

DIGITAL CURRENCY:
MAY BE A 'BIT PLAYER' NOW, BUT IN THE LONGER TERM
A 'GAME CHANGER' FOR TAX

STEVEN STERN*

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 article draws attention to the major ramifications of technological developments in the monetary field for the capacity of governments to control the economic agenda, including tax. The definition of 'money' is changing, and 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.

I. INTRODUCTION

Financial technology is bringing innovation into the financial system. It can improve efficiency and service delivery, and it can substantially change the way businesses interact with each other and with consumers. Australian businesses are increasingly using digital currencies for both domestic and international transactions. But this increasing use of digital currencies creates challenges for the taxation system. The definition of 'money' in Australia's taxation legislation does not seem to recognise digital currencies as 'money'. Consequently, transactions involving digital currencies can have taxation consequences which, as the Australian Government has identified, seem incompatible with its commitment to promote technological innovation and economic growth. For example, changes in exchange rates between digital currencies and what traditionally has been recognised as 'money' in taxation legislation can have unintended capital gains tax (CGT) consequences. Sales and purchases involving payment with digital currencies may attract exposure to 'double CGT' if a digital currency is itself regarded as a capital asset. The most egregious example of exposure to

* BEc LLB (Mon); LLM PhD (Melb); CTA; Adjunct Professor, College of Law & Justice, Victoria University; Barrister-at-Law, List S Gordon & Jackson, Victorian Bar; Registered Tax Agent. An earlier version of this article was presented as a paper at the Australasian Tax Teachers' Association Annual Conference at the University of New South Wales from 20 to 22 January 2016 being made available electronically at <https://www.business.unsw.edu.au/about/schools/taxation-business-law/australasian-tax-teachers-association/2016-atta-conference-papers>; at <https://www.ijc.net/library/detail.asp?key=935>; and, as a published manuscript, in (Winter 2016) Volume 9 Number 34 *International In-house Counsel Journal* 3821.

double taxation which has attracted the Australian Government's attention as particularly problematic is the goods and services tax (GST).

The Treasurer, the Hon Scott Morrison MP, has produced a 'discussion paper addressing the important issue of the GST treatment of digital currency',¹ noting that:

The current treatment of digital currency under GST law means that consumers are 'double taxed' when using digital currency to buy anything subject to GST.²

This article explores the options available to provide redress for the double taxation problem, with a particular focus on purchases subject to GST, as identified in the discussion paper. It would not require comprehensive amendments to Australia's existing taxation laws to expressly recognise digital currencies as 'money'. There are possible alternatives which would achieve substantially similar tax outcomes. The article considers whether shelving the option to recognise digital currencies as 'money' in the immediate future would be prudent, given technological developments in the field of electronic payments and the ever-increasing use of digital currencies.

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

In refusing to recognise digital currencies as 'money', the Australian Taxation Office (ATO) seems to have relied on those features of digital currencies which can inhibit them from performing all the usual universally accepted functions of money. The Australian Government itself recognises that the ATO's approach is no longer sustainable. As this restrictive approach is based on the underlying legislation, the Australian Government has indicated its support for legislative amendment. The concept of 'money' is pivotal to the taxation system. This article therefore considers whether the comprehensive recognition of digital currencies as 'money' for taxation purposes should be addressed now rather than being deferred or left to piecemeal approaches in the legislative amendment process.

The article's conclusion is that, notwithstanding the kinds of inhibiting features referred to above, the reality is that increasingly, digital currencies tend to function as money. Moreover, international developments increasingly seem to be promoting the use of digital currencies

¹ 'GST treatment of digital currency', Discussion Paper, May 2016, available at www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2016/GST%20treatment%20of%20digital%20currency/Key%20Documents/PDF/GST_treatment_of_digital_currency.ashx page v, accessed 14 September 2016.

² Ibid.

to perform the functions of money. Recently, the central government of India demonetised old Rupee 500 and 1,000 notes, reportedly to crack down on holders of 'black money'. The Indian Prime Minister, Narendra Modi, is reported to have appealed to the citizens of India, particularly the youth, to go digital: to 'embrace E-banking' and mobile banking transactions and pave the way for an increasingly cashless society.³

Given these developments and the evident direction internationally towards cashless transactions, the definition of 'money' in the Australian taxation legislation should be amended to reflect the reality that digital currencies increasingly perform the functions of money. What may now be only a 'bit player' is likely in the not too distant future to become a real 'game changer'. The central theme of this article is that, as the concept of 'money' is pivotal to the taxation system, it would be prudent to address the issue of recognising digital currencies as 'money' for taxation purposes now.

