assets in Australia. • Trading trusts: Investing in digital assets may result in a trust being subject to tax as a company if the digital asset in question fails to satisfy the definition of eligible investment business. It is currently unclear whether digital assets could fall within the scope of "other security" or "similar financial instruments" included in the definition of eligible investment business. If a trust (or a Corporate Collective Investment Vehicle that is deemed to be a trust under Subdivision 195-C of the ITAA 1997) is treated as a trading trust, it will not be able

[7] https://www.ato.gov.au/law/view/view.htm?docid=EV/1051972615838&PiT=99991231235958

	to achieve flow through tax treatment. • Managed Investment Trust (**MIT**) covered asset: If a trust is above to overcome the trading trust issue above, it is likely that digital assets do not satisfy the definition of MIT covered assets as they do not fall within the asset classes currently listed in legislation. This means a MIT would not be able to make a capital account election in relation to digital assets, and falls back on ordinary principles to determine capital / revenue treatment (which is discussed elsewhere in this submission). • Listed investment company (**LIC**) permitted investment: Tax relief is currently provided to shareholders in LICs in respect of LIC capital gains. To qualify as an LIC, at least 90% of the market value of CGT assets of the listed investment company to be “permitted investments”. It is unclear whether digital assets could be permitted investments for these purposes, and this may depend on whether they are “financial instruments”, and/or whether they are used in the course of carrying on a business to derive interest, an annuity, rent, royalties or foreign exchange gains. • Investment manager regime (**IMR**): It is unclear whether a widely held foreign fund (an IMR entity) that invests in digital assets would be eligible for the IMR concessions as this broadly only applies to TOFA financial arrangements (other than taxable Australian real property and indirect Australian real property interests). It is also possible that at some point in the future, DAOs will replace companies and trusts as collective investment vehicles, and the tax treatment of both the DAO and its investors will need to be considered. This is discussed further below.
Tax treatment of Decentralised Autonomous Organisations (DAOs)	The tax treatment of DAOs should be clarified, including whether the tax characterisation of these depends on the specific arrangements for each DAO. A DAO could be characterised, for example, as an unincorporated association of persons (which is in certain circumstances treated as a company for tax purposes), or a tax law partnership. The tax characterisation will impact whether the DAO itself could potentially be subject to tax in Australia (although there are significant practical challenges with this), or whether the participants are subject to tax (equally difficult from a practical perspective).
Controlled Foreign Company (CFC) issues	In addition to the issues already highlighted in this Appendix, it is not clear whether income arising from dealings with digital assets and transactions is tainted income for the purposes of Australia’s CFC

	provisions. Broadly, the CFC provisions will only attribute profits back to Australia if the CFC fails the “active income test”, that is, where the CFCs tainted income ratio (gross tainted turnover divided by gross turnover) is more than 5%. Tainted turnover includes passive income, which is defined to include income derived from carrying on a business of trading in tainted assets. Tainted asset is also a defined term, and broadly includes a range of common financial assets, as well as “other securities”, “any similar financial instrument” and “an asset other than trading stock or any other asset used solely in carrying on a business”, but does not include a commodity investment. Similar to the other issues highlighted in this submission, determining whether income from a particular digital asset or transaction is tainted turnover (requiring inclusion in the numerator of the trained income ratio), or where the active income test is failed, is adjusted tainted income which is “notional assessable income” and hence attributable, requires a complex analysis of the particular digital asset and the facts and circumstances surrounding the transaction. This level of uncertainty has the potential to increase compliance costs and reduce overall levels of compliance, as well as encourage businesses to structure their activities in such a way as to avoid any potential Australian tax exposures, including by way of the CFC rules.
Withholding tax	As highlighted in Appendix A in relation to interest or interest-like returns generated from DeFi transactions, it is likely to be extremely difficult and impractical to impose withholding tax on transactions occurring on a blockchain. This also includes embedded royalties in NFTs, where it may not be possible to identify: • the parties to the transaction • the location of each party if any can be identified, or • the location where a smart contract is executed.
Donation of digital assets	Current tax rules providing a deduction for donations of property to DGRs or other recognised organisations require a valuation to be obtained from the Commissioner where the Commissioner values the gift at more than $5,000, and the property was purchased more than 12 months ago or the donor did not purchase the property (for example, it was won or inherit). The ATO charges a fee for this valuation equal to the cost of obtaining the valuation. As this may be seen as a barrier to donating digital assets (which under the current law are treated as property), we suggest considering the introduction of an alternative approach or a streamlined process for obtaining valuations. For example, the law could be amended to remove the valuation requirement in circumstances where the

