

# International Taxation of Digital Asset Transactions

By John Marcarian

# Introduction

The emergence of digital assets as a global phenomenon has raised questions in the minds of many as to how to deal with these assets from a regulatory perspective. A chief concern for many governments around the world is how they should be taxed.

It is clear that tax policy with respect to the taxation of digital assets in many countries is a moving feast.

Even to the casual observer it is evident that digital assets are evolving in a way unlike any other previous asset class.

This is particularly the case in the area of decentralised finance (DeFi) where there were only 6 digital assets in 2013, whereas today there are more than 10,000 digital assets and growing.

While some believe that these assets can simply be taxed using existing tax principles that is in my view more of a hope than a reality. The changing use and nature of some digital assets renders the initial tax treatment as to how to treat the asset out of step with how the token is being used.

For example, in Singapore the position is that utility tokens and payments for them are treated as prepayments and the cost of acquiring them is deductible over the period of time that they are used. However, as the token's utility changes, and additional rights are attributed to the token holder using an apportionment method to claim a tax deduction is somewhat problematic.

Nowhere is the state of flux as to how to tax digital assets more evident than in the field of international taxation.

Unlike the long-established body of international tax law which, generally speaking, has achieved broad global consensus through the vast array of Double Tax Agreements between countries and various policy papers released by international bodies – there is no global consensus in how countries tax various digital assets.

There is also currently no formal guidance available that indicates how digital assets should be classified for accounting purposes with most countries using the existing generally accepted accounting principles, which require that digital assets be classified based on their economic properties.

While it is not possible in this article to do an in-depth review of the whole topic, a broad overview as to how a number of different countries tax digital assets within the category of a payment token or virtual currency can be provided.



# Income Taxation

Before we review the international tax consequences of dealing in virtual currency let us consider the question, from an international viewpoint, as to whether virtual currency is regarded as money.

**Most countries consider virtual currencies to be a form of intangible property rather than a pure currency for income tax purposes.**

## Is a virtual currency money?

The income tax treatment of virtual currencies across countries often follows on from the definition of virtual currencies within a particular country. Generally, this defines how the virtual currency is taxed within its existing tax laws on the taxation of income from different sources.

Many countries have begun the work of providing guidance notes as to how virtual currencies should be taxed including Australia, the United Kingdom and Singapore (to name a few countries covered below).

There are few countries that consider virtual currencies to be an actual type of currency itself for tax purposes.

There are many reasons for this, but some reasons include the volatile nature of the asset class, limitations on how it can be exchanged, its decentralised nature and also perhaps underlying this reticence is a general lack of understanding of the fundamentals as to how this asset class works.

For income tax purposes, almost all major international countries have shared their view as to whether digital assets are a form of property for tax purposes. Also, a range of other taxes apply in foreign countries which can include indirect taxes, sales taxes, and property taxes.

Only a small number of countries consider virtual currencies to be similar to currency for tax purposes, these include Belgium, Italy, and Poland. Italy has issued private tax rulings confirming that virtual currencies are like foreign currency.

In some countries, there is a degree of uncertainty over how virtual currencies are defined which then results in different interpretations of their tax treatment when it comes to international transactions.

As most countries consider virtual currencies to be a form of intangible property rather than a pure currency for income tax purposes it is the normal property tax regime that tends to apply rather than the country's foreign exchange tax rules.

This classification is important as usually foreign exchange rules provide exemptions from income tax for individuals not regarding as trading in virtual currencies or there are minimum thresholds before income tax applies.

For those countries that treat virtual currencies as an item of property then – the tax consequences are likely to be broader because most regimes have a 'capital gains' tax which does not allow individuals to avoid taxation.

In places, such as Singapore and Hong Kong whether there are no capital gains taxes on individuals – the classification of a digital asset as property is a good outcome.

There are a whole host of possible transactions or events to consider from an international taxation viewpoint. We will examine a few of the more important ones with respect to virtual currencies.

## **Taxation upon on creation by the Miner**

The first possible taxing event in relation to a unit of virtual currency is when it is created.

