



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

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Taxation Determination

Income tax: is bitcoin a 'foreign currency' for the purposes of Division 775 of the *Income Tax Assessment Act 1997*?

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This publication (excluding appendixes) is a public ruling for the purposes of the *Taxation Administration Act 1953*.

A public ruling is an expression of the Commissioner's opinion about the way in which a relevant provision applies, or would apply, to entities generally or to a class of entities in relation to a particular scheme or a class of schemes.

If you rely on this ruling, the Commissioner must apply the law to you in the way set out in the ruling (unless the Commissioner is satisfied that the ruling is incorrect and disadvantages you, in which case the law may be applied to you in a way that is more favourable for you – provided the Commissioner is not prevented from doing so by a time limit imposed by the law). You will be protected from having to pay any underpaid tax, penalty or interest in respect of the matters covered by this ruling if it turns out that it does not correctly state how the relevant provision applies to you.

Ruling

1. No. Bitcoin is not a 'foreign currency' for the purposes of Division 775 of the *Income Tax Assessment Act 1997* (ITAA 1997).¹

Date of effect

2. This Determination applies to years of income commencing both before and after its date of issue. However, this Determination will not apply to taxpayers to the extent that it conflicts with the terms of a settlement of a dispute agreed to before the date of issue of this Determination (see paragraphs 75 and 76 of Taxation Ruling TR 2006/10).

¹ All legislative references in this Determination are to the ITAA 1997 unless otherwise specified.

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3. While the ATO view set out in this Determination will have application for periods prior to its publication, the ATO will not generally seek to apply compliance resources to applying this view in income years commencing before 1 July 2014 in relation to taxpayers who can show that they have made a genuine attempt to determine the tax treatment of bitcoin, and have then adopted a consistent position regarding the tax treatment of bitcoin in those years.

Commissioner of Taxation

17 December 2014

Appendix 1 – Explanation

① *This Appendix is provided as information to help you understand how the Commissioner's view has been reached. It does not form part of the binding public ruling.*

How is 'foreign currency' relevant for tax purposes?

4. Division 775 provides rules for recognising foreign currency gains and losses for income tax purposes. Under subsection 775-15(4), to the extent that a foreign currency gain would be included in a taxpayer's assessable income under Division 775 and another provision of the Assessment Acts,² the gain is only included in the taxpayer's assessable income under Division 775. Subsection 775-30(4) provides a corresponding rule to prevent a double deduction in relation to a foreign currency loss.

5. Section 995-1 provides that 'foreign currency means a currency other than Australian currency'. The terms 'currency' and 'Australian currency' are not defined in the Assessment Acts and therefore take their ordinary meaning having regard to their context and the legislative purpose.

6. Determining whether a bitcoin is 'foreign currency' or 'currency' as those terms are used in the income tax law requires consideration of the characteristics of Bitcoin.

What is bitcoin?

7. The *Oxford Dictionary of English* (3rd Ed) defines bitcoin as:

a type of digital currency in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank: *bitcoin has become a hot commodity among speculators | If you want to buy something using bitcoin you need to make sure the seller accepts the cryptocurrency.*

8. It is described by commentators as 'a virtual currency that essentially operates as online cash'³ and as a 'crypto-currency, designed to reinvent the way that money works'.⁴ Bitcoin operates as a decentralized peer-to-peer payments network whose implementation relies on the use of public-key cryptography to validate transactions involving existing bitcoin and in doing so generates new bitcoin.⁵ The Bitcoin system is decentralized in that it is not under the control of a central authority.⁶ Transactions on the Bitcoin network are denominated in bitcoin. The value of bitcoin is 'not derived from gold or government fiat, but from the value that people assign it'.⁷

² Except Division 230: By virtue of section 230-20, foreign exchange gains and losses from a Division 230 financial arrangement (if any) are dealt with under Division 230 not under Division 775.

³ Brito, J and Castillo, A 'Bitcoin: A Primer for Policymakers', *Policy*, Summer 2013-2014, vol. 29, no. 4, pp 3-12.

⁴ Bradbury, D 'The problem with Bitcoin', *Computer Fraud & Security* November 2013, issue 11, pp 5-8.

⁵ Refer to footnote 3 of this Determination.

⁶ See also Guthrie, N 'The End of Cash? Bitcoin, the Regulators and the Courts' *Banking & Finance Law Review* Apr 2014, vol 29, no. 2, pp 355-367; Moore, T 'The promise and perils of digital currencies' *International Journal of Critical Infrastructure Protection*, 2013, pp 147-149.