	deduction is calculated based on the value of digital assets according to specified trusted exchanges, similar to the 2015 proposal[8] to remove the need to obtain a valuation for donations of listed shares and managed funds greater than $5,000.
Integrity concerns	Specific rules to deal with integrity concerns may be required for digital assets and transactions, or consideration of how existing tax anti-avoidance rules apply to digital assets and transactions. For example, the ATO has recently highlighted[9] the use of asset wash sales to artificially generate losses to reduce income. Whilst it is possible that existing rules such as Part IVA General Anti-Avoidance Rule applies to wash sales (see Taxation Ruling TR 2008/1 *Income tax: application of Part IVA of the Income Tax Assessment Act 1936 to 'wash sale' arrangements*), there may be a need to introduce specific rules dealing with other arrangements.
Provision of digital assets to employees as incentives	Current ATO guidance provides that any provision of cryptocurrency by an employer to an employee in respect of their employment is classified as a property fringe benefit, resulting in no Pay As You Go (PAYG) withholding obligations, and no Superannuation Guarantee obligations. The valuation of a property benefit is dependent, among other things, on whether the employer purchased the benefit under an arms-length transaction - where this is the case, the amount paid is the taxable value. Where this is not the case, the taxable value will be determined by reference to the notional value of the property at the provision time. The need to ascertain the notional value of the property may also be necessary where the employer is taken to have provided an in-house property fringe benefit. To ascertain the notional value of a property fringe benefit the employer must determine the amount the employee would have to pay the provider for a comparable benefit under an arm's length transaction. The ATO currently does not provide guidance on acceptable means of determining the notional value of cryptocurrencies at the time it is provided (i.e. to an employee by an employer or their associate). Without a central digital currency exchange, there may be occasions where obtaining a single price to rely upon could be both subjective and variable, in turn impacting the integrity of the calculation of a property fringe benefit's taxable value. Guidance on what would constitute an acceptable means of determining a 'notional' value should be considered. Furthermore, the ATO has provided that the sales and purchases of

[8] https://ministers.treasury.gov.au/ministers/josh-frydenberg-2014/media-releases/measures-boost-philanthropy-australia
[9] https://www.ato.gov.au/Media-centre/Media-releases/Wash-sales--The-ATO-is-cleaning-up-dirty-laundry/

	digital currency are not subject to GST from 1 July 2017. As such, it can be ascertained that the taxable value of the provision of digital assets to employees as incentives would be grossed up at a lower rate. Guidance on the classification of cryptocurrencies as either type should be considered.
Employee contributions and repayment of loans	Questions may arise as to whether an employee, for the purpose of making a recipient's or employee's contribution (for FBT purposes) or for the purpose of reducing a loan benefit, could provide an employer with payment in the form of a cryptocurrency. We note in relation to recipient's contributions that an amount must be 'paid' to an employer, and in relation to loan benefits, an amount must be repaid. In this regard, it may be possible that cryptocurrency 'payments' may be validly recognised in both contexts - section 145 of the *Fringe Benefits Tax Assessment Act 1996* identifies that where consideration is effected by the provision of 'property' the money value of that property is taken to have been paid. If the ATO accepts this position, the question posed in the section above would become relevant, being how the value (in this case, the money value) of a cryptocurrency could be determined on a day (other than at the point at which it was purchased/acquired). Guidance from the ATO would be welcomed.
Payroll Tax	For payroll tax purposes, circumstances can arise where the jurisdiction in which 'wages' (which includes taxable fringe benefits) are paid can be determinative on the question of whether those wages are subject to payroll tax, and if so, the relevant State/Territory in which the liability will arise. To illustrate, wages (in cash) are taken to be paid in the State/jurisdiction in which the recipients bank account is located. Shares on the other hand, are taken to be paid in the State/jurisdiction in which the relevant company (in which the shares are held) is registered. Guidance from the State Revenue authorities would be welcome for the purpose of determining the relevant State/jurisdiction in the event of cryptocurrencies being paid/provided, in circumstances where that payment/provision results in a 'taxable wage' for payroll tax purposes.
Application of GST to DeFi arrangements	There is currently no specific guidance on the application of the Australian GST rules to these DeFi protocols and transactions. Whilst some DeFi protocols may fit neatly into traditional arrangements already catered for under the GST law (i.e. simple lending protocols

	involving “interest”), the wide array of these protocols can vary significantly in complexity. Noting the scale and liquidity that has been committed or pledged under these protocols, it should be a priority to establish GST rules and guidelines within the foundational principles outlined in this submission.
Time and place of supply and GST attribution	Further, as mentioned above in respect of income tax, it is unclear as to how the existing time and place of supply rules may apply to events on the blockchain. For example, the existing GST attribution rules may not be applicable in respect of transactions that occur by virtue of smart contracts that contain specific criteria before funds and/or tokens are released to the relevant party (notwithstanding that the counterparty provided the funds and/or tokens prior to the smart contract criteria being satisfied), etc.
GST and NFTs	The existing GST rules seem to be able to deal with simple transactions involving NFTs as akin to supplies of property. However, as the nature of NFTs continues to mature, the complexity of this space may require specific GST rules. For example, where royalties are embedded into the NFT to allow the original creator to continue to benefit from subsequent sales, it is unclear how the existing GST rules would deal with the treatment of the royalty, similar to withholding taxes discussed above, where it is not possible to identify: • the parties to the subsequent transaction • the location of each party if any can be identified, or • the location where a smart contract is executed.
GST and the ‘Metaverse’	Significant complexity seems to arise when considering the existing GST regime in the context of blockchain gaming and the concept of the ‘Metaverse’. There is currently no GST guidance on transactions occurring within the ‘Metaverse’, however, we note among the considerations are: • Do participants in the ‘Metaverse’ carry on an enterprise for GST purposes (this is particularly relevant for ‘play to earn’ gaming)? • Will a ‘Metaverse’ operator be considered an ‘Electronic Distribution Platform’ operator for GST purposes? • How will participants in the ‘Metaverse’ identify when they transact with non-resident counterparties? • Does the location of the ‘Metaverse’ operator / servers impact the location of transactions taking place in the ‘Metaverse’?