As we know virtual currencies can be created via the mining process (through rewards under a proof of work protocol), by way of an airdrop or through an ICO of new tokens.

It is worth noting though that virtual currency received via airdrops may be of little value, and there is less international concern about this area of tax compliance. This is due to the fact that airdrops may involve the distribution of very small amounts of virtual currencies which have next to no market value given their relative newness.

As mining has received the most international attention from tax authorities this is our focus.

A number of major countries consider that the receipt of newly minted coins is the first taxable event. These countries include Finland, Japan, New Zealand, Norway, the United Kingdom, and the United States.

Broadly speaking these countries include the value of the virtual currency in the miner's taxable income when the token is received and tax it as ordinary income. All costs of production are generally allowable.

In Finland income from mining activity is treated as business income and any direct costs can be deducted including the costs of electricity and equipment used in any mining activity. Generally, the timing of the income tax liability is when the token is received.

Norway adopts a slightly different position. It views income from mining as income based on the market value of the virtual currency at the time of 'extraction'. There is a slightly different methodology in terms of calculating income from mining depending upon how the mining is done, i.e., as a business or using a home computer on a private or hobby basis.

In the United Kingdom, the position is similar to Finland's and the income generated is estimated at the value of the virtual currency in pound sterling at the time of receipt. If the mining activity does amount to the carrying on of a business, then the value of the virtual currencies at the time of receipt will be included in the miner's taxable income as trading profits.

Any future gains realised when that token is sold are then treated as capital assets and taxed under the capital gains regime. An interesting side note is that in the United Kingdom airdrops are not taxable (assuming that they were not received in exchange for goods or services being provided by the recipient) but rather they will be taxed as a capital gains on disposal.

Lastly it is worth noting that a number of countries tax treatment of the creation of a virtual currency depends on whether the mining activity takes place as a business activity or is more of a hobby or occasional pursuit. These countries include Australia, Canada, and Singapore.

## **Taxation upon disposal by the Miner**

There are a large number of countries that treat the first disposal of the virtual currency by the miner as the initial taxable event. These countries include Denmark, France, & Singapore (business mining only).

In these jurisdictions the total value of the virtual currency at the date of its disposal is then included in the miner's taxable income less the costs incurred to mine the asset. A number of countries allow the write off of computing costs including Australia, Austria, and Estonia.

For countries that treat disposal as the initial taxing point the income is most commonly regarded a capital gain taxable under the capital gains tax rules of those countries.

This usually means that reduced tax rates, or partial exemptions apply, as compared to the situation were the gain to be regarded as business income.

Some countries apply exemptions from capital gains tax after a certain holding period is met, which can mean that income from mining can be untaxed. These countries include New Zealand, Singapore, and Switzerland.



**Income is calculated at the value of the mined virtual currency when the virtual currency is received and is first treated as inventory of the business.**

## **Taxation on receipt by the Miner**

The receipts basis of taxation applies to miners in Australia, Canada, and Singapore if the mining activities are being carried on as a business rather than as a hobby or part time activity.

In Australia, if the miner is carrying on a business, then any virtual currencies generated through mining are treated as trading stock and the usual trading stock rules apply. Generally, this means that changes in the value of the stock are included as income or losses and sales revenue is assessable income.

Deductions are calculated pursuant to the usual rules of Australia's income tax laws and any losses from mining are available to be offset against the miner's other income. If the mining activities are not conducted as part of carrying on a business, then the virtual currency mined is taxed under Australia's capital gains tax regime. Australia's personal use asset rules may exempt an individual from paying capital gains tax in certain cases.

Canada's position is similar to that of Australia. Virtual currencies gained through business mining activities are considered as business income. The income is calculated at the value of the mined virtual currency when the virtual currency is received and is first treated as inventory of the business. If the acquisition of the virtual currency through mining activities is considered a speculative investment, then taxation occurs at the point of disposal. In such a case the cost of acquiring the virtual currency is treated as its cost base when calculating the capital gain.

