

**Digital currency - may be a "bit player" now, but in the longer term a "game changer" for tax
by Dr Steven Stern, Adjunct Professor, College of Law & Justice, Victoria University¹**

Abstract

The Prime Minister of Australia, the Hon Malcolm Turnbull MP, has announced that the tax system is one of the key levers the government has to promote economic activity and that tax is at the centre of the whole productivity agenda. This paper draws attention to how technological developments in the monetary field will have major ramifications in respect of the capacity of governments to control the economic agenda, including tax. With changes to what is "money", it might not be prudent for governments and their advisers to assume that levers to control the composition of tax which existed in the twentieth century will continue to be available in the coming decades of the twenty first century.

Tax is about money

The profession of a proficient taxation practitioner necessitates that he or she must have a deep grasp of a broad range of the law and the capacity to apply that wide knowledge in his or her day-to-day practice on behalf of the revenue or of taxpayers. In addition to being able to cover a large and diverse sway of taxation legislation, this expertise as demanded of the taxation practitioner comprehends such diverse fields of the law as corporations, securities, equity, trusts, partnerships, administrative law, constitutional law, contracts, torts, property law and the criminal law.² Tax fraud is considered to be “a crime against the entire community.”³ How the taxation ramifications of digital currencies can involve the criminal law is illustrated by a report that: “An eccentric and seemingly brilliant IT entrepreneur and security expert” who “was named by IT magazine *Wired* yesterday as the possible creator of the Bitcoin electronic currency, previously known only by the pseudonym Satoshi Nakamoto” “has had his Sydney home and office raided by the Australian Federal Police over a tax dispute with [the] Australian Taxation Office”.⁴

Taxation has the public function of allocating how the money for government expenditures is to be sourced among taxpayers. Accordingly, it has substantial capacity to allocate the division of income and property within the society. It therefore has a major function relating to macroeconomic management in the country as a whole. Certain parts of the community appear to gain from an increased incidence of taxation. Where welfare is financed from increased burdens of progressive taxation, it might be assumed that the poorer sections of our community gain at the expense of wealthier taxpayers.⁵ Conversely, the Chief Economist at The Australia Institute is arguing that the opposite applies in respect

¹ B.Ec LLB (Mon) LLM PhD (Melb) CTA; Barrister at Law (Vic) List S, Gordon & Jackson; Registered Tax Agent

² Justice Geoffrey Nettle, “Applications for Special Leave in Tax Matters” (29 October 2015) 3 at <http://www.vicbar.com.au/GetFile.ashx?file=BarAssocTaxFiles%2f29.10.15+-+TAX+BAR+ASSOCIATION+-+Speech+-+Melbourne.pdf> accessed 10 December 2015

³ Joanna Mather, “DPP appeals tax sentence” (Tuesday, 1 December 2015) *Australian Financial Review* 5

⁴ Leo Shanahan, “Bitcoin ‘creator’ raided over tax” (10 December 2015) *The Australian* 5

⁵ Nettle, op cit 8

of the Australian superannuation system with “its fundamental structural problems and chronic inequities”, arguing that the system “was deliberately broken by 10 years of policy intended to transform it from a system designed to boost retirement incomes for middle income workers, to one designed to avoid tax for the wealthiest families.”⁶

The practice of taxation professionally represents a fight between government and the person, whether natural or corporate. Inevitably, the taxpayer will be relatively disadvantaged when compared with the resources and power of the state. Citing limited government, personal freedom and property rights, the courts often maintained the right of any subject of the Crown to order his or her affairs so as to reduce the amount of tax payable under an applicable Act where however unappreciative the revenue or other taxpayers might be of his or her (or a taxation adviser’s) ingenuity, the taxpayer should not become obliged to pay more tax.⁷ Tax avoidance, namely, preventing a tax obligation from arising in the first place therefore traditionally was seen as legitimate; for example, “there is no morality in a tax and no illegality or immorality in a tax avoidance scheme”.⁸ By contrast, tax evasion, namely, the failure to inform Commissioners of the relevant facts in respect of a tax assessment, whether any such failure was fraudulent or innocent, always has been illegitimate.⁹

With increased demands in the community for what the state should supply, there has been a series of legislative and judicial developments responding to an emerging consensus on the unacceptability of tax avoidance:¹⁰

“While the techniques of tax avoidance progress and are technically improved, the courts are not obliged to stand still. Such immobility must result either in loss of tax, to the prejudice of other taxpayers, or to Parliamentary congestion or (most likely) to both.”¹¹

Where there is a pre-ordained series of transactions or one single composite transaction which includes the achievement of a legitimate commercial or business end, such as share sales in operating companies, and steps are inserted which have no commercial or business purpose apart from the avoidance of a liability to tax, the inserted steps are to be disregarded for fiscal purposes requiring the courts to look at the end result which will be taxed in accordance with the terms of the applicable taxing statute.¹²

⁶Richard Dennis, “A super fix to savings unfairness” (Tuesday, 1 December 2015) *Australian Financial Review* 42

⁷ E.g. *Inland Revenue Commissioners v Duke of Westminster* [1936] AC 1, 19-20 per Lord Tomlin

⁸ *Ensign Tankers (Leasing) Ltd v Stokes (Inspector of Taxes)* [1992] 1 AC 655, 668 per Lord Templeman

⁹ *Commissioner of Inland Revenue v Challenge Corporation Ltd* [1987] 1 AC 155, 167 [Privy Council]

¹⁰ E.g. *Income Tax Assessment Act 1936* (Cth), Part IVA

¹¹ *W T Ramsay Ltd v Inland Revenue Commissioners* [1982] AC 300, 326 per Lord Wilberforce

¹² *Furniss v Dawson* [1984] AC 474, 527 per Lord Brightman

Legislation has vastly expanded so as to produce what government perceives to be social benefits and outcomes creating substantial complexity particularly as these benefits and outcomes might have little to do with maximising the amount of tax which is to be collected:

There was only one such [general avoidance] provision in federal income tax legislation until 1981. It was short, had been unchanged in the Act since 1936, and was focused on transactions to the extent to which they had a tax avoidance purpose. ...

...

