

QUESTIONS WE'VE BEEN ASKED > GENERAL ISSUES

Income tax – tax treatment of cryptoassets received from a hard fork

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The use of cryptoassets and distributed ledger technology (e.g. blockchain) is becoming increasingly common. As a result, Inland Revenue has been asked to clarify the tax treatment of various types of cryptoasset transactions and arrangements. This Question We've Been Asked addresses the income tax consequences of receiving cryptoassets from a hard fork.

General advice on the taxation of cryptoassets can be found on the Inland Revenue website at <https://www.ird.govt.nz/cryptoassets>.

All legislative references are to the Income Tax Act 2007, unless otherwise stated.

Key provisions

Income Tax Act 2007 – ss CA 1(2), CB 1, CB 3, CB 4, DA 1, DB 23, EA 2

Question

What are the income tax consequences of receiving cryptoassets from a hard fork?

Answer

The receipt of cryptoassets from a hard fork is taxable where a person:

- has a cryptoasset business; or
- acquired the cryptoassets as part of a profit-making undertaking or scheme.

In other cases, the receipt is not taxable.

The disposal of cryptoassets that were received from a hard fork is taxable where a person:

- has a cryptoasset business;
- disposed of the cryptoassets as part of a profit-making undertaking or scheme;
- acquired the cryptoassets for the purpose of disposing of them; or
- acquired the original cryptoassets for the purpose of disposing of them (where the person receives the new cryptoassets through an exchange).

In most cases, the disposal will be taxable.

Key terms

Blockchain is a type of distributed ledger technology, providing a digital record of transactions that is shared and maintained by users across a network.

Cryptoassets are cryptographically secured digital representations of value that can be transferred, stored or traded electronically. They use some form of distributed ledger technology such as blockchain. Cryptoassets may also commonly be referred to as cryptocurrencies, digital tokens or virtual currencies.

Cryptoasset business is a business that uses cryptoassets as part of its day-to-day activities, such as an exchange, a cryptoasset dealing business or a mining business.

Disposal includes selling cryptoassets for money, exchanging them for other cryptoassets or using them to acquire goods or services.

Hard fork is described at [1] below.

Explanation

What is a hard fork?

1. A hard fork has been described as follows:¹

As the rules relating to the functioning of each type of virtual currency are established by the underlying protocol that is shared by all of the users of that token, most changes to how the token functions requires a change to that protocol. These might be for example changes that would improve the speed at which transactions can be processed by changing how much information can be included in each block on the chain.

These changes are known as forks in the chain and require users to update the protocol software they are running. In order to implement a fork, a majority of users running the protocol must agree to the change. There are two main types of fork:

- **A hard fork** (sometimes also referred to as a “chain split”) changes the protocol code to create a new version of the blockchain alongside the old version, thus creating a new token which operates under the rules of the amended protocol while the original token continues to operate under the existing protocol. One example of this was the July 2017 hard fork of Bitcoin that saw the creation of the Bitcoin Cash token alongside Bitcoin...
 - **A soft fork** also updates the protocol, however, it is intended to be adopted by all users on the network and thus no new coin is expected to be created (e.g. the August 2017 Segwit fork to the Bitcoin protocol).
2. A person who holds the original cryptoassets in a wallet or on an exchange that supports the hard fork at the time the fork occurs will generally have the right to an equivalent value of new cryptoassets on the new blockchain.

Holding cryptoassets on an exchange that supports the hard fork

3. Generally, a person who holds their cryptoassets on an exchange will receive the new cryptoassets only if the exchange supports the hard fork. In that case, the person may receive the new cryptoassets by way of a credit to their account without doing anything.

¹ OECD *Taxing Virtual Currencies, an Overview of Tax Treatments and Emerging Tax Policy Issues* (OECD, Paris, 2020) at 1.2.2. This item deals with the income tax consequences of receiving new cryptoassets from a hard fork. Forks that do not result in a new cryptoasset being received (for example, a soft fork) are not relevant for the purposes of this item.