Under Singapore law, a miners' profit from the receipt of virtual currencies is taxable if such virtual currency was created with a profit-making intention and provided that the gains or loss have a trading or business nature. The default position for companies engaged in such activities is that they will be treated as carrying on a business whereas individual miners will prima facie be treated as conducting a hobby or otherwise not taxable as Singapore does not have a capital gains tax.

## **Disposing of virtual currencies**

The vast majority of major global economies treat a disposal of a virtual currency as a taxation event.

There are a number of ways that a disposal of a virtual currency can occur including, exchange for fiat, exchange for a good or service or via gift, loss, or theft.

**Major economies consider exchanges between virtual currencies and other forms of virtual currency to give rise to taxation.**

## **Exchanges for Fiat Currency**

Most of the major economies of the world consider an exchange of virtual currency for fiat a taxable event including Australia, Germany, Japan, Israel, and the United Kingdom.

With a few exceptions, most of the above major economies consider exchanges between virtual currencies and other forms of virtual currency to give rise to taxation.

There are though, a couple of notable exceptions to this including Italy and Switzerland. In Italy transactions by individuals in virtual currency are not taxed unless they are treated as speculative trading based on certain defined tests under Italian tax law.

In Switzerland, transacting virtual currencies is treated the same as transacting with conventional methods of payment and any gains or losses have no tax consequence. Similar to Italy if the activities are considered commercial then any capital gain may be taxable and any losses deductible.

## **Exchanges for Virtual Currency**

When virtual currency is exchanged for another virtual currency, most major countries do not make a distinction in tax terms between part time trading and trading as a going concern or business. These countries included Denmark, Germany, and Korea.

Denmark, for example treats any gains from disposing of virtual currencies as speculation and taxable under business or capital gains tax rates.

Some countries do not consider exchanges with other virtual currencies to be taxable include Chile, France, and Poland. The likely reasons for this are pragmatism as it would be extremely difficult for the Revenue to calculate gains or losses occurring between virtual currencies. The view might be that only an interaction with a fiat currency on an exchange is something more readily determinable.

The international tax treatment of persons involved in part time activities generally established the position whereby the tax treatment falls under the capital gains tax regime which means reduced tax rates with any losses being quarantined. This contrasts with the international tax treatment for those persons carrying on a business undertaking.

In a number of jurisdictions, the tax treatment depends upon the type of owner and or the expected use of the virtual currency. Let us look at three such jurisdictions Australia, Belgium, & Japan.

Australia taxes exchanges carried out in the conduct of a business undertaking and those undertaken in a private capacity. Business activity is subject to normal taxation whereas individuals undertaking non-business-related activities are taxed on any capital gain they may make on the transaction. If the gain on the asset was made in respect of an asset held for longer than 12 months, then a discounted tax calculation is performed. The personal use exemption rules

may apply in some cases. Australia's tax system quarantines any capital losses against future capital gains so this means any virtual currency losses by an individual cannot be offset against other personal income of the individual. Also note that an individual can carry on a business as a sole trader and therefore if the digital assets are being traded then Australia's ordinary trading stock rules come into play.

Belgium's tax system provides that in cases where a person's professional occupation is trading virtual currencies, any profits will be taxable as professional income and subject to progressive tax rates that range between 25 and 50 per cent. However, a Belgian resident who makes gains on virtual currency outside his or her professional is likely to not pay tax if these transactions are part of their usual wealth management affairs.

Under Japanese tax law, similar to Australia and Belgium, a distinction is made between income generated from occasional trading and income derived from the carrying on of a business undertaking. Income gained from part time trading of virtual currency is treated as miscellaneous income and curiously is not concessionally taxed like gains from stocks and bonds. Such gains are actually added to an individual's income and then taxed. This can result in a tax rate above 50%.

## **Exchanges for Goods & Services**

Virtual currencies are now commonly being exchanged for goods and services. The trend is likely to continue given the increasing number of virtual currencies being issued in the marketplace.