Federal tax legislation has also become more complicated since 1981 with very many changes including the introduction of tax upon capital gains, separate tax on fringe benefits and tax on the provision of goods. What was treated as debt or equity for tax purposes has been replaced with a new regime intended to apply economic concepts. Dividend imputation has occasioned new, and many complex, rules through which to enable tax credits to be enjoyed by shareholders but not to be traded by others. The relatively simple arrangements to allow companies to be taxed as a group have been replaced with a much more complex system for the tax consolidation of companies.¹³

The tax professional must focus on facts. He or she must address what the taxpayer has done or not done; what other persons who are relevant have done or not done; what was intended to be achieved; and what was neither considered nor contemplated? This concentration on the evidence is essential whether the tax professional is operating as a barrister, a solicitor or an accountant.¹⁴

The global economy is changing significantly at ever increasing speeds. Financial markets are increasingly globally integrated. The international flow of capital has become less restricted and more mobile. New technology can threaten the medium and long term viability of taxation systems around the world. Technology has allowed new business models to evolve that have substantially changed the way businesses and consumers interact.¹⁵

Tax is about money. Often tax pertains to much money.¹⁶ Therefore, what is money? The answer is crucial in the taxation field. Challenges arise from the potential for digital currencies to increase the ability of companies to relocate profits to minimise their tax. Financial markets are increasingly globally integrated. The international flow of capital has become less restricted and more mobile. Technology has also allowed new business models to evolve that have substantially changed the way businesses and consumers interact. New ways of transacting, including crypto-currencies such as bitcoin, were not

¹³ C T Pagone, *Tax Avoidance in Australia* (2010) v The Federation Press, Annandale NSW

¹⁴ Nettle, op cit 3-4

¹⁵ The Hon Joe Hockey MP, *Launch of the Tax Discussion Paper* (30 March 2015) at <http://jbh.ministers.treasury.gov.au/speech/010-2015/> accessed 10 December 2015

¹⁶ Nettle, op cit 4

contemplated when the current tax system was designed.¹⁷ Given that tax is about money, these new ways of transacting through the use of crypto-currencies must have the most significant ramifications for taxation systems across the globe.

Digital currency – game changer or bit player?

In August 2015, the Senate Economics References Committee in Australia published a report entitled '*Digital currency - game changer or bit player*'.¹⁸ The Committee's terms of reference included particular regard as to how to develop an effective regulatory system for digital currency that ascertains the most appropriate definition of digital currencies under Australian tax law; and the potential impact of digital currency technology on the economy.¹⁹ This paper draws attention to how in the medium to long term digital currencies potentially could impact upon the viability of taxation systems throughout the world.

What is digital currency?

Digital currency is a digital representation of value that can be digitally traded. It functions as a medium of exchange. It might also function as a unit of account. It may store value. It does not have to have the status of legal tender in any country or other legal jurisdiction. So when tendered to a creditor, digital currency does not have to be a valid and legal offer of payment. Digital currency is neither issued nor guaranteed by the government of any country or other jurisdiction. Digital currency fulfils functions analogous to money. It does so only by agreement between users of the digital currency. By contrast, the coin and paper money of a country issued by a sovereign government agency such as a central bank ("fiat" currency or "fiat" money), and designated as legal tender within the country, circulates and is used (and accepted) as the medium of exchange in the country of issue. E-money is a digital representation of fiat currency used to electronically transfer value denominated in fiat currency. E-money electronically transfers value that has legal tender status. It is a digital transfer mechanism for fiat currency.²⁰

Digital currency can sometimes have a broader meaning to include e-money. "Digital currency" and "virtual currency" can be used interchangeably. Convertible digital currency has an equivalent value to real or fiat currency and can be exchanged back and forth for real currency. Bitcoin is an example of convertible currency. Non-convertible digital currency cannot be so exchanged for real currency. It is specific to a particular virtual domain or world, such as a massively multiplayer online role-playing game. Convertible digital currencies can be either centralised, that is, issued by a single administrative

¹⁷ E.g. see The Hon Joe Hockey MP, *Rethink: Tax discussion paper* (March 2015) 7 at <http://bettertax.gov.au/publications/discussion-paper/> accessed 10 December 2015

¹⁸ http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Digital_currency/Report accessed 10 December 2015

¹⁹ *Ibid* 1

²⁰ Financial Action Task Force, *Virtual Currencies—Key Definitions and Potential AML/CFT Risks* (2014) 4 at <http://www.fatf-gafi.org/topics/methodsandtrends/documents/virtual-currency-definitions-amlcft-risk.html> cited by Senate Economics Reference Committee, *op cit* 3 para 1.1

authority or decentralised. Non-convertible digital currencies have to be centralised as they require issue by a single administrative authority. Decentralised digital currencies are also known as cryptocurrencies. They are distributed, open-source, math-based, peer-to-peer currencies that have no central administrating authority and no central monitoring or oversight. Bitcoin is an example of such a cryptocurrency.²¹

What is bitcoin?²²

Bitcoin is “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.’*”²³ Bitcoin is an electronic payment system which allows two parties to transact directly with each other over the internet without needing a third party intermediary.

Bitcoin has been described as “a virtual currency that essentially operates as online cash”²⁴ and as a “crypto-currency, designed to reinvent the way that money works”.²⁵ A “distributed ledger” or a “block chain” is used to record and verify transactions. A “block chain” is “a *digital ledger in which transactions made in bitcoin or another cryptocurrency are recorded chronologically and publicly*”.²⁶ This “distributed ledger” or “block chain” allows digital currency to be used as a decentralised payment system. Bitcoin operates as a decentralized peer-to-peer payment network whose implementation relies on the use of public-key cryptography to validate transactions involving existing bitcoin and in doing so generates new bitcoin.²⁷ The bitcoin system is decentralized in that it is not under the control of a central authority.²⁸

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”.²⁹ In simplified terms, a user wishing to make a payment issues payment instructions that are disseminated across the network of other users. Standard cryptographic techniques make it possible for users to verify that the transaction

²¹ Senate Economics Reference Committee, op cit 4 para 2.4

²² For this section, see *ibid* and *GSTR 2014/3—Goods and services tax: the GST implications of transactions involving Bitcoin* at <https://www.ato.gov.au/law/view/document?DocID=GST/GSTR20143/NAT/ATO/00001> accessed 8 December 2015