⁷ Refer footnote 3 of this Determination and see also footnote 6 of this Determination: Guthrie, N at 357 and Moore, T at p 147.

9. The process through which bitcoin are created and enter into circulation is called 'Bitcoin mining'. Mining involves a 'miner' using freely downloadable Bitcoin software to solve complex cryptographic equations that essentially verify and validate transactions involving the transfer of existing bitcoin between other parties, for example, to ensure an existing bitcoin cannot be transferred more than once by the one person. The first 'miner' to successfully solve an equation receives as a reward a specified number of newly created bitcoin to their 'Bitcoin address'. The process of 'mining' has been explained as follows:⁸

The actual mining of bitcoins is by a purely mathematical process. A useful analogy is with the search for prime numbers: it used to be fairly easy to find the small ones (Eratosthenes in Ancient Greece produced the first algorithm for finding them). But as they were found it got harder to find the larger ones.

...

For bitcoins the search is not actually for prime numbers but to find a sequence of data (called a 'block') that produces a particular pattern when the Bitcoin 'hash' algorithm is applied to the data. When a match occurs the miner obtains a bounty of bitcoins (and also a fee if that block was used to certify a transaction). The size of the bounty reduces as bitcoins around the world are mined.

The difficulty of the search is also increased so that it becomes computationally more difficult to find a match. These two effects combine to reduce over time the rate at which bitcoins are produced and mimic the production rate of a commodity like gold. At some point new bitcoins will not be produced and the only incentive for miners will be transaction fees.

10. Bitcoin that are already in circulation can be acquired either by exchanging 'national' or 'fiat' currencies⁹ for them through an online exchange (or through a Bitcoin ATM), or by accepting them as a gift or in exchange for goods and services.

11. Bitcoin are sent and received via Bitcoin addresses. A Bitcoin address is a long alphanumeric string used by the network as an identifier. The address can be generated at no cost by any user of Bitcoin and a person can have any number of Bitcoin addresses.¹⁰

12. Bitcoin uses public key cryptography to make and verify digital signatures used in bitcoin transactions.¹¹ Each user is assigned a 'public/private' keypair which is saved in that person's 'Bitcoin wallet'. A Bitcoin wallet has been described as something 'that stores the digital credentials for [a person's] bitcoin holdings'.¹²

13. The public key is an alphanumeric number that mathematically corresponds to the Bitcoin address which is publically known. The private key is also an alphanumeric number; however, it is kept secret as it is what allows bitcoin to be transferred between Bitcoin addresses.¹³ The private key is also mathematically related to the Bitcoin address. It is designed so that the Bitcoin address can be calculated from that private key, but importantly, the same cannot be done in reverse.¹⁴

⁸ Tindell, K 'Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995' *Business Insider* 5 April 2013. See also footnote 3 of this Determination.

⁹ For example, Australian dollars, US dollars etcetera. 'Fiat money' is defined as 'Money that a government has declared to be legal tender, although it has no intrinsic value and is not backed by reserves. Most of the world's paper money is now fiat money.': *A Dictionary of Finance and Banking* (Oxford) 4th revised ed.

¹⁰ See footnote 4 of this Determination.

¹¹ See footnote 3 of this Determination.

¹² Villasenor, J 'Secure Bitcoin Storage: A Q&A With Three Bitcoin Company CEOs' *Forbes* 26 April 2014.

¹³ See footnote 3 of this Determination.

¹⁴ Wiener, H, Zelnik, J, Tarshish, I, & Rodgers, M 'Chomping at the Bit: U.S. Federal Income Taxation of Bitcoin Transactions' *Journal Of Taxation Of Financial Products* (2013) vol. 11, no. 3, pp. 35-47 at 35.

14. To transfer bitcoin, a person creates a transaction message with the number of bitcoin to be transferred and signs the transaction with their private key.¹⁵ Those bitcoin are associated with the person's public key. The transaction is then broadcast to the Bitcoin network for validation through the Bitcoin mining process.¹⁶ Once validated they are added to the 'block chain', which is a public global ledger of all Bitcoin transactions.

15. A bitcoin is only accessible by the person in possession of the private key that relates to the Bitcoin address associated with that person's bitcoin holdings. Accordingly, a bitcoin consists not just of the numerical amount (or balance) of bitcoin and the Bitcoin address to which they are associated, but also the related private key that allows the holder to do anything with those bitcoin.

Is bitcoin 'currency' under the ordinary meaning of the term?

