The demystification of decentralised finance: finding our way through

Management of taxes | Personal tax



23 May 2022

Decentralised finance (or DeFi) is growing rapidly. In the UK, we are seeing various government proposals towards creating the early stages of a framework, as well as HMRC guidance on the taxation aspects of DeFi.

Key Points

What is the issue?

HMRC introduced updated guidance on crypto assets on 2 February 2022, looking at the world of decentralised finance (DeFi).

What does it mean for me?

As with crypto assets generally, various taxation anomalies arise with DeFi. Many of these issues are linked to whether or not disposals of crypto assets are taking place

to support a specific transaction.

What can I take away?

The market for crypto assets is maturing and the regulatory and taxation authorities are working hard to provide protections and rules to allow taxpayers to understand how they can invest in, or involve, crypto assets in their business and personal transactions.

HMRC introduced updated guidance on crypto assets on 2 February 2022, looking at the world of decentralised finance (DeFi) (see CRYPTO61214 at bit.ly/36LQPj8).

In my last *Tax Adviser* article on crypto assets, 'The crypto revolution' (December 2021), I referred to comments made by Sir Jon Cunliffe, Deputy Governor for Financial Stability at the Bank of England, who stated that between 2020 and 2021 DeFi had grown ten times in size to $100 billion and was continuing to grow quickly.

The world of crypto is at the best of times volatile, but in recent weeks this has especially been the case, with significant challenges arising in the area around stablecoins, which were designed to reduce that volatility. That said, this does not point towards the end of 'crypto'. Crypto is on a journey, and some of what we have seen is just part of that journey.

John Glen, the Economic Secretary to the Treasury, in his speech of 4 April 2022 set out the government's aims to make the UK the pre-eminent location for financial services, with crypto playing a key part, including DeFi.

What is DeFi?

DeFi is not one single thing. In simple terms, it refers to financial services provided by applying computer algorithms, activities or arrangements via distributed ledger technology (DLT), usually blockchain, and without involving banks or other such intermediaries. In distributed ledger technology, there is generally no central control or central internet service provider – thereby further extending the lack of intermediaries. Whilst DeFi could feasibly cover all manner of financial activities, a significant part of the market currently relates to borrowing and lending activities.

The nature of DeFi activities is akin to internet based financial services, where little or no regulatory framework exists. The same volatility exists in this market of

financial services as in crypto assets in general. The market is moving fast, and the Bank of England or the Financial Conduct Authority (FCA) are trying to move quickly to introduce regulation, at least on some of the higher risk activities.

The first real FCA action in the area was the banning of crypto derivative services to the general public in October 2020 and requiring crypto asset businesses to comply with the money laundering regulations.

In January 2022, the government issued its response to a consultation on the regulation on crypto asset promotions, referring to DeFi at 4.26 to 4.29 (see bit.ly/3KeHnCz). Whilst not specifically targeting DeFi, the proposed regulatory changes arising from that consultation may well cover DeFi activities. One would also expect HMRC guidance to develop over time, as DeFi activities expand and develop.

Finally, a significant part of the DeFi market involves many of the crypto asset exchange providers. Therefore, some of the services which form part of the DeFi market may also be available on a parallel centralised finance (CeFi) market.

With regard to the services themselves, a key aspect is the lack of human or intermediary involvement, which has been replaced by smart contracts automating transactions. In November 2021, Carolyn Wilkins, an external member of the Financial Policy Committee, set out some of the advantages of decentralised finance:

- Decentralisation reduces the reliance on intermediaries and their inefficient infrastructure.
- Smart contracts are enabled by the fact that DeFi protocols (the rules of the platform) can integrate with each other. Data is therefore easily shared, as opposed to traditional siloed platforms that do not talk to each other.
- DeFi protocols are open source, so the code is visible and auditable, and every transaction is visible on the blockchain.
- DeFi provides the technological opportunities for more creativity in financial services and within a swifter and more secure environment.

There is little doubt that those at policy level of financial services are supportive of crypto and blockchain developments, as long as they are properly regulated.

And so, to matters of taxation. As with crypto assets generally, various taxation anomalies arise with DeFi. Many of these issues are linked to whether or not disposals of crypto assets are taking place to support a specific transaction.

A quick refresher

It is worth understanding some of the important aspects which arise in terms of crypto and, by association, DeFi. In the administration of blockchain technology operations generally work by way of either Proof of Work or Proof of Stake.

Proof of Work

Proof of Work requires the various participants (nodes) to add new parts of the 'block' by way of undertaking complex computerised calculations. This is part of the reason why bitcoin, in particular, receives criticism for the level of energy involved.