²³ <http://www.oxforddictionaries.com/definition/english/bitcoin> accessed 4 December 2015

²⁴ J Brito and A Castillo, “A ‘Bitcoin: A Primer for Policymakers’” (Summer 2013-2014)29(4) *Policy* 3-12 cited by *GSTR 2014/3* op cit

²⁵ D Bradbury, “The problem with Bitcoin” (November 2013 11 *Computer Fraud & Security* 5-8 cited by *GSTR 2014/3* op cit

²⁶ <http://www.coindesk.com/oxford-dictionaries-definitions-blockchain-miner/> accessed 4 December 2015

²⁷ Bradbury, loc cit

²⁸ E.g. see N Guthrie, “The End of Cash? Bitcoin, the Regulators and the Courts” (April 2014) 29(2) *Banking & Finance Law Review* 355-67; T Moore “The promise and perils of digital currencies” (2013) *International Journal of Critical Infrastructure Protection* 147-9 both cited by *GSTR 2014/3*

²⁹ Brito and Castillo, loc cit

is valid. This validity is to verify the person who would be the payer owns the currency in question. 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. So special users in the network, known as "miners" gather together blocks of transactions and compete to verify them. A miner is: "A person who obtains units of a cryptocurrency by running computer processes to solve specific mathematical problems."³⁰ To mine is: *To obtain units of (a cryptocurrency) by running a computer process to solve specific mathematical problems.*³¹ Miners who successfully verify a block of transactions receive in return for this service both an allocation of newly created currency and any transaction fees offered by parties to the pertinent transactions.³²

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.³³

Bitcoin that are already in circulation can be acquired either by exchanging 'national' or 'fiat' currencies 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. As intimated above, fiat money is regarded as money that a government or state has issued to serve as currency within its jurisdiction usually declaring it to be legal tender although the money has no intrinsic value, such as in terms of gold, silver or other precious

³⁰ <http://www.coindesk.com/oxford-dictionaries-definitions-blockchain-miner/> accessed 4 December 2015

³¹ Senate Economics Reference Committee, op cit 4 para 2.4

³² Ibid 4, para 2.5; Robleh Ali, John Barrdear, Roger Clews and James Southgate, "Innovations in payment technologies and the emergence of digital currencies" (Third Quarter 2014) 54 *Quarterly Bulletin of the Bank of England* 266 <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q301.pdf> (accessed 1 December 2015)

³³ K Tindell, "Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995" (April 2013) *Business Insider* cited by GSTR 2014/3

metal; and the money is not backed by reserves; for example, in such a precious metal. All the major currencies issued as moneys throughout the world are now fiat money since the nexus between the US dollar and gold was broken in 1971.

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. Bitcoin uses public key cryptography to make and verify digital signatures used in bitcoin transactions. Each user is assigned a 'public/private' key pair which is saved to that person's bitcoin wallet. A bitcoin wallet has been described as something that stores the digital credentials for a person's bitcoin holdings. 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, this private key is kept secret as it is what allows the bitcoin to be transferred between bitcoin addresses. 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.³⁴

To transfer bitcoin, a person creates a transaction message with the amount of bitcoin to be transferred and signs the transaction with their private key.³⁵ 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. Once validated these bitcoins are added to the block chain, which as intimated above is a public global ledger of all bitcoin transactions. 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.³⁶

Use of Bitcoin

There is a lot of uncertainty surrounding digital currencies. They have been described as potentially very disruptive and to involve a fast-moving technology that has only recently emerged into the limelight:

“We do not really know where Bitcoin coin will be in a couple of years, in terms of whether it will be used primarily as a long-term store value—akin to a digital gold—for transactions involving large parties or, as I would like to say, the kind of currency used to buy aircraft carriers with, or if it will turn into a currency that is used for microtransactions and retail transactions and consumer online commerce—the kind of currency you use to buy a cup of coffee—or

³⁴ H Wiener, J Zelnik, I Tarshish and M Rodgers, “Chomping at the Bit: U.S. Federal Income Taxation of Bitcoin Transactions” (2013) 11(3) *Journal Of Taxation Of Financial Products* 35-47, 35 cited by GSTR 2014/3

³⁵ K Kondor, M Posfai, I Csabai and G Vattay, “Do the Rich Get Richer? An Empirical Analysis of the Bitcoin Transaction Network” (2014) 9(2) *PLoS ONE* 1-10, at 1 cited by GSTR 2014/3

³⁶ GSTR 2014/3 op cit

perhaps fill in both of those at the same time. There are many unanswered questions at the moment.”³⁷

There is the ever present consideration of huge fluctuations in value. In the United States, it has been noted judicially that:

Since its introduction in 2009, bitcoin’s value has been volatile, ranging from less than \$2 per bitcoin to more than \$1,200 per bitcoin. Currently, there are more than 12.2 million bitcoins in circulation.³⁸

It seems that only a minority of users might actually have been using bitcoin as a medium of exchange. Rather, there seems to have been a trend towards investment. It has been suggested that 25% to 50% of the transactions that take place each day are made by people investing and trading in Bitcoin, rather than as payments for goods and services. It is thought to be a valuable undertaking to be able definitively to assess the volume and value of digital currencies’ use relative to the mainstream payment system in order for regulatory agencies, such as taxation offices, to form a definitive response to their use.³⁹

As will be cited more fully later, the relatively few people who presently use bitcoin primarily seem to view it as a store of value albeit with significant volatility and there presently is said to be little evidence of bitcoin being used as units of account.⁴⁰ At present, it seems that:

the incentives embedded in the current design of digital currencies pose impediments to their widespread usage. A key attraction of such schemes at present is their low transaction fees. But these fees may need to rise as usage grows and may eventually be higher than those charged by incumbent payment systems.