16. The *Macquarie Dictionary* relevantly defines 'currency' as:

1. that which is current as a medium of exchange; the money in actual use.
- ...
5. circulation, as of coin.

17. This definition suggests one of the core features of currency is that it is ultimately related to, and might be viewed as a species of the broader category of, 'money'. The term 'money' is defined in the *Macquarie Dictionary* as:

1. gold, silver, or other precious metal pieces of convenient form stamped by public authority and issued as a medium of exchange and measure of value.
2. current coin.
3. coin or certificate (as banknotes, etc.) generally accepted in payment of debts and current transactions.
4. any article or substance similarly used.
5. a particular form or denomination of currency.
6. a money of account.
7. property considered with reference to its pecuniary value.
8. an amount or sum of money.
9. wealth reckoned in terms of money.
10. (plural) Law pecuniary sums.
11. pecuniary profit.

18. In *Leask v. Commonwealth*¹⁷ (*Leask*), in finding that subsection 31(1) of the *Financial Transaction Reports Act 1988* was a law with respect to 'currency' within the meaning of paragraph 51(xii) of the *Commonwealth of Australia Constitution Act 1901*, Brennan CJ stated at:¹⁸

Currency consists of notes or coins of denominations expressed as units of account of a country and is issued under the laws of that country for use as a medium of exchange of wealth.

¹⁵ Kondor D, Posfai M, Csabai I, Vattay G 'Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network' (2014) *PLoS ONE* vol. 9, issue 2 pp 1-10 at p 1.

¹⁶ See footnote 3 of this Determination.

¹⁷ [1996] HCA 29; (1996) 187 CLR 579.

¹⁸ *Leask* at CLR 595.

19. Gummow J further explained:¹⁹

Section 8(1) of the *Currency Act 1965* (Cth) (the Currency Act) states that the monetary unit, or unit of currency, of Australia is the dollar; s 9(1), so far as is material, requires every transaction, dealing, matter or thing relating to money or involving the payment of, or a liability to pay, money to be made, executed, entered into or done according to the currency of Australia, unless the currency of some other country is used; and s 11(1) requires that every payment, unless made according to the currency of some other country, be made according to the currency of Australia.

...

In *Watson v Lee* (147), Mason J, with whom Gibbs J agreed, held that s 51(xii) gave the Parliament power 'to control and regulate the receipt and use' in Australia of foreign currency. Barwick CJ and Stephen J (with whom Gibbs J also agreed) spoke to the same effect (168). By parity of reasoning, the power also supports laws to control and regulate the receipt and use of coin and paper money in Australia, being the medium of exchange in Australia.

Stephen J and Mason J also emphasised that, while 'coinage' and 'legal tender' involved quite specific and narrow concepts, the former being concerned with coins as money and the latter with the prescription of that which at any particular time may be a lawful mode of payment, 'currency' was a broader expression. This is exemplified by the provisions of the Currency Act to which I have referred earlier in these reasons. They illustrate the proposition that currency is a universal means of exchange, designated by a particular unit of account (169). (footnotes omitted)

20. The meaning of 'money' was considered in *Travellex Limited v. Commissioner of Taxation*²⁰ (*Travellex*) in the context of the *A New Tax System (Goods and Services Tax) Act 1999*. The issue in question was whether the taxpayer was entitled to a declaration that a foreign currency exchange transaction was a supply made in relation to rights and, if so, whether the rights were for use outside Australia, such that it was a GST-free supply. In considering when money may be considered to be 'goods' Emmett J stated:

Money is any generally accepted medium of exchange for goods and services and for the payment of debts (see *Butterworth's Australian Legal Dictionary* at 759). Currency and legal tender are examples of money. However, a thing can be money and can operate as a generally accepted medium and means of exchange, without being legal tender. Therefore, bank notes have historically been treated as money, notwithstanding that they were not legal tender. It is common consent and conduct that gives a thing the character of money (see *Miller v. Race* (1758) 1 Burrow 452 at 457). Money is that which passes freely from hand to hand throughout the community in final discharge of debts and full payment for commodities, being accepted equally without reference to the character or credit of the person who offers it and without the intention of the person who receives it to consume it or apply it to any other use than in turn to tender it to others in discharge of debts or payment for commodities (see *Moss v. Hancock* [1899] 2 QB 111 at 116).

21. In *Messenger Press Proprietary Ltd v. FC of T(Messenger Press)*²¹, Perram J considered the test in *Moss v. Hancock*²² (*Moss*) as adopted by Emmett J in *Travellex* and applied it to promissory notes denominated in a foreign currency paid in exchange for release of a book debt denominated in Australian currency. In concluding that the promissory notes were not 'money' under the *Moss* concept of money, Perram J noted that:²³

¹⁹ *Leask* at CLR 617-618 and CLR 622.