II. TAX IS ABOUT MONEY

Proficiency as a taxation practitioner necessitates a deep grasp of a broad range of law and the capacity to apply that wide knowledge in day-to-day practice on behalf of the revenue or of taxpayers. In addition to covering a large and diverse swathe of taxation legislation, the expertise demanded of the taxation practitioner is to comprehend such diverse fields as corporations law, securities law, the law of equity and trusts, partnership law, administrative law, constitutional law, contracts, torts, property law and criminal law.⁴ Tax fraud is considered 'a crime against the entire community.'⁵ How the taxation ramifications of digital currencies can involve the criminal law is illustrated by a report concerning 'An eccentric and seemingly brilliant IT entrepreneur and security expert' who 'was named ... as the possible creator of the Bitcoin electronic currency, previously known only by the pseudonym Satoshi Nakamoto' and who 'has had his Sydney home and office raided by the Australian Federal Police over a tax dispute with [the] Australian Taxation Office'.⁶

Taxation has the public function of determining the way money for government expenditure is to be sourced from taxpayers. Accordingly, it has substantial capacity to reallocate the distribution of income and property within the society. It thus 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

³ All India-Indo-Asian News Service, *Embrace E-Banking, Mobile Banking: PM Narendra Modi* (27 November 2016) at <http://www.ndtv.com/india-news/embrace-e-banking-mobile-banking-pm-narendra-modi-1630731> accessed 28 March 2017.

⁴ 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 28 March 2017.

⁵ Joanna Mather, 'DPP appeals tax sentence' (1 December 2015) *Australian Financial Review* 5.

⁶ Leo Shanahan, 'Bitcoin "creator" raided over tax' (10 December 2015) *The Australian* 5. The claim that Dr Craig Wright is the creator of Bitcoin is unconfirmed and does not seem accepted by the majority of Bitcoin experts.

increased burdens of progressive taxation, it might be assumed that the poorer sections of our community gain at the expense of wealthier taxpayers.⁷ Conversely, the Chief Economist at the Australia Institute argues that the opposite applies in respect of the Australian superannuation system with ‘its fundamental structural problems and chronic inequities’. The Chief Economist argues 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.’⁸

The professional practice of taxation reflects the tension between government and the person, whether natural or corporate. Inevitably, the taxpayer will be relatively disadvantaged when faced 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 such that – 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.⁹ Tax avoidance, namely, preventing a tax obligation from arising in the first place, was therefore traditionally seen as legitimate. Thus ‘there is no morality in a tax and no illegality or immorality in a tax avoidance scheme’.¹⁰ 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, has always been illegitimate.¹¹

With increased demands in the community about what the state should supply, there have been a series of legislative and judicial developments responding to an emerging consensus on the unacceptability of tax avoidance:¹²

*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.*¹³

While digital currencies can have intrinsic commercial benefits, their increased use can commensurately expand the opportunities for innovative tax avoidance. Tax is about money. Often tax pertains to much money.¹⁴ Therefore it is pertinent to ask, 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.

⁷ Justice Nettle, above n 4, 8.

⁸ Richard Dennis, ‘A super fix to savings unfairness’ (1 December 2015) *Australian Financial Review* 42.

⁹ For example, *Inland Revenue Commissioners v Duke of Westminster* [1936] AC 1, 19-20 per Lord Tomlin.

¹⁰ *Ensign Tankers (Leasing) Ltd v Stokes (Inspector of Taxes)* [1992] 1 AC 655, 668 per Lord Templeman.

¹¹ *Commissioner of Inland Revenue v Challenge Corporation Ltd* [1987] 1 AC 155, 167 [Privy Council].

¹² For example, *Income Tax Assessment Act 1936* (Cth), Part IVA.

¹³ *W T Ramsay Ltd v Inland Revenue Commissioners* [1982] AC 300, 326 per Lord Wilberforce.

¹⁴ Nettle, above n 4, 4.