Many countries including Croatia, Lithuania, Norway & Sweden treat these transactions as barter or reciprocal transactions under their domestic tax systems. Furthermore, the disposal of virtual currency for goods and services creates a taxable event for the owner of the virtual currency. Estonia however, unlike its neighbour Lithuania, does not consider any disposals to be a taxable event in relation to the token itself.

There is a general view amongst most countries, that in terms of the person receiving the virtual currency the underlying tax treatment should be the same as if the person had received fiat.

This is not wholly unexpected.

Therefore, a supplier who supplies goods and receives say, bitcoin or ether, would include the value of the bitcoin or ether in their taxable income. Likewise, an employee who is paid in bitcoin or ether is generally taxable on that value under the relevant country's personal income tax rules.





**A gift of virtual currency can result in taxation being due on the donor or the donee depending upon the particular country involved.**

## **Exchanges occurring for no value**

There is a dearth of information across the international tax community about how disposals of virtual currencies should be treated in cases where there is no consideration involved. An example of this type of disposal is a gift to a friend or family member or a charity.

In a number of countries, such a disposal does give rise to taxation. Generally, a gift of virtual currency can result in taxation being due on the donor or the donee depending upon the particular country involved.

The United Kingdom for example treats the taxable event as having occurred at the donor level. If the gift is made to a registered charity, then an exemption from tax may result. The donee is generally deemed to have received the virtual currency at the date the gift was made for a market value at that date.

In Australia, however, gifts are generally not taxable to the recipient. Unless the gift is made to a registered charity the gift is not deductible to the donor. Australia would though generally tax the donor to the extent a capital gain was made on the virtual currency at the time of the gift.

Another type of disposal is loss or theft.

The general position among a number of countries is that a loss of trading stock (in cases where the virtual currency is trading stock) is tax deductible. These countries include, Australia, Singapore & the United Kingdom. Losses incurred by private individuals due to carelessness or theft are not generally tax deductible.

# Conclusion

This article highlights just how much work is yet to be done in the area of the international taxation of digital assets. For a true international consensus to emerge regarding how various transactions should be viewed and taxed around the globe, many more years of research and collaboration between tax authorities will need to be done.

We can already see that some countries are presently adopting pragmatic positions with respect to tax collection on digital assets due largely to the challenges of identifying what individuals are doing within the realm of digital assets.

Other countries continue to view digital assets through the prism of their existing taxation and reporting systems. While that may be the case for now it is evident that international tax and reporting systems will have to adapt significantly if they are to keep pace with the creativity being displayed in word of DeFi.

It is also worth bearing in mind that the existing digital asset world has yet to embrace the power of quantum computing, which will continue to present global taxation authorities with an ever-increasing range of technical issues to deal with.



# About the Author

## John Marcarian



John is an Australian Chartered Accountant with over 25 years of experience. Having founded CST Tax Advisors in 1992, John has in-depth knowledge of international tax matters for both businesses and globally mobile expats.

In 2004 John established the Singapore Office of CST. CST now has offices in a number of cities around the world.

### **Recognised Thought Leader**

John has had a number of articles published in the Tax Specialist, a publication of the Institute of Chartered Accountants of Australia, and the Tax Yearbook, a publication of the International Tax Planning Association.

Most recently, John has published two books; 'Expatriation', which is aimed at assisting potential global expats plan their move and 'The CST Way' a professional services book for Global Accounting Firms.

John is a sought-after speaker on tax and business matters and regularly presents to business groups around the world.

### **Recognised Tax Specialist in Digital Assets**

John has a deep understanding of digital assets and the Fourth Industrial Revolution presently underway around the world in the area of blockchain and digital assets.

A recognised tax specialist in digital assets, John has a qualification from the MIT Sloan School of Management in Blockchain technologies.

He has contributed tax expertise to a specialist US publication on international tax and digital assets.

He works regularly with companies issuing tokens and other forms of digital assets. This unique blend of skills gives John a practical day to day knowledge of the business challenges faced by entrepreneurs in the digital asset market.



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