The best known examples of Proof of Work blockchains are bitcoin and Ethereum 1.0. Ethereum is now the predominant blockchain on which DeFi protocols and applications function, with 70% of the worldwide DeFi value on the Ethereum blockchain.

Proof of Stake

Proof of Stake is an alternative to Proof of Work, with the aim of increasing the speed of transactions and reducing transaction fees. Instead of lots of miners vying with each other to add the next block on the blockchain, the work will be done by those who already have a stake in the blockchain. As with miners on Proof of Work blockchains, 'stakers' will receive coins or tokens for their efforts. Their stake will often act as a guarantee for the legitimacy of new blocks. In some circumstances, their stake can be cancelled or reduced; e.g. where things go wrong on the new block or transactions take too long.

Proof of Stake provides additional benefits by way of the 'liquidity' provided to the DeFi protocol. The blockchain process is currently more cumbersome than traditional investment marketplaces, where transactions can flow through central exchanges in seconds. DeFi requires a solution. One is for stakers to provide liquidity by way of staking some of their crypto in return (usually) for liquidity tokens. The DeFi site

then has a ready flow of crypto to lend to borrowers.

Staking may have tax implications. Whether it is taxable or not will require an analysis of the facts, in particular whether the person staking crypto passes full legal control of the staked crypto to the DeFi site.

Lending to a DeFi platform

Some people will lend to a DeFi site for a return. The inclination of many would be to treat this return as ‘interest’. However, returns on investment on crypto assets throw up a number of issues; in particular, whether that return meets the generally accepted definition of interest in law. The HMRC crypto guidance links to the Corporate Finance Manual (CFM33030), which itself sets out definitions of interest. The HMRC Savings and Investment Manual SAIM2060 also provides further reference to case law on the meaning of interest.

Perhaps the best known quotation on what interest is comes from Rowlatt J in *Bennett v Ogston* (1930) 15 TC 374. He described interest as ‘payment by time for the use of money’.

The leading case on the ‘interest of money’ is *Re Euro Ltd Hotel (Belgravia) Ltd* (1975) 51 TC 293, in which Megarry J considered that two requirements had to be satisfied for a payment to amount to interest:

- There must be a sum of money by reference to which the payment which is said to be interest is to be ascertained. A payment cannot be ‘interest of money’ without the requisite money for the payment to be ‘interest of’.
- Those sums of money must be due to the person entitled to the alleged interest.

As a result of the various case law around the definition of interest and the current status that crypto assets do not constitute money (see my article ‘The crypto revolution’ in *Tax Adviser*, December 2021), then in cases of DeFi lending, the return may well amount to a revenue, as opposed to capital, receipt, but it will not be interest as such. As a result, HMRC will look instead to the miscellaneous income rules within the Income Tax (Trading and Other Income) Act 2005 Part 5 or, in the case of a company, Corporation Tax Act 2009 Part 10.

Transfer of beneficial ownership?

It is important to consider whether the lender (or liquidity provider) actually transfers their beneficial ownership of tokens to the borrower or DeFi lending platform. This will require an examination of the contract’s terms and conditions.

Where the recipient of the tokens can deal with those tokens as they want, this will be a strong indicator that they have acquired the beneficial ownership of the tokens. Conversely, if the recipient is specifically restricted from dealing with the tokens, this will be a strong indicator that they do not have beneficial ownership.

HMRC has stated that where the beneficial ownership of the tokens is transferred to the borrower or DeFi lending platform, this will give rise to a disposal of the tokens, subject to the revenue and capital issues mentioned elsewhere. The receipt of such assets will amount to an acquisition for the purposes of capital gains tax. A future repayment, with any transfer of beneficial ownership of crypto assets, will be a disposal, against which that earlier acquisition will be set in terms of a capital gains tax computation.

Crypto assets as collateral

On various DeFi sites, there is a requirement to pledge crypto assets as collateral before someone can borrow.

As stated above, if that collateral involves a transfer of beneficial ownership of crypto assets, this will amount to a disposal and it will be necessary to determine relevant valuations for computational purposes. At the point of withdrawing the collateral, this will be an acquisition.

Conversely, where beneficial ownership is not transferred to the DeFi site, then no disposal will have occurred and the Taxation of Chargeable Gains Act (TCGA) 1992 s 26 applies.

Consequences of liquidation

Some DeFi sites, can seek to liquidate positions, as part of administration. This can involve those pledging crypto assets, having part of their holding liquidated as a result of various liquidation events. If liquidation takes place in circumstances where beneficial ownership has transferred, triggering a capital gains tax disposal, then there will be no capital gains tax effect at that point. However, if beneficial ownership has not passed to the DeFi site, the liquidation will result in a disposal for

the purposes of capital gains tax.

In cases of liquidation, the DeFi site can penalise the borrower by taking a proportion of the collateral, which can in turn be passed over to the liquidator.