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 – models that have substantially changed the way businesses and consumers interact. New ways of transacting, including crypto-currencies such as Bitcoin, were not contemplated when the current tax system was designed.¹⁵ Given that tax is about money, these new ways of transacting through the use of crypto-currencies must have significant ramifications for taxation systems across the globe. The issue is the extent to which those ramifications of digital currencies will involve tax avoidance.

Where there is a pre-ordained series of transactions or one single composite transaction which includes the achievement of some 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.¹⁶ There might well be concern that a change in the interpreted meaning of money to include digital currencies could alter the way taxing statutes can be applied, so as to result in tax benefits to taxpayers utilising movements in the exchange rates between traditional money and the new range of digital currencies.

Legislation has vastly expanded to produce what governments perceive to be social benefits and outcomes, in the process 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.¹⁷

Tax professionals must focus on facts. They 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

¹⁵ For example, see The Hon Joe Hockey MP, *Rethink: Tax discussion paper* (March 2015) 7 at <http://bettertax.gov.au/publications/discussion-paper/> accessed 28 March 2017.

¹⁶ *Furniss v Dawson* [1984] AC 474, 527 per Lord Brightman.

¹⁷ C T Pagone, *Tax Avoidance in Australia* (2010), Federation Press, Annandale NSW, v.

evidence is essential, whether the tax professional is operating as a barrister, a solicitor or an accountant.¹⁸

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, and these have substantially changed the way businesses and consumers interact.¹⁹

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 associated with the value of money, its essence, its stability and its development seem to remain unsolved:²⁰

*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.*²¹

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.*²²

III. 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*'.²³ The Committee's terms of reference included paying particular attention to ways to develop an effective regulatory system for digital currency, to ascertain the most appropriate definition of digital currencies under Australian tax law, and to the potential impact of digital currency technology on the economy.²⁴ The work undertaken by this Committee draws attention to the way, in the

¹⁸ Nettle, above n 4, 3–4.

¹⁹ The Hon Joe Hockey MP, *Launch of the Tax Discussion Paper* (30 March 2015) at <http://jhb.ministers.treasury.gov.au/speech/010-2015/> accessed 28 March 2017.

²⁰ Compare F A Mann, *The Legal Aspect of Money* (5th ed 1992) Clarendon Press, Oxford, xviii.

²¹ Ibid; The Right Hon Winston Churchill MP, *Hansard* volume 468 column 160 (28 September 1949).

²² P Davidson, *Post Keynesian Macroeconomic Theory* (1994) 86 Edward Elgar Publishing Company, Brookfield, Vermont.

²³ At http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Digital_currency/Report accessed 28 March 2017.

²⁴ Ibid 1.

medium to long term, digital currencies could have an impact upon the viability of taxation systems throughout the world.

A. *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. But 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.²⁵

Digital currency can sometimes have a broader meaning that includes 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 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 authority – or decentralised. Non-convertible digital currencies must be centralised, as they require issue by a single administrative authority. Decentralised digital currencies are also known as cryptocurrencies. They are distributed, open-source, maths-based, peer-to-peer currencies that have no central administering authority and no central monitoring or oversight. Bitcoin is an example of such a cryptocurrency.²⁶

B. *What Is Bitcoin?*²⁷

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

²⁵ Financial Action Task Force, *Virtual Currencies—Key Definitions and Potential AML/CFT Risks* (2014) 4 at <http://www.fatfgafi.org/topics/methodsandtrends/documents/virtual-currency-definitions-amlcft-risk.html> cited by Senate Economics Reference Committee, 3 para 1.1.

²⁶ Senate Economics Reference Committee, above n 23, para 2.4.

²⁷ For this section, see Senate Economics Reference Committee, above n 23 and *Goods and Services Tax Ruling 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.

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'*.²⁸ 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'²⁹ and as a 'crypto-currency, designed to reinvent the way that money works'.³⁰ 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'.³¹ This 'distributed ledger' or 'block chain' allows digital currency to be used as a decentralised payment system. Bitcoin operates as a decentralised peer-to-peer payment network whose implementation relies on the use of public-key cryptography to validate transactions involving existing Bitcoins, and in doing so generates new Bitcoins.³² The Bitcoin system is decentralised in that it is not under the control of a central authority.³³

Transactions on the Bitcoin network are denominated in Bitcoins. The value of Bitcoin is 'not derived from gold or government fiat, but from the value that people assign it'.³⁴ 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 is valid. This validity is to verify the person who would be the payer possesses and is entitled to spend the currency in question. The process through which Bitcoins 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 Bitcoins 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 Bitcoins to their Bitcoin address. Thus particular 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

²⁸ At <http://www.oxforddictionaries.com/definition/english/bitcoin> accessed 4 December 2015.

