An In-Depth Guide to Calculating Cryptocurrency Tax Liabilities

Credit: Vishal Chawla via Crypto Briefing

Key Takeaways

- Tax season is approaching.
- Crypto investors may be liable for income tax and capital gains tax based on their activity.
- Capital gains tax and income taxes are applied differently based on the nature of crypto transactions.

The Crypto Tax Guide

As we enter the new year, most cryptocurrency traders and investors will have tax deadlines looming. In the United States, the Internal Revenue Service will be opening up the filing process for taxpayers from Jan. 24, with last year's tax returns due by Apr. 18. That means that tax returns filed in 2022 will apply to the 2021 tax year; taxes for 2022 will be due in April 2023.

The IRS first published its guidance on taxing cryptocurrencies in 2019, and many other countries have adopted similar policies. As such, active crypto traders, DeFi enthusiasts, and NFT collectors need to pay attention to their tax obligations. Before filing taxes, the most important step is to take note of all crypto transactions that trigger taxable events.

Such transactions include selling crypto assets like Bitcoin and Ethereum for cash or other assets, receiving airdrops, crypto mining, staking, and yield farming. It's also important to be aware of the type of tax that applies to each transaction. Those that trigger taxes fall into two main categories–income tax and capital gains tax. Both are reported differently in tax returns. This feature covers the topic in detail.

Income Tax

In the U.S., income tax applies on crypto assets received through staking, yield farming, as part of a salary, or in exchange for a good or service. Income tax is charged at the regular tax rate according to earnings. It applies to compensation earned from employment, including salary and royalties. Other earnings such as dividends and commissions are also subject to income tax.

All crypto assets received from lending, yield farming, airdrops, and governance token rewards are subject to income tax according to the market value at the time the user receives them. Whenever a user receives coins in their wallet, the market price in fiat terms can be used as the cost basis for reporting gross income.

In the U.S., the gross income must be reported on Form 1040, which is used for filing individual income tax returns. Income tax rates fall under seven brackets ranging from 10% to 37%. It's worth noting that there is also a standard tax free deduction on income in the U.S. The deduction is set at $12,550 for the 2021 tax year and $12,950 for the 2022 tax year.

Capital Gains Tax

According to the U.S. Internal Revenue Code, capital gains are made from selling or exchanging capital assets like stocks and cryptocurrencies, and other properties used for investment purposes.

Capital gains or losses must be calculated when an asset is sold, swapped, or exchanged for fiat money, stablecoins, or any other tokens.

In the U.S., there are two types of capital gains tax: short-term and long-term. Short-term gains apply to assets sold within a one-year holding period and are subject to higher rates than long-term gains. As such, many crypto users opt to hold assets for more than one year to reduce their liabilities.

Short-term capital gains tax is charged at the same rate as ordinary income. Taxpayers can therefore expect to pay between 10% and 37% on gains from selling their assets within a year.

Long-term capital gains tax is charged at between 0% and 20% depending on the taxpayer's income. The tax-free allowance for single people is up to $40,400 for the 2021 tax year and up to $41,675 for the 2022 tax year.

It is also important to note how capital losses can impact tax liabilities. A capital loss is a realized loss from an asset depreciating in value at the time of sale. Capital losses can be used to offset capital gains and reduce tax liabilities as part of a strategy known as "tax loss harvesting." For example, a crypto user may have bought a DeFi token that underperformed in 2021. They could decide to sell that asset at a loss in order to offset the capital gains they owe on the SOL and LUNA they sold at a profit in the same year.

In the U.S., taxpayers must file the IRS Form 8949 to report capital gains and losses.

Taxes on NFTs

NFTs are tokenized digital collectibles that may encompass digital art, music, memes, or any other type of content. In 2021, NFTs exploded in the mainstream and welcomed a new wave of adopters into the crypto space.

While NFTs are still a nascent asset class, it is important to note that they are a type of cryptocurrency. As such, taxes apply to NFTs in the U.S. and other parts of the world. As with other types of crypto asset, the liabilities users face can vary from income tax to short or long-term capital gains tax.

There are two primary ways to generate NFT profits. One of them is creating an NFT and selling it on a marketplace such as OpenSea. In this instance, income tax applies.

Buying an NFT and selling it on the secondary market, meanwhile, leaves the user liable to capital gains tax. For example, if someone minted an NFT for $200 in Ethereum in May and sold it for $6,000 in Ethereum in August, the liability would be $5,800. Liabilities are calculated based on the dollar value of NFTs.

In the U.S., investors must report gains and losses from NFTs on the IRS Form 8949.