Most digital currencies incorporate a pre-determined path towards a fixed eventual supply. In addition to making it extremely unlikely that a digital currency, as currently designed, will achieve widespread usage in the long run, a fixed money supply may also harm the macroeconomy: it could contribute to deflation in the prices of goods and services, and in wages. And importantly, the inability of the money supply to vary in response to demand would likely cause greater volatility in prices and real activity. It is important to note, however, that a fixed eventual supply is not an inherent requirement of digital currency schemes.⁴¹

³⁷ Mr Andreas Antonopoulos, *Committee Hansard* (4 March 2015) 6

³⁸ *Securities and Exchange Commission v. Trendon T Shavers and Bitcoin Savings and Trust* CASE NO. 4:13-CV-416, 2 per Judge Mazzant (14 September 2014)

³⁹ Senate Economics Reference Committee, op cit 49-50 paras 5.59-5.62

⁴⁰ Ali et al, op cit 1

⁴¹ Ibid

Accordingly, at present it seems that the uncertainties surrounding digital currencies given their use involves a potentially disruptive and fast-moving technology need to be resolved before such a digital currency could become a significant monetary system in its own right.

Australian Taxation Office Rulings

On 17 December 2014, the Australian Taxation Office (ATO) finalised a suite of earlier draft public rulings on the tax treatment of digital currencies:

“The tax office came to this issue with the approach that bitcoin transactions are happening and we need to provide some certainty for the community about what the tax treatment is with the tools we have available to us under the existing law. So the approach we took was to understand the technology, understand the business models, see if the existing law could or did apply and then to provide the advice. We took the approach of being as collaborative as possible. We worked with experts, industry associations — banking, finance, tax—and accounting professionals as well.”⁴²

In summary, the ATO's rulings determined that transactions with such crypto-currencies as bitcoins are akin to a barter arrangement, with similar tax consequences. The ATO's view is that bitcoin is neither money nor a foreign currency, and the supply of bitcoin is not a financial supply for goods and services tax (GST) purposes. Bitcoin is, however, an asset for capital gains tax (CGT) purposes. These rulings are as follows:

- GSTR 2014/3—Goods and services tax: the GST implications of transactions involving Bitcoin
- TD 2014/25—Income tax: is Bitcoin a 'foreign currency' for the purposes of Division 775 of the *Income Tax Assessment Act 1997*?
- 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*?
- TD 2014/27—Income tax: is Bitcoin trading stock for the purposes of subsection 70-10(1) of the *Income Tax Assessment Act 1997*?
- TD 2014/28—Fringe benefits tax: is the provision of Bitcoin by an employer to an employee in respect of their employment a fringe benefit for the purposes of subsection 136(1) of the *Fringe Benefits Tax Assessment Act 1986*?

The Senate Economic References Committee's summary of the taxation implications of the ATO's rulings on digital currencies is as follows:⁴³

Those using digital currency for investment or business purposes may be subject to CGT when they dispose of digital currency, in the same way they would be for the disposal of shares or similar CGT

⁴² Mr Michael Hardy, Australian Taxation Office, *Committee Hansard* (4 March 2015) 15

⁴³ Senate Economics Reference Committee, *op cit* 6-7 para 2.10

assets; individuals who make personal use of digital currency (for example, using digital currency to purchase items to buy a coffee) and where the cost of the bitcoin was less than AUD \$10,000, will have no CGT obligations.

Individuals will be charged GST when they buy digital currency, as with any other property. Businesses will charge GST when they supply digital currency and be charged GST when they buy digital currency.

Businesses providing an exchange service, buying and selling digital currency, or mining bitcoin, will pay income tax on the profits. Businesses paid in bitcoin will include the amount, valued in Australian currency, in assessable business income. Those trading digital currencies for profit will also be required to include the profits as part of their assessable income.

Remuneration paid in digital currency will be subject to FBT where the employee has a valid salary sacrifice arrangement, otherwise the usual salary and wage Pay As You Go rules will apply.

GST ruling

According to the Senate Economics Reference Committee, the digital currency industry's primary concern regarding the ATO's rulings related to the GST treatment of digital currencies.

The ATO has ruled that a transfer of bitcoin from one entity to another is a “supply” for GST purposes.⁴⁴ The exclusion from the definition of supply for supplies of money⁴⁵ does not apply to bitcoin because bitcoin is not 'money' for the purposes of the GST Act.⁴⁶ The supply of bitcoin is not a 'financial supply' under section 40-5. Further, it is not an input taxed supply under paragraph 9-30(2)(b). A supply of bitcoin is a taxable supply under section 9-5 if the other requirements in section 9-5 are met, and the supply of bitcoin is not GST-free under Division 38 (for example, as a supply to a non-resident for use outside of Australia).⁴⁷ A supply of bitcoin in exchange for goods or services will be treated as a barter transaction. Bitcoin is not a “good” and cannot be the subject of a taxable importation under paragraph 13-5(1)(a). However, an offshore supply of bitcoin can be a taxable supply under the “reverse charge” rules in Division 84. An acquisition of bitcoin will not give rise to input tax credits under Division 66, which allows input tax credits for certain acquisitions of second-hand goods. A supply of bitcoin is not a supply of a voucher under Division 100.

According to the ruling, the exclusion from the definition of supply for supplies of money does not apply to bitcoin because bitcoin is not “money” for the purposes of the GST Act. Having regard to the provisions in the GST legislation, the ATO considers that , “money” is a central concept in determining whether there is a ‘supply’ for GST purposes, and the calculation of the GST payable on a taxable

⁴⁴ *A New Tax System (Goods and Services Tax) Act 1999* (Cth), s 9-10(1)

⁴⁵ *Ibid* s 9-10(4) excludes a supply of money from the definition of supply except where money is provided as consideration for the supply of money

⁴⁶ *Ibid* s 195-1 where “money” is defined

⁴⁷ *Ibid* s 38-190

supply. The ATO has noted that “money” is defined to specifically include, amongst other things, “currency (whether of Australia or of any other country)”.