²⁹ J Brito and A Castillo, "Bitcoin: A Primer for Policymakers" (Summer 2013-2014) 29(4) *Policy* 3-12 cited by Goods and Services Tax Ruling GSTR 2014/3.

³⁰ D Bradbury, 'The problem with Bitcoin' (November 2013 11 *Computer Fraud & Security* 5-8, cited in Goods and Services Tax Ruling GSTR 2014/3.

³¹ At www.coindesk.com/oxford-dictionaries-definitions-blockchain-miner/ accessed 4 December 2015.

³² Bradbury, above n 30.

³³ See for example 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 Goods and Services Tax Ruling GSTR 2014/3.

³⁴ Brito and Castillo, above n 29.

problems.’³⁵ To mine is: ‘To obtain units of (a cryptocurrency) by running a computer process to solve specific mathematical problems.’³⁶ 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:³⁷

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.³⁸

Bitcoins 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, unlike gold, silver or other precious metal; and the money is not backed by reserves, as for example with a precious metal. All the major currencies issued as money throughout the world is now fiat money, since the nexus between the US dollar and gold was broken in 1971.

Bitcoins 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 a software application 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 publicly known. The

³⁵ At <http://www.coindesk.com/oxford-dictionaries-definitions-blockchain-miner/> accessed 4 December 2015.

³⁶ Senate Economics Reference Committee, above n 23, 4 para 2.4.

³⁷ 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 at <http://www.bankofengland.co.uk/publications/Documents/quarterlybulletin/2014/qb14q301.pdf> (accessed 1 December 2015).

³⁸ K Tindell, ‘Geeks Love the Bitcoin Phenomenon Like They Loved the Internet in 1995’ (April 2013) *Business Insider* cited by *Goods and Services Tax Ruling GSTR 2014/3*.

private key is also an alphanumeric number. However, this private key is kept secret, as it is what allows Bitcoins 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.³⁹

To transfer Bitcoins, a person creates a transaction message with the amount of Bitcoin to be transferred and signs the transaction with their private key.⁴⁰ Those Bitcoins 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, this transaction is 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 Bitcoins and the Bitcoin address with which they are associated, but also the related private key that allows the holder to do anything with those Bitcoins.⁴¹

C. Use of Bitcoin

There is a lot of uncertainty surrounding digital currencies. They have been described as potentially very disruptive and involving 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 perhaps fill in both of those at the same time. There are many unanswered questions at the moment.*⁴²

There is also 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.*⁴³

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

³⁹ H Wiener, J Zelnik, I Tarshish and M Rodgers, 'Chomping at the Bit: US Federal Income Taxation of Bitcoin Transactions' (2013) 11(3) *Journal of Taxation of Financial Products* 35–47, 35 cited by GSTR 2014/3.

⁴⁰ 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 Goods and Services Tax Ruling GSTR 2014/3.

⁴¹ Goods and Services Tax Ruling GSTR 2014/3.

⁴² Andreas Antonopoulos, *Committee Hansard* (4 March 2015) 6.

⁴³ *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).

suggested that between 25 and 50 per cent 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 would be a valuable undertaking to definitively 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.⁴⁴

As will be discussed more fully later, the relatively few people who presently use Bitcoin seem to view it primarily as a store of value, albeit with significant volatility, and there is said to be little evidence of Bitcoin being used as units of account.⁴⁵ 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.⁴⁶

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

IV. AUSTRALIAN TAXATION OFFICE RULINGS

A. *The Rulings Generally*

On 17 December 2014, the ATO finalised a suite of 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.⁴⁷

⁴⁴ Senate Economics Reference Committee, above n 23, 49–50 paras 5.59–5.62.

⁴⁵ Robleh Ali, John Barrdear, Roger Clews and James Southgate, 'Innovations in payment technologies and the emergence of digital currencies' 54 *Quarterly Bulletin of the Bank of England* Q3.