Airdrops

Many crypto tokens are launched through airdrops to early users. While airdrops can offer lucrative returns for active crypto users, they must also be reported in tax filings.

Token airdrops are considered a form of income in the U.S., and their value is based on the market value at the time the user receives them.

For example, if someone received 310.7 DYDX tokens from dYdX's September 2021 airdrop and claimed them at a market price of $10, their taxable income would be $3,107.

The income tax forms a cost basis for calculating capital gains on an asset. It's deductible from capital gains tax liabilities. For example, if the user sold the 310.7 DYDX when the tokens were trading at $20, they would receive $6,214. The realized capital gain would be the difference between the $6,214 profit and the $3,107 liability, which comes to $3,044. Tax would be due on the $3,044 gain.

On the contrary, if the user sold the 310.7 DYDX when the tokens traded at $6, they would receive $1,864.20. Factoring in the $3,107 taxable income, they would realize a capital loss of $1,242.80. This loss could be deducted from other capital gains, reducing the user's overall tax burden.

DeFi Lending and Yield Farming

Taxes also apply to DeFi activities.

Lending assets on platforms like Compound, Curve Finance, and Balancer in anticipation of yield is a core component of DeFi.

Income tax applies to yield farming based on the market value at the time of claim or receipt in the user's wallet.

In DeFi, lending rewards are typically paid out using interest-bearing tokens. For example, on Aave, lenders earn aTokens, a form of ERC-20 token that gets minted when a deposit is made and denotes the user's deposited value. aTokens can be redeemed for the underlying asset. Such tokens add a layer of complexity to reporting liabilities as they can trigger multiple taxable events.

For example, a DeFi user may buy 10 ETH for $3,000 each at a total price of $30,000. Later, they could deposit the assets into an Aave lending pool. Aave would mint 10 aETH, and they stay pegged to the underlying asset. Ten months later, if the price of ETH increased to $3,300, they would receive 0.1 aETH (or $330) in interest.

They would need to report the $330 interest as income. After this, they could close the deposit and convert 10 aETH to 10 ETH when each token is trading at $3,300. As they would receive a $33,000 sum, there would be a capital gain based on the difference between the value of the deposit and the assets withdrawn. The difference between the $30,000 deposit and $33,000 withdrawal results in a capital gain of $3,000.

The overall tax due would be $3,000 plus the $330 interest, which equates to $3,330.

On centralized cryptocurrency lending platforms, such situations be less complex. For example, lending 10 ETH on BlockFi may earn 0.1 ETH directly to the user’s wallet. If the user does not make any trades, they would only be subject to income tax.

Liquidity and Governance Rewards

Providing liquidity is another way to generate profits in DeFi.

On decentralized exchanges like Uniswap, liquidity providers can earn a portion of the trading fees.

Liquidity providers automatically receive a share of the fees through LP tokens, which represent a percentage share in a pool.

When users withdraw assets from a pool, they burn the LP token and receive their underlying assets plus any accrued interest.

Such activities constitute a crypto-to-crypto trade and therefore assume capital gains taxes.

For example, a user may receive LP tokens after depositing $1,000 worth of ETH to a Uniswap pool. If they withdraw their assets a few months later when the LP tokens are worth $1,100, the capital gain is calculated based on the difference between the LP tokens and the underlying asset. This would result in a capital gain of $100.

Many DeFi protocols also reward users with governance tokens in what's known as liquidity mining. For example, if a user earns 10 SUSHI at a market price of $10 for providing liquidity on SushiSwap but does not dispose of the asset, they would owe capital gains on trading their LP tokens, and $100 income tax on their SUSHI rewards. If the price of SUSHI increased to $20 and they opted to sell the tokens, the liability would be the capital gain of $200 with the income tax liability of $100 deducted. This would result in a $100 liability.

Final Thoughts

The IRS has not provided complete clarity or guidance on taxing all types of DeFi transactions. For example, it's still unclear whether depositing Bitcoin to mint wrapped Bitcoin would count as a taxable event. It could be argued that swapping BTC for WBTC does not count as disposing of the underlying asset, but most crypto tax experts say that transactions and trading should be considered taxable events. Therefore, even a simple swap of BTC to WBTC can qualify as a taxable event.

Many active crypto traders calculate their taxes using tools such as CryptoTrader.Tax, CoinTracker, TaxBit, and TokenTax. Such products are useful for tracking transactions and making the process of paying taxes on crypto less cumbersome. Some users opt for consulting a specialist before filing their returns. When using crypto, DeFi, and NFTs, it's important to be aware of the tax liabilities for each activity. That way, there's less chance of an unexpected shock when tax season comes around.