The consequence of treating Bitcoin transactions as barter transactions is that GST effectively is being applied twice to the one transaction. GST is being applied to the goods or services being provided. Also, additional GST is being applied to the “supply” of the digital currency used as payment.⁴⁸ This double tax treatment was the critical issue for digital currency businesses as:

“Where GST or VAT is imposed on the acquisition of bitcoins as part of a trading transaction, it makes it much more difficult and much less economically viable for me to take my Australian dollars and convert them into bitcoin if one-eleventh of that transaction is going to be lost in GST at the point that I do that. For everyday consumers, that one-eleventh cost is a real cost. That is a consequence of treating bitcoin like a commodity rather than a currency.”⁴⁹

Promoters of digital currency were prepared to accept their obligation to pay capital gains tax on any investment profits and to pay GST on goods or services purchased using Bitcoin. Their “only point of contention to the ATO’s ruling is to our industry being rendered uncompetitive because of additional GST levied over and above our fiat-based competitors and international Bitcoin-based competitors”.⁵⁰ Others were concerned that capital gains tax treatment, as well as the GST treatment of digital currency, had slowed domestic adoption of the technology.⁵¹

The Senate Economics Reference Committee noted that the Australian Taxation Office’s ruling that digital currency was a commodity rather than a currency was similar to the position taken by corresponding authorities in other countries such as Canada and Singapore. Other jurisdictions such as the United Kingdom and Spain had advised that digital currency was exempt from value added tax.⁵²

Definition of “money”

The Commonwealth of Australia’s *A New Tax System (Goods and Services Tax) Act 1999* (the GST Act) provides that “money” includes:

- (a) currency (whether of Australia or of any other country); and
- (b) promissory notes and bills of exchange; and
- (c) any negotiable instrument used or circulated, or intended for use or circulation, as currency (whether of Australia or of any other country); and
- (d) postal notes and money orders; and
- (e) whatever is supplied as payment by way of:

⁴⁸ Ibid 28 para 4.7

⁴⁹ BitAwareAustralia, *Submission 17* 15 at Ibid 29 para 4.10

⁵⁰ Ibid

⁵¹ Ibid 29 n 12

⁵² Ibid 7 para 2.13

- (i) credit card or debit card; or
- (ii) crediting or debiting an account; or
- (iii) creation or transfer of a debt,

but not to include:

- (f) a collector's piece; or
- (g) an investment article; or
- (h) an item of numismatic interest; or
- (i) currency the market value of which exceeds its stated value as legal tender in the country of issue.⁵³

Statutory definition of 'money' in GST Act is an inclusive, and not an exhaustive, definition

The "orthodox" and "correct approach to the understanding of the effect of these provisions is that 'means' is used if the definition is intended to be exhaustive while 'includes' is used if it is intended to enlarge the ordinary meaning of the word".⁵⁴

It therefore was submitted that the Australian Taxation Office should not take a strict and narrow interpretation of the definition of 'money' by restricting it in terms of something that is 'currency as prescribed by the *Currency Act 1965* (Cth)';⁵⁵ the definition of 'money' in the GST Act should be interpreted to include concepts that take their value and recognizance by custom and commercial practice, rather than by reference to the *Currency Act 1965* (Cth); Bitcoin is widely used and is a generally accepted medium of exchange; and Bitcoin is functionally a currency, a store of value and a payment system. For example, it was submitted that a bitcoin transaction is a signed debit from one account resulting in credit to another and so should fall within the scope of subparagraph (e)(ii) of the definition of 'money' in the GST Act. It was further submitted that the ordinary concept of 'money' includes any medium which: is generally accepted for the exchange of goods and services and payment of debts; passes freely from hand to hand throughout the community in the final discharge of debts, being accepted equally; and includes, but is not limited to, 'currency' and 'legal tender'.⁵⁶ Under this interpretation, it was argued that 'money' would include bitcoin.⁵⁷

⁵³ S 195(1)

⁵⁴ D C Pearce and R S Geddes, *Statutory Interpretation in Australia* (8th ed 2014) 309 para [6.60] LexisNexis Butterworths Australila

⁵⁵ See *R v. Scott* (1990) 20 NSWLR 72 (definition of "officer" in *Companies (NSW) Code* not to be treated as expanding meaning of terms used in the *Crimes Act 1900* (NSW))

⁵⁶ Based on comments in *Travellex Ltd v. Commissioner of Taxation* [2008] FCA 1961, paragraph [25] per Emmett J

⁵⁷ See *Ruling Compendium GSTR2014/3EC* at

<https://www.ato.gov.au/law/view/document?LocID=%22CGR%2FGSTR2014EC3%2FNAT%2FATO%2F00001%22&PiT=99991231235958> accessed 4 December 2015

The response of the Australian Taxation Office was to acknowledge that the definition of 'money' in the GST Act is an inclusive definition, something which may indicate that something broader than what follows in that statutory definition. However, it maintained that determining whether a broader meaning is intended and the content of that meaning is informed by the statutory context in which the term 'money' appears. The Australian Taxation Office's view is that there is insufficient indication in the context of the GST Act as a whole, and having regard to the specific terms of the definition of money, that the Federal Parliament had intended that the term 'includes' in the definition of 'money' was intended to be as broad as what had been submitted. Instead, what was required was an examination of the range of meanings a particular word may have, and then identification within that range of the meaning most appropriate in that context. Using this approach, the Australian Taxation Office's view was that the use of the term 'money' was intended to prescribe fiat currency and those financial instruments and payment mechanisms which were denominated in, or related directly to, fiat currency.⁵⁸

The Australian Taxation Office noted that the inclusions in paragraphs (b) to (e) (of the definition of money) are each denominated in and reducible to fiat currency. It thought that by their nature this is a strong indication that 'money' generally for GST purposes cannot and does not extend beyond methods of payment that are denominated in and reducible to fiat currency. It considered that support for this view is also provided by the Currency Act which contemplates that money is denominated in the fiat currency of Australia or some other country.

The meaning of the 'currency of Australia' under the Currency Act was the requisite monetary unit of exchange established by that Act as a means of discharging monetary obligations for all transactions and payments in Australia. Conversely, 'the currency of some country other than Australia' - the only other species of 'currency' according to which transactions and payment obligations can be discharged consistent with the Currency Act - must be any monetary unit recognised by another country's laws for the same purposes.⁵⁹ It was the legislative recognition of something as a monetary unit of exchange which made that thing 'currency'. That 'currency' could only exist within a legal framework and as an exercise of sovereignty is an aspect of the State theory of money insofar as it was only by 'fiat' of the State that legitimacy was conferred.⁶⁰

The reference to 'a sum certain in money' in the definitions of bill of exchange and promissory note required payment in either Australian currency or foreign currency. That was, the sum must be denominated in and the rights enforceable by reference to 'fiat' currency. This interpretation was consistent with case law which, for example, had concluded that an instrument which provided for