Holding cryptoassets on an exchange or in a wallet that does not support the hard fork

4. Where a person holds their cryptoassets on an exchange, in a wallet that does not support the fork or in a cold wallet (that is, offline), they may not receive an entitlement to the new cryptoassets from the hard fork.
5. To be entitled to the new cryptoassets from the hard fork, the person will need to move their original cryptoassets onto an exchange or wallet that supports the hard fork before the 'snapshot date'. This may incur transaction fees or exchange fees.
6. When the original cryptoassets are held on an exchange or in a wallet that supports the hard fork prior to the snapshot, the person will generally become entitled to the cryptoassets after the snapshot has occurred.
7. Unless the person holds their cryptoassets on an exchange which supported the fork and has received a credit to their account, the person will then need to decide whether they undertake the necessary steps to get possession and control of the new cryptoassets. These steps may include the following:
 - downloading the new cryptoasset's wallet and syncing the new blockchain;
 - importing private keys; and
 - transferring cryptoassets between wallets at various stages (eg, for security reasons). Transaction fees are usually payable for such transfers.

Is the receipt of the new cryptoassets taxable?

8. When a person receives cryptoassets from a hard fork, the first question is whether that receipt is taxable. As explained below, in most cases the receipt of new cryptoassets from a hard fork is unlikely to be taxable.

Business income

9. An amount a person derives from a business is their income unless the amount is of a capital nature (s CB 1). An "amount" includes money's worth. Cryptoassets, while not money, are money's worth, so the receipt of cryptoassets could be an amount derived from a business. The question is whether the amount is derived from the current operations of the business, in the ordinary course of the business, or as an ordinary

incident of the business.² The answer to this question depends on the nature of the business and its relationship with the cryptoassets.

10. The receipt of cryptoassets from a hard fork is likely to be in the ordinary course, or an ordinary incident, of cryptoasset businesses (such as mining or dealing businesses) but would not generally be an ordinary incident of other types of businesses. Whether receipt occurs in the ordinary course, or as an ordinary incident, of a business will depend on the type of business and the way in which it earns income. The receipt of new cryptoassets from a hard fork would be taxable if the receipt could be said to be part of the way in which the business earns its income.
11. A business that is not actively involved in cryptoassets as part of its day to day business may hold cryptoassets for various reasons. For example, it may receive cryptoassets as a payment provided for goods (a barter transaction). Where such a business receives new cryptoassets from a hard fork, the new cryptoassets are unlikely to be connected to the current operations or be an ordinary incident of many non-cryptoasset businesses. However, this may depend on the nature of the business and the extent to which the operations of the business involve receiving payments in cryptoassets.
12. Cryptoassets received from a hard fork may form part of the trading stock of a cryptoasset business if they are held for trade or exchange in the ordinary course of the business.

Profit-making undertaking or scheme

13. An amount a person derives from a profit-making undertaking or scheme is income of the person (s CB 3). An undertaking or scheme is a series of steps directed to an end result. There needs to be a plan or purpose that is coherent and has some unity of conception. The undertaking or scheme must be carried out for the dominant purpose of making a profit.³
14. The receipt of cryptoassets from a hard fork could be income from a profit-making undertaking or scheme if the person has a plan directed at acquiring cryptoassets that are undergoing a hard fork, with the dominant purpose of making a profit.

² *CIR v City Motor Service Ltd*; *CIR v Napier Motors Ltd* [1969] NZLR 1,010 (CA) and *AA Finance Ltd v CIR* (1994) 16 NZTC 11,383 (CA).

³ *Investment & Merchant Finance v FCT* (1970) CLR 177 (HCA); *Vuleta v CIR* [1962] NZLR 325 (SC); *Duff v CIR* (1982) 5 NZTC 61,131 (CA); and *Case S86* (1996) 17 NZTC 7,538 (TRA).

Income under ordinary concepts

15. An amount will also be taxable where it is income under ordinary concepts (s CA 1(2)). Income is commonly described as something that “comes in” to a person. Factors that are relevant for deciding whether something is income include whether payments are regular or recurrent, the relationship between the payer and payee, and the purpose of the payment.⁴
16. It is unlikely that the receipt of new cryptoassets from a hard fork would occur often enough to be considered regular or recurrent. In addition, there is generally no relationship between the “payer” (the blockchain) and recipients who may do nothing other than hold the original cryptoasset at the time of the fork; nor could there be said to be a particular purpose for making a payment of the new cryptoassets to the particular recipients.