HMRC has stated that in such cases, the market value of the tokens will not be an allowable deduction in calculating any capital gains tax, as they do not meet the requirements set out within TCGA 1992 s 38.

Crypto and international transparency

At the time of writing, developments are taking place to increase international tax transparency in crypto.

On 22 March 2022, the OECD published a public consultation on:

- the introduction of a new international framework to require the global reporting of crypto assets; and
- extending the Common Reporting Standard to include crypto assets within the definition of financial accounts.

The Crypto Assets Reporting Framework

The Crypto Assets Reporting Framework (CARF) (see bit.ly/3N3iVpx) is a proposal for an international reporting framework to be made up of four building blocks:

1. the scope of crypto assets to be covered;

2. the intermediaries subject to data collection and reporting requirements;

3. the transactions subject to reporting, as well as the information to be reported in respect of such transactions; and

4. the due diligence procedures to identify crypto asset users and the relevant tax jurisdictions for reporting purposes.

1. The scope of crypto assets

The OECD proposal looks to focus on ‘cryptographically secured distributed ledger technology’. The definitions seek to ensure that assets covered under the CARF

meet those within the scope of the Financial Action Task Force (FATF), so that the due diligence requirements can build on existing anti-money laundering/know your customer (AML/KYC) rules. (FATF is the independent inter-governmental body that develops and promotes policies to protect the global financial system against money laundering, and the financing of terrorism and the proliferation of weapons of mass destruction.)

2. Intermediaries in scope

Under the CARF proposals, intermediaries facilitating exchanges between crypto assets and between crypto assets and fiat currency will be in scope. Again, much reliance is placed on the FATF's definitions so as to limit any gaps. It is anticipated that intermediaries providing booking and dealing services will also be in scope.

3. Reporting requirements

There are four types of relevant transaction reportable under the CARF:

- exchanges between crypto assets and fiat currencies;
- exchanges between one or more forms of crypto assets;
- reportable retail payment transactions; and
- transfer of crypto assets.

The CARF proposes that transactions will be reported on an annual aggregate basis by type of crypto asset and distinguishing outward and inwards transactions. It is anticipated that reporting will distinguish between crypto to crypto and crypto to fiat currency and will also categorise transfers by type; e.g. airdrops, income from staking or loan.

In terms of crypto to fiat, the fiat amount paid or received is to be reported as the acquisition amount or gross proceeds. In terms of crypto to crypto transactions, whether acquisition or disposal, this will also be in fiat currency. It will also be reported as two reportable elements: a disposal based on market value at that time; and an acquisition again based on market value.

4. Due diligence procedures

The CARF contains due diligence requirements to be followed by crypto asset service providers in identifying crypto asset users, determining the relevant tax jurisdictions

for reporting purposes. It is envisaged that the CARF due diligence will build on the self-certification process of the Common Reporting Standard, as well as existing AML/KYC obligations.

One comment on the OECD proposals, is around the level of information to be gathered and exchanged. There is currently no international framework for the taxation of crypto and so countries are left to their own devices. Would it be better to agree on an international taxation framework ahead of data exchange, as otherwise there is a risk of collecting and exchanging data without, as yet, a clear purpose?

Amendments to the Common Reporting Standard

The Common Reporting Standard was introduced by the OECD in 2014 with first reports from 2017. It requires financial institutions to automatically report on account holders holding reportable financial accounts to their respective tax authorities for onward transmission through the relevant tax authority of the account holder. Over 100 countries have adopted the Common Reporting Standard (although the US has instead adopted and implemented FATCA).

The current OECD proposal seeks to extend the Common Reporting Standard to bring in new digital financial products, including electronic money products and central bank digital currencies. It is also proposed that the definitions of financial assets and investment entities will include derivatives that reference crypto assets and are held in custodial accounts and investment entities investing in crypto assets.

The way ahead

It is now clear that crypto assets, in some shape or form, are here to stay and are now becoming a greater part of our financial services landscape, as well as of our daily lives. The market is maturing, and the regulatory and taxation authorities are working hard to keep pace and provide protections and rules to allow us to start to advise clients on how they can invest in, or involve, crypto assets in their business as well as personal transactions.

As stated above, on 4 April 2022 John Glen, Economic Secretary to the Treasury, set out some of the UK government’s plans for fintech and the role of crypto. He

confirmed that the UK government will look to make stablecoins a part of the UK payment system.

The recent volatility and publicity around stablecoins might require pause for thought; however, with good regulation, one would argue that the concept is sound. Glen also stated that there would be a further review of DeFi, including of some of the staking rules.

Such statements by senior politicians show the clear commitment to support and grow the crypto and blockchain environment.