⁵⁸ GSTR 2014/13 op cit paras 53 to 66;

⁵⁹ Ibid para 57

⁶⁰ Ibid para 58; e.g. *Leask v Commonwealth* (1996) 197 CLR 579, 595 per Brennan CJ (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); 617-8 and 622 per Gummow J (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)

payment in gold dust was not a promissory note.⁶¹ It followed that a bill of exchange or promissory note which purportedly granted a right denominated in bitcoin did not meet paragraph (b) of the definition of 'money' in the GST Act.⁶²

The term 'instrument' in the phrase 'negotiable instrument' referred to a formal legal document.⁶³ Bitcoin, however, was intangible and therefore was not an instrument, and therefore could not be a negotiable instrument. Further, bitcoin was not for use or circulation as currency of Australia or of any other country for the same reasons as explained above. It followed that bitcoin was not money under paragraph (c) of the definition.⁶⁴

Bitcoin was not a postal note because no post office action was involved and nor was Bitcoin a money order because it was not an order for the payment of money issued by one post office and payable by another. Therefore, bitcoin did not meet paragraph (d) of the definition of 'money' in the GST Act.⁶⁵

In respect of paragraph (e) of the definition of 'money' in the GST Act to include whatever is supplied as payment by way of credit or debit card; or creating or debiting an account or creation or transfer of a debt, the ATO view was that for the purposes of paragraph (e), there would be 'payment' by way of one of the payment mechanisms listed in this paragraph (e) if whatever was supplied were denominated in, and the performance or enforcement of the relevant payment was in, fiat currency. The concept of 'payment' had to encompass an amount accounted for in notional units that were directly translatable as of right to a particular amount of fiat currency.⁶⁶

The view of the Australian Taxation Office was that, although the definition of 'money' was not exhaustive, the fact that the inclusions in paragraphs (b) to (e) were each denominated in and reducible to fiat currency by their nature was a strong indication that 'money' generally for GST purposes could not and did not extend beyond methods of payment that were denominated in and reducible to fiat currency. The ATO's view was that in taking a purposive approach to the interpretation of the term 'money' in the GST Act, the broader legislative context which included the Currency Act was critical. The Currency Act approach permitted transactions and payments relating to money in Australia only to be undertaken with either Australian currency or currency of some other country. This gave rise to a *concept* of 'currency' under the Currency Act that aligned with the State theory of money. There was no indication in the GST Act that Parliament intended to recognize as payments of money a category of

⁶¹ *McDonald v. Belcher* [1904] AC 429, 435 [Privy Council]

⁶² GSTR 2014/13 op cit paras 71 and 72

⁶³ *Re Otto Azevedo v. Secretary To the Department of Primary Industries and Energy* [1992] FCA 84, [39] per French J ("a formal legal document whereby a right is created or confirmed, or a fact recorded; a formal writing of any kind, as an agreement, deed, charter, or record, drawn up and executed in technical form")

⁶⁴ GSTR 2014/13 op cit paras 78 and 79

⁶⁵ *Ibid* paras 80 to 82

⁶⁶ See GSTR 2003/14 *Goods and services tax: the GST implications of transactions between members of a barter scheme conducted by a trade exchange* at <https://www.ato.gov.au/law/view/document?docid=GST/GSTR200314/NAT/ATO/00001&PiT=20031112000001> accessed 8 December 2015

dealings which fell outside of the Currency Act's framework for money transactions. The Australian Taxation Office considered that it would be a peculiar and inconsistent outcome if the GST Act recognized something as money but that thing could not be legally used to fulfill monetary obligations in Australia as either Australian currency or foreign currency under the Currency Act.⁶⁷

Functional approach

It was argued that bitcoin could be viewed as serving a similar function as money; for example, in being used to acquire goods and services. The submission was that Bitcoin satisfied the functional definition of money because it was asserted to serve as a medium of exchange, a unit of account and a store of value. In addition, there was according to the argument an increasing acceptance within the community of bitcoin as a means of discharging debts and acquiring goods and services which had now reached the point that it qualified as money.⁶⁸

However, the Australian Taxation Office considered that serving a function similar to that as 'money' was not enough to make something 'money' for the purposes of the GST Act. This was also supported indirectly by the scheme of the GST Act giving specific treatment to supplies of gold in subdivision 38-L and 40-D. While gold could have some of the functional features of money, gold was not money for the purposes of the GST Act.⁶⁹

The meaning of 'money', in the context of determining if banknotes were goods or supplies in relation to rights, was considered in *Travelex Limited v. Commissioner of Taxation*⁷⁰ (*Travelex*). There, Emmett J observed:

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).⁷¹

⁶⁷ E.g. *Ruling Compendium GSTR2014/3EC* op cit para 1.4

⁶⁸ E.g. *ibid* para 1.1

⁶⁹ E.g. *GSTR 2014/3* op cit n 61

⁷⁰ [2008] FCA 1961 (19 December 2008) (sale of foreign currency at Sydney Airport after the departure side of the customs barrier to passenger who has passed through immigration not exempt from GST)

⁷¹ *Ibid* para [25]

While the High Court of Australia reversed this decision, they did not disturb Emmett J's characterisation in *Travellex* of banknotes as money and currency.⁷²

In *Messenger Press Proprietary Ltd v. Federal Commissioner of Taxation (Messenger Press)*⁷³, Perram J considered the test in *Moss v. Hancock*⁷⁴ (*Moss*) as referred to 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:⁷⁵

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.