Summary

17. The receipt of new cryptoassets from a hard fork is taxable where they are received:
 - by a cryptoasset business (if received as an ordinary incident of the way in which the business earns its income); or
 - as part of a profit-making undertaking or scheme.
18. In other cases, the receipt is not taxable.

Is the disposal of the new cryptoassets taxable?

19. The second question is whether the disposal of cryptoassets received from a hard fork is taxable. As discussed below, whether a disposal is taxable will depend on the person’s circumstances. In most cases, disposals will be taxable.

Business income

20. Amounts received from disposing of cryptoassets that were received from a hard fork will be taxable income of cryptoasset businesses (such as mining and dealing businesses) as the disposal will likely be the sale of their trading stock or otherwise income from a business.

⁴ See *Tennant v Smith* (1892) 3 TC 158 (HL); *CIR v Grover* (1988) 10 NZTC 5,012 (CA) and *Reid v CIR* (1985) 7 NZTC 5,176 (CA).

21. The disposal of cryptoassets received from a hard fork by other types of businesses is unlikely to be taxable under s CB 1 unless disposing of cryptoassets is something that occurs in the ordinary course of the business. However, the disposal may still be taxable under other provisions such as s CB 4.

Profit-making undertaking or scheme

22. There may be instances where a disposal of cryptoassets received from a hard fork are part of a profit-making undertaking or scheme, in which case the amount derived from the disposal will be income under s CB 3. This will be fact specific.

Acquired for the purpose of disposal

23. An amount derived from disposing of personal property is income if the person acquired the property for the purpose of disposing of it (s CB 4). The decision in *Ruscoe* clarified that cryptoassets can be property.⁵
24. For s CB 4 to apply, disposal must be the person's dominant purpose for acquiring the property.⁶ The Commissioner's general position is that in most cases cryptoassets will be acquired for the dominant purpose of disposal, unless a person can provide clear and compelling evidence to show otherwise.⁷
25. Where a person passively acquires property, for example, by inheritance or gift, they generally do not have a purpose when acquiring that property. However, a person will not be regarded as a passive recipient where they have turned their mind to acquisition or provided consideration.⁸
26. A person acquires cryptoassets from a hard fork when the person has possession and control of the cryptoassets and can deal with them. This is when the person holds the private key (or otherwise has the cryptoassets credited to their account on an exchange). Accordingly, all steps and actions of the person up until that time are relevant for determining what the person's purpose was when that cryptoasset was acquired. At that time, the person generally has had to turn their mind to whether they take possession of the cryptoassets.

⁵ *Ruscoe v Cryptopia Ltd (in liq)* [2020] NZHC 728; (2020) 5 NZTR 30-001.

⁶ *CIR v National Distributors Ltd* (1989) 11 NZTC 6,346 (CA).

⁷ See <https://www.ird.govt.nz/cryptoassets>.

⁸ *Case F41 74 ATC 227* (Board of Review); *FCT v Miranda* 76 ATC 4180 (NSWSC); *Tikva Investments Pty Ltd v FCT* 72 ATC 4231 (HCA).