²⁰ (Corrigendum dated 4 February 2009) [2008] FCA 1961; 2008 ATC 20-087; (2008) 71 ATR 216.

²¹ [2012] FCA 756.

²² [1899] 2 QB 111.

²³ *Messenger Press* at 196.

There was no evidence that the promissory notes had taken on the quality of being able to be used throughout the community for the discharge of debts and, if they did have that quality, any reasonable person would certainly make inquiries as to the 'character or credit' of the issuer before accepting such a note.

22. In relation to the *Moss* concept of money, Perram J noted that 'no doubt this definition has its limitations'²⁴ referring to the fact that the *Moss* formulation did not include the exchange settlement funds held by banks with a central bank as such funds are not available to the community at all, passing only between banks despite the fact that they constitute the monetary base of the payments system. Noting some other deficiencies in the definition, Perram J referred to *Mann on the Legal Aspects of Money*.²⁵

23. In that text, Proctor observes that the formulation in *Moss* reflects a purely functional approach to the idea of money.²⁶ It is further suggested that although a legal definition of money should reflect at least some of these functional attributes, for something to be money in the modern sense it must also include an element which recognises the international law requirement that money 'must exist within some form of legal framework, because it reflects an exercise of sovereignty by the State in question'.²⁷ Proctor then goes on to state:

For anything which is treated as 'money' purely in consequence of local custom or the consent of the parties does not represent or reflect an exercise of monetary sovereignty by the State concerned, and thus cannot be considered as 'money' in a legal sense.²⁸

24. It has been argued that bitcoin satisfies the ordinary meaning of money because on a functional approach it satisfies three essential elements for money because it serves as (1) a medium of exchange, (2) a unit of account, and (3) a store of value. In addition, it is argued that there is widespread usage and acceptance of bitcoin in the community as a means of discharging debts and making other payments, and accordingly bitcoin's increasing acceptance has now reached the point that it qualifies as 'money'. This later point is very much a question of fact and degree. The evidence available to the Commissioner informs the view that the current levels of use and acceptance of bitcoin within the community is far short of what may be regarded as sufficient or necessary to satisfy the test in *Moss*, nor is it a generally accepted medium of exchange as per *Travellex*.²⁹ Accordingly, bitcoin does not satisfy the ordinary meaning of money.

25. Ultimately, it is not critical to come to a conclusion on whether bitcoin is covered by the ordinary meanings of currency and money because within the context of section 995-1, the statute is considered to have provided its own particular conception of currency.

²⁴ *Messenger Press* at 196.

²⁵ *Messenger Press* at 196.

²⁶ C. Proctor, *Mann on the Legal Aspect of Money* (Oxford University Press, 6th Ed, 2005) at [1.11].

²⁷ C. Proctor at [1.12].

²⁸ C. Proctor at [1.13].

²⁹ Given the anonymous nature of Bitcoin and the fact that a Bitcoin user can have, and usually will have, many Bitcoin addresses, it is difficult to determine precisely the current number of Bitcoin users. Recent estimates are that there are approximately 500,000 Bitcoin users worldwide, and that it is likely that fewer than one in ten businesses would currently accept payment in bitcoin even in the United States, where Bitcoin is most widely used. These rough figures suggest that bitcoin use at present is far from universal and is rather uncommon. For further consideration of this issue see Bank of England 2014, *Quarterly Bulletin Q3 2014 – The economics of digital currencies*, Bank of England, London, viewed 24 November 2014 <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q3digitalcurrenciesbitcoin2.pdf>

Is bitcoin 'currency' taking into account the legislative context and purpose?

26. The Commissioner considers that bitcoin does not constitute 'currency' nor 'foreign currency' in the context in which those terms operate for the purposes of Australian tax law.

27. The legislative context in which the term 'currency' is used is to define 'foreign currency' as something 'other than Australian currency'. Accordingly, Parliament chose to define 'foreign currency' as the antithesis of 'Australian currency'. Therefore it is necessary to consider what the ITAA 1997 means by 'Australian currency' in order to determine in what sense the term 'currency' is being used within the definition of foreign currency.