In relation to the *Moss* concept of money, Perram J in *Messenger Press* noted that 'no doubt this definition has its limitations'⁷⁶ and referred to a specific passage in the text by Charles Proctor '*Mann on the Legal Aspect of Money*'.⁷⁷ In that passage, Proctor observed that the formulation in *Moss* reflects a purely functional approach to the idea of money.⁷⁸

The definition suffers from the obvious defect that it does not include the exchange settlement funds held by banks with a central bank. Such funds are not available to the community at all, passing only between banks. They nevertheless constitute the monetary base of the payments system.⁷⁹

The Australian Taxation Office considered that according to the available evidence the current levels of use and acceptance of bitcoin within the community was far short of what may be regarded as sufficient or necessary to satisfy the test in *Moss*. Given the anonymous nature of bitcoin and the fact that a bitcoin user can have, and usually will have, many bitcoin addresses, it was difficult to determine

⁷² *Travellex Ltd v. Commissioner of Taxation* [2010] HCA 33 (29 September 2010) (sale of foreign currency was GST free being a supply in relation to rights that attend upon ownership of the foreign currency where it is evident that the currency is to be used overseas, so the rights that attach to the currency are for use outside Australia), see e.g. at paras [15] per French CJ and Hayne J, and [45] per Heydon J

⁷³ [2012] FCA 756 (17 July 2012) (gains and losses arising from exchanges of liabilities denominated in foreign currency for liabilities denominated in Australian dollars)

⁷⁴ [1899] 2 QB 111

⁷⁵ [2012] FCA 756, at [196]

⁷⁶ *Ibid*

⁷⁷ Charles Proctor, *Mann on the Legal Aspect of Money* (6th ed 2005) Oxford University Press, Oxford at [1.07-1.14]. See also Charles Proctor, *Mann on the Legal Aspect of Money* (7th ed 2012) Oxford University Press, Oxford 7th Ed at [1.07-1.14].

⁷⁸ *Ibid* at [1.07]-[1.14]

⁷⁹ [2012] FCA 756, at [196]

precisely the current number of bitcoin users. According to recent estimates, there were approximately 500,000 bitcoin users worldwide, and that it was likely that fewer than one in ten businesses would currently accept payment in bitcoin even in the United States, where bitcoin was most widely used. These rough figures suggested that bitcoin use at present is far from universal and is rather uncommon:

⁸⁰

At present, digital currencies are used by relatively few people. For these people, data suggest that digital currencies are primarily viewed as stores of value – albeit with significant volatility in their valuations - (see **summary chart**) – and are not typically used as media of exchange. At present, there is little evidence of digital currencies being used as units of account.⁸¹

Bitcoin did not meet the test in *Moss v. Hancock* considered by Emmett J in *Travellex* that the current use and acceptance of bitcoin in the community was sufficiently widespread, and that bitcoin was a generally accepted medium of exchange, to satisfy the ordinary meaning of 'money'. At any rate, the Australian Taxation Office considered that custom alone, whether it be local or international, could not make something 'money' in the absence of an 'exercise of monetary sovereignty by the State concerned'.⁸²

International ramifications

The Australian Taxation Office received several comments which concerned how overseas jurisdictions are treating bitcoin for taxation purposes, particularly the United Kingdom and Germany. It was submitted that the UK Value Added Tax (“VAT”) treatment of bitcoin transactions was more favorable than the Australian Commissioner's approach and that Germany had recognized bitcoin as a financial instrument in the form of units of account (therefore bitcoin was foreign currency). It was submitted that Australia should adopt a similar approach to the UK so that GST applied to transactions where payment was made using bitcoin in the same way it applied to transactions where payment was provided in more traditional forms. It had also been submitted that the definition of 'bitcoin' as money was supported by at least two decisions of courts in the United States. While relatively recent decisions, it seems to this author that at present these decisions might be confined to their statutory context involving criminal charges and civil penalty processes to safeguard investor protections.⁸³

⁸⁰ For further consideration of this issue, the Australian Taxation Office referred at GSTR 2014/3 op cit n 62 to Ali et al, op cit

⁸¹ Ali et al, op cit 1

⁸² GSTR 2014/13 op cit para 73

⁸³ These cases were *Securities and Exchange Commission v. Trendon T Shavers and Bitcoin Savings and Trust* CASE NO. 4:13-CV-416 (14 September 2014) (found blatant misrepresentations to investors concerning use of their bitcoins and safety of their investments); and *U.S. v. Faiella*, U.S. District Court, Southern District of New York, No. 14-cr-00243 (18 August 2014) (bitcoin clearly qualifies as “money” of “funds” for the purposes of criminal charges concerning the operation of an underground market in the virtual currency bitcoin via the web site Silk Road))

According to the Australian Taxation Office, the UK had given provisional advice regarding the VAT treatment of bitcoin pending further developments.⁸⁴ For VAT purposes, the UK treated bitcoin as exempt from VAT under article 135(1)(d) of the EU VAT Directive (as a payment service). Australia's tax system was different to the UK's and the Australian Taxation Office had determined that bitcoin was neither money nor a financial supply for the purposes of the GST Act. As such, a transfer of bitcoin was a supply for GST purposes and a supply of bitcoin would be a taxable supply where the other requirements of section 9-5 were also met. It is true that:

As an EU tax, the VAT treatment for cryptocurrencies adopted by the UK must be consistent with any treatment that may eventually be implemented across the EU.⁸⁵

However, there seems to be no reason why Australia should not adopt the same kind of position as that taken in the United Kingdom:

The value of the supply of goods or services on which VAT is due will be the sterling value of the cryptocurrency at the point the transaction takes place.⁸⁶

Germany's Federal Financial Supervisory Authority in classifying bitcoin as units of account ('*Rechnungseinheiten*') had not legally accepted bitcoin as a means for discharging monetary obligations in Germany. Rather this classification under German law simply meant that bitcoin was a unit of value, not being legal tender, that served as a private means of payment in barter transactions. This classification was for the purposes of German banking law to ensure that entities trading in Bitcoin or undertaking Bitcoin mining pools would be subject to regulation. Germany did not recognize bitcoin as legal tender, nor did it consider bitcoin is foreign currency.⁸⁷ Implicit in the Australian Taxation Office's approach is that were Germany or any other country to recognize bitcoin as "money" under the laws of that country, bitcoin thereby would become a "foreign currency" for the purposes of Australian law resulting in its treatment for GST purposes analogous to that in the United Kingdom in respect of VAT.