Situations where a person turns their mind to acquiring the cryptoassets

27. As previously stated, a person receives an entitlement to the new cryptoassets where they held the original cryptoassets on a relevant exchange or wallet that supported the hard fork at the snapshot.
28. In some cases, people will need to acquire eligible cryptoassets or transfer their cryptoassets on to a relevant wallet or exchange in order to be eligible for the hard fork. When a person has had to do this, they have turned their mind to the acquisition of the cryptoassets and will have a purpose in acquiring the cryptoassets. Section CB 4 will apply if they acquired those cryptoassets for the purpose of disposal.
29. Even where a person does not have to buy or transfer original cryptoassets (because they are already held in a supporting wallet), claiming the cryptoassets still requires a decision to be made, and several steps undertaken. Usually, a decision is involved as to whether or not to claim the cryptoassets from the hard fork. There may be issues with security, the hard fork may fail and/or the cryptoassets may have limited value.
30. Once a person has made the decision to claim the new cryptoassets, they generally:
 - download a new wallet and sync the blockchain;
 - transfer their original cryptoassets out of the original wallet to avoid any security issues (although this is not mandatory) and pay transaction fees; and
 - import their private keys into the new wallet.
31. A person turns their mind in some way to acquiring cryptoassets when they make the decision to claim the cryptoassets and undertake the above steps. As noted at [26], because a cryptoasset is acquired for tax purposes when a person has control over it, all the steps taken up to that time are relevant for determining whether they have a purpose at the time of acquisition. A purpose may be determined where the person has had to turn their mind to acquiring the cryptoassets in some way. Section CB 4 will apply to tax the disposal of the cryptoassets if they were acquired for the purpose of disposal.
32. In summary, a purpose on acquisition can be determined where a person has had to turn their mind to claim their cryptoassets. This includes situations where the person:
 - acquires original cryptoassets in order to be entitled to the new cryptoassets from the hard fork;
 - transfers their cryptoassets to a supporting exchange or wallet to ensure they are eligible (prior to the snapshot); or

- makes a decision to claim the cryptoassets, downloads the new wallet and undertakes steps to claim the new cryptoassets.

In these cases, s CB 4 will apply where the person's purpose in acquiring cryptoassets is to dispose of them. As stated above, all steps and actions of the person up until they have possession and control of the cryptoasset are relevant for determining the person's purpose on acquisition.

Situations where a person has not had to turn their mind to claim the cryptoassets

33. There are situations where a person may not have to specifically turn their mind to claiming the cryptoassets from a hard fork. This is where they hold the cryptoassets on an exchange that supports the fork, and the cryptoassets are credited to their account. In this event, it is still possible to attribute a purpose on acquisition of the new cryptoassets, being the purpose for which the original cryptoassets were acquired.
34. The same purpose can be attributed in this situation due to the relationship between the two blockchains - both carrying the same transactional history up to a point in time. The new blockchain and its cryptoassets are derived from the same property as the original blockchain and its cryptoassets, generally with only a change to the existing protocol (such as different block sizes) being the event triggering the hard fork. A hard fork could objectively be said to be an anticipated consequence and a normal feature of decentralised blockchains (such as Bitcoin), where users can propose protocol changes (for example, proposing a different consensus protocol, or different block sizes).⁹ It is also likely that the value of the new blockchain and its cryptoassets is derived to an extent from the existing blockchain (at least at the time of the fork).
35. Accordingly, treatment under s CB 4 is similar to that for share subdivisions and demergers. That is, if the original cryptoassets were acquired for the purpose of disposal, the new cryptoassets will also be acquired for the same purpose. In that event, disposals will be taxable under s CB 4.

Summary

36. The disposal of cryptoassets that were received from a hard fork is likely to be taxable in most cases, although this will depend on the circumstances. The disposal will be taxable where the person:

⁹ This is shown by the number of Bitcoin hard forks that have occurred to date, for example, Bitcoin XT in 2014, Bitcoin Classic and Bitcoin Unlimited in 2016, and Bitcoin Cash, Bitcoin Gold and Bitcoin Diamond in 2017, amongst others.

- has a cryptoasset business;
- disposes of the cryptoassets as part of a profit making undertaking or scheme; or
- acquired the cryptoassets (including in some cases the original cryptoassets) for the purpose of disposing of them.

Are any deductions available?

37. The third question is whether any deductions are available if any amounts are taxable. As discussed below, generally no deductions are available as no expenditure is usually incurred in acquiring cryptoassets from a hard fork. However, deductions will be available where cryptoassets are taxed on receipt and also on disposal.