28. Although the term 'Australian currency' is undefined in the Assessment Acts, it has a legal meaning under Australian law by virtue of the *Currency Act 1965* (the Currency Act) as explained above in *Leask*. It is a general principle of statutory interpretation that, where a statute uses words that have acquired a legal meaning, 'it will be taken, prima facie, that the legislature has intended to use them with that meaning unless a contrary intention clearly appears from the context'.³⁰

29. In *Gamer's Motors Centre (Newcastle) Pty Ltd v. Natwest Wholesaler Pty Ltd*³¹ Priestley JA further elaborated:³²

The object of the approach is not to find the legal as opposed to the 'ordinary' meaning, but to find from the range of legal and ordinary meanings, which in any event will seldom be in watertight compartments, the meanings best suited to the statutory document as a whole.

30. Subsection 8(1) of the Currency Act provides that the unit of currency of Australia is the dollar. The Australian Dollar is the only legally recognised form of payment in Australia (apart from the currency of some other country) under sections 9 and 11 of the Currency Act for the purposes of discharging monetary obligations (see paragraph 19 of this Determination for the relevant aspects of sections 9 and 11 of the Currency Act).

31. Accordingly, the meaning of 'the currency of Australia' (or 'Australian currency') under the Currency Act is the monetary unit established by that Act as the requisite unit of account, and means of discharging monetary obligations, for all transactions and payments that are not made according to the currency of another country. Conversely, 'the currency of some country other than Australia' – the only other species of 'currency' according to which transactions and payments can proceed under the Currency Act – must be any monetary unit recognised by another country's laws for the same purposes. Therefore, the critical character of the Currency Act's concept of 'currency' is State recognition and adoption of a monetary unit under law. This approach under the Currency Act reflects the position taken in *Mann on the Legal Aspects of Money*, namely that money 'must exist within some form of legal framework, because it reflects an exercise of sovereignty by the State in question'.³³

³⁰ *Attorney-General (NSW) v. Brewery Employees Union of New South Wales* (1908) 6 CLR 469 at 531. See also the other authorities discussed in Pearce and Geddes, *Statutory Interpretation in Australia* (8th ed, 2014) at 160 [4.13].

³¹ (1985) 3 NSWLR 475.

³² (1985) 3 NSWLR 475 at 484. For an example of the application of this principle, see *Johnson v. Native Title Registrar* [2014] FCA 142 at [29]-[30].

³³ Proctor, *Mann on the Legal Aspects of Money*, (6th ed, 2005) at 14 [1.12].

32. The Commissioner considers that when defining 'foreign currency' as 'a currency other than Australian currency' in section 995-1, Parliament intended to use the term 'currency' in the same sense that 'currency' is used in the Currency Act – namely, a currency legally recognised and adopted under the laws of a country as the monetary unit and means of discharging monetary obligations for all transactions and payments in that country. Consistent with the Currency Act, this concept of currency is in turn divided into two types for the purposes of the ITAA 1997:

- (1) Australian currency, and
- (2) every currency that is recognised and adopted by the laws of any other sovereign State as the monetary unit and means of discharging monetary obligations for all transactions and payments in the respective sovereign state (that is, foreign currency).

33. As bitcoin is not a monetary unit recognised and adopted by the laws of any other sovereign State as the means for discharging monetary obligations for all transactions and payments in a sovereign State, it is not 'foreign currency' for the purposes of Division 775 of the ITAA 1997.

Income Tax Consequences

34. As bitcoin is not a foreign currency, Division 775 does not apply and transactions involving bitcoin give rise to the same tax consequences as other barter transactions.³⁴

35. Accordingly, a taxpayer that receives bitcoin as payment for goods or services they provide as part of their business, or uses bitcoin to make purchases for their business, is required to include the arm's length Australian dollar value of their bitcoin transactions in calculating their assessable income.

36. The Australian dollar value of bitcoin may increase or decrease between the time a taxpayer acquires and disposes of bitcoin. Whether such fluctuations give rise to ordinary income or capital gains tax (CGT) consequences will depend on the particular facts and circumstances of the taxpayer.

37. Taxation Determination TD 2014/26 *Income tax: is bitcoin a CGT asset for the purposes of subsection 108-5(1) of the Income Tax Assessment Act 1997?* provides guidance on the CGT consequences of disposing of bitcoin and the anti-overlap rule where both the CGT and the ordinary income provisions apply.

³⁴ Taxation Ruling IT 2668 *Income tax: Barter and Countertrade Transactions* provides guidance on the tax treatment of barter transactions.

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Previous draft:

TD 2014/D11

*Related Rulings/Determinations:*TR 2006/10; TD 2014/26; TD 2014/27;
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- foreign currency

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