Conclusion

From a legal viewpoint, commercial activity and issues of economics and finance are facts. In so far as they become pertinent to the application or elaboration of rules of law, their relevance and weight are resolved on the evidence. While humanity is able to venture into space and onto the moon, problems

⁸⁴ In particular the EU VAT position (Revenue & Customs Brief 09/14, *Tax treatment of activities involving Bitcoin and other similar cryptocurrencies*, 3 March 2014 at <https://www.gov.uk/government/publications/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies/revenue-and-customs-brief-9-2014-bitcoin-and-other-cryptocurrencies> accessed 10 December 2014

⁸⁵ Ibid

⁸⁶ Ibid

⁸⁷ *Ruling Compendium GSTR2014/3EC* op cit para 2.1

associated with the value of money, its essence, its stability and its development seem to remain unsolved.⁸⁸

There is no sphere of human thought in which it is easier for a man [or woman] to show superficial cleverness and the appearances of superior wisdom than in discussing questions of currency and exchange.⁸⁹

It would seem to be as true now, as it was twenty years ago that:

economists have probably spilled more printers' ink over the topic of money than any other, and while monetary theory impinges on almost every conceivable branch of economic analysis, confusion over the meaning and nature of money continues to plague the economics profession.⁹⁰

Over the next decades, revolutionary changes are likely to take place in the monetary field. These changes are likely to give precedence to economic functionality over political considerations in determining what is "money" for legal purposes. These changes will have a fundamental effect on the regulation of international monetary systems, including taxation. Taxation offices around the world, taxpayers and their respective advisers would be well advised to stop looking backwards to what might soon become the redundant approach to what is "money" of the twentieth century and instead look forward adapting to a rapidly changing new world.

The Australian Senate Economics References Committee has recommended that digital currency should be treated as money for the purposes of the goods and services tax with an appropriate amendment to the definition of "money" in the GST Act and the inclusion of digital currency in the definition of "financial supply" in the *A New Tax System (Goods and Services Tax) Regulations 1999*.⁹¹ It has also recommended that further examination of appropriate tax treatment of digital currencies should be included in the taxation white paper process, with particular regard to income tax and fringe benefits tax.⁹²

At present, the crucial considerations in respect of bitcoin seem to be that there is no law in any country recognising it as a currency and a legal tender of that country; on the evidence, there seems to be as yet no country where the current use and acceptance of bitcoin in the community could definitely be sustained as sufficiently deep or widespread so as to substantiate that bitcoin is a generally accepted medium and means of exchange, or a standard unit of account, within any country, or that bitcoin has a significant "niche" in these respects for the purposes of conducting any substantial kind or specie of

⁸⁸ Cf F A Mann, *The Legal Aspect of Money* (5th ed 1992) xviii Clarendon Press, Oxford

⁸⁹ Ibid; The Right Hon Winston Churchill MP, *Hansard* volume 468 column 160 (28 September 1949)

⁹⁰ P Davidson, *Post Keynesian Macroeconomic Theory* (1994) 86 Edward Elgar Publishing Company, Brookfield, Vermont

⁹¹ Senate Economics Reference Committee, *op cit* 34 para 4.35

⁹² Ibid 36 para 4.45

transnational transactions; associated with that consideration, bitcoin does not appear to have been used in any country across the full range and diversity of financial transactions so as to mandate the ongoing regulatory intervention of the country's monetary authorities; bitcoin does not appear to have any tangible or physical form of a kind that has been traditionally associated with coinage or paper notes issued by the sovereign as impressed accordingly – while this consideration might appear to be otiose in the digital age (and “money” does not necessarily have to be “legal tender”), the lack of this feature inherently is still restricting the use of bitcoin to relatively limited ways and in specialist kinds of markets seemingly precluding it from being able to be prescribed as legal tender in any country; and while moneys issued by sovereign governments and their central banks also fluctuate substantially in value either through market forces or in the course of the central bank's intervention as part of its management of the country's monetary system, bitcoin does not seem to have received community-wide recognition in any country or internationally as a sufficiently stable and secure store of economic value to fulfill one of money's major attributes as a store of value.⁹³

There are commercial and economic considerations which presently seem to inhibit digital currencies functioning as fully fledged monetary systems; for example, as intimated above transaction fees might need to rise so as to become higher than those charged by incumbent payment systems should there be greater widespread use of digital currencies; and the present dominant feature of a digital currency's fixed eventual supply (although itself not essentially an inherent mandatory requirement of digital currency systems) presently could contribute to deflationary pressures in the economy with more widespread use and towards unacceptable volatility in prices and real activity.

However, these inhibiting characteristics might be overcome or otherwise superseded over the coming decades. Tax authorities and taxpayers should anticipate that the features which the Australian Taxation Office has been able to advert to in mounting a respectable case that bitcoin (and other digital currencies) presently are not “money” could fairly quickly be superseded by significant changes which could make this position no longer sustainable. In essence, bitcoin and other digital currencies might not presently be “money”. However, they seem well on the way to becoming money. As set out in several places above, money does not have to be legal tender. So should digital currencies increasingly be treated as money, the pressure towards recognizing them as money might well become irreversible and irresistible. With the private sector becoming increasingly important economically, it might not be prudent to presume that money necessarily will retain its character as solely something that must have been issued by a sovereign state agency.

Were money to change from being currency issued by the government of a sovereign state, it would be prudent to anticipate revolutionary changes in the taxation system. For example, taxation would seem to be a compulsory payment of money by individuals and the private sector to government for use for government purposes calculated according to predetermined criteria without reference to benefits actually received by the taxpayers so as not to be a “price” or other “consideration”, and so as to be

⁹³ E.g. as identified in *Travelex Ltd v. Commissioner of Taxation* [2010] HCA 33 (29 September 2010) at [26] per French CJ and Hayne J

non-penal in character distinguishing tax from a fine or other penalty. Tax envisages its imposition by reference to pre-determined non-discriminatory criteria which are certain and of general application.⁹⁴ It is said that tax exists because of “the bald necessity to raise money for the government”.⁹⁵

Digital currency may presently still be a “bit player”, but it seems inevitable it will become a “game changer”. It does not seem to be a question of “if”, but “when”. Were money no longer to be something which must be issued by the State, and nor to be something which has to be managed and controlled by State agencies such as central banks, but instead were there to be competing moneys of various private issuers, how then would tax be pre-determined and non-discriminatory, of certain and general application, and fulfill the necessity to raise money for government independent of “price”? These are challenges going to the very heart of our modern taxation systems which prudently should be addressed now!

⁹⁴ Cf R I Barrett, *Principles of Income Taxation* (2nd ed 1981) 1 para [1.03] Butterworths, Sydney

⁹⁵ <http://www.yourdictionary.com/taxation> assessed 7 December 2015