The cost of the cryptoassets

38. Where the receipt or disposal of cryptoassets is taxable, deductions for expenditure incurred may be available (s DA 1 or s DB 23). However, other than transaction fees, there is generally no expenditure incurred when a person receives cryptoassets from a hard fork. Therefore, no deduction (other than for transaction fees) will generally be available.
39. However, where a person is taxed on both the receipt and disposal of a cryptoasset then a deduction for the cost of the cryptoasset is available at the time of disposal (ss DB 23 and EA 2). Where a person is taxed on receipt and disposal, the cost of acquiring that cryptoasset can take into account the value of the cryptoasset at the time of receipt (which the person paid tax on). Allowing a cost for this amount ensures the person is not effectively taxed twice on the initial value of the cryptoasset.¹⁰

Trading stock rules

40. Cryptoassets received from a hard fork that form trading stock of a business may also be taxable on receipt and on disposal. For the same reasons as above, a person who holds trading stock that is taxable both on receipt and on disposal may claim a deduction for cost relating to the value on receipt (which the person paid tax on). This deduction may be claimed in the year the receipt is returned as income. The person

¹⁰ This is considered to be consistent with comments made in *Tasman Forestry Ltd v CIR* (1999) 19 NZTC 15,147 (CA), *Sharkey v Wernher* [1956] AC 58 (HL); *Halliwell v CIR* (1991) 13 NZTC 8,197 (HC); and *Rangatira Ltd v CIR* (1996) 17 NZTC 12,727 (PC).

must then value the trading stock at the end of each income year under the trading stock rules (in Part E of the Act).

41. Standard valuation methods apply to the valuation of trading stock. There are no special rules for cryptoassets, so a person may use whatever method is available to them. However, the value of any trading stock that is an excepted financial arrangement must be valued at cost.¹¹ If a person uses a different method, they must satisfy all the requirements of the method. There may be difficulties in satisfying methods that refer to a value (or an amount that would be expected to be received) due to the volatility of cryptoasset prices.

Examples

Example 1: Ethel received Bitcoin Cash

Ethel acquired USD1,000 of Bitcoin in June 2017 so she could use it to pay for things over the internet. She found out that Bitcoin would undergo a hard fork in August 2017 and "Bitcoin Cash" (a new cryptoasset) would be created.

Ethel decided she wanted to claim Bitcoin Cash as it could be a faster way to pay for internet transactions. Ethel transferred her Bitcoin into a wallet that supported the hard fork. The hard fork occurred in August 2017 and Ethel downloaded the new wallet and undertook the necessary steps to acquire the Bitcoin Cash.

In 2019, Ethel cashed up half of her Bitcoin and Bitcoin Cash as she was not using it for as many internet transactions as she hoped. These disposals are taxable under s CB 4 as Ethel acquired both her Bitcoin and her Bitcoin Cash for the dominant purpose of disposing of it.

Ethel's remaining Bitcoin Cash hard forked again a year later, and Bitcoin SV was created. However, Ethel decided not to claim Bitcoin SV as she didn't think it was worth it. As she did not acquire it, there are no tax consequences.

Example 2: Beth holds Bitcoin on an exchange

Beth acquired NZD500 of Bitcoin in April 2017 and kept it on an exchange along with various other cryptoassets she was using for small trades. The exchange announced it

¹¹ Cryptoassets are proposed to be included as excepted financial arrangements (with retrospective effect), and so cost appears the most appropriate valuation method. Cost will be the only appropriate method once this legislative change is enacted.

was supporting the Bitcoin Cash hard fork and Beth did not have to do anything in order to receive the equivalent amount of Bitcoin Cash credited to her account.

Beth started trading the Bitcoin Cash along with her other cryptoassets. Beth acquired the Bitcoin Cash for the same purpose as she acquired the Bitcoin – to dispose of it. Every time Beth makes a trade of Bitcoin Cash, she must pay tax on that trade under s CB 4.

References

Legislative references

Income Tax Act 2007 – ss CA 1(2), CB 1, CB 3, CB 4, DA 1, DB 23, EA 2

Case references

AA Finance Ltd v CIR (1994) 16 NZTC 11,383 (CA)

Case F41 74 ATC 227 (Board of Review)

Case S86 (1996) 17 NZTC 7,538 (TRA)

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Tennant v Smith (1892) 3 TC 158 (HL)

Tikva Investments Pty Ltd v FCT 72 ATC 4231 (HCA)

Vuleta v CIR [1962] NZLR 325 (SC)

Other references

Inland Revenue, Cryptoassets (www.ird.govt.nz/cryptoassets)

OECD (2020) *Taxing Virtual Currencies, an Overview of Tax Treatments and Emerging Tax Policy Issues* (OECD, Paris).

About this document

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