⁴⁶ *Ibid.*

⁴⁷ Michael Hardy, Australian Taxation Office, *Committee Hansard* (4 March 2015) 15.

In summary, the ATO's rulings determined that transactions with such crypto-currencies as Bitcoin 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 GST purposes. Bitcoin is, however, an asset for CGT purposes. The ATO rulings are as follows:

- Goods and Services Tax Ruling GSTR 2014/3—Goods and services tax: the GST implications of transactions involving Bitcoin.
- Taxation Determination TD 2014/25—Income tax: is Bitcoin a 'foreign currency' for the purposes of Division 775 of the *Income Tax Assessment Act 1997*?
- 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*?
- Taxation Determination TD 2014/27—Income tax: is Bitcoin trading stock for the purposes of subsection 70-10(1) of the *Income Tax Assessment Act 1997*?
- Taxation Determination 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:⁴⁸

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 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.

B. Key GST Ruling

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

⁴⁸ Senate Economics Reference Committee, above n 23, 6-7 para 2.10.

The ATO has ruled that a transfer of Bitcoin from one entity to another is a 'supply' for GST purposes.⁴⁹ The exclusion from the definition of supply for supplies of money⁵⁰ does not apply to Bitcoin because Bitcoin is not 'money' for the purposes of the GST Act.⁵¹ The supply of Bitcoin is not a 'financial supply' under s 40-5. Further, it is not an input-taxed supply under s 9-30(2)(b). A supply of Bitcoin is a taxable supply under s 9-5 if the other requirements in s 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).⁵² 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 s 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 in the calculation of the GST payable on a taxable supply. The ATO has noted that 'money' is defined to specifically include, among other things, 'currency (whether of Australia or of any other country)'.

The consequence of treating Bitcoin transactions as barter transactions is that GST is in effect being applied twice to the one transaction. It is being applied to the goods or services being provided, and additional GST is being applied to the 'supply' of the digital currency used as payment.⁵³ 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.⁵⁴

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 with respect to 'our industry being

⁴⁹ *A New Tax System (Goods and Services Tax) Act 1999* (Cth), s 9-10(1).

⁵⁰ *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.

⁵¹ *Ibid* s 195-1, where 'money' is defined.

⁵² *Ibid* s 38-190.

⁵³ *Ibid* s 28; Senate Economics Reference Committee, above n 23, 6-7 para 4.7.

⁵⁴ BitAwareAustralia, *Submission 17* at Senate Economics Reference Committee, above n 23, 29 para 4.10.

rendered uncompetitive because of additional GST levied over and above our fiat-based competitors and international Bitcoin-based competitors'.⁵⁵ Others were concerned that capital gains tax treatment, as well as the GST treatment of digital currency, had slowed domestic adoption of the technology.⁵⁶

The Senate Economics Reference Committee noted that the ATO'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.⁵⁷

V. THE LEGISLATION AND THE ATO'S RESPONSE ON HOW TO INTERPRET IT

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

but does not include:

- (f) a collector's piece; or
- (g) an investment article; or
- (h) an item of numismatic interest; or

⁵⁵ Ibid.

⁵⁶ Ibid 29 n 12.

⁵⁷ Ibid 7 para 2.13.

- (i) currency the market value of which exceeds its stated value as legal tender in the country of issue.⁵⁸

B. *Statutory Definition of 'Money' In GST Act Is Inclusive, Not Exhaustive*

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'.⁵⁹

It therefore was submitted that the ATO 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)';⁶⁰ the definition of 'money' in the GST Act should be interpreted to include concepts that take their value and recognition through 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'.⁶¹ Under this interpretation, it was argued that 'money' would include Bitcoin.⁶²

The response of the ATO was, first, to acknowledge that the definition of 'money' in the GST Act is an inclusive definition – something which may indicate that something broader than the ordinary meaning of money was intended. 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 ATO'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 an identification, within that range, of the meaning most appropriate in that context.

⁵⁸ Subsection 195(1).

⁵⁹ D C Pearce and R S Geddes, *Statutory Interpretation in Australia* (8th ed 2014) 309 para [6.60] LexisNexis Butterworths Australila.

⁶⁰ 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)).

⁶¹ Based on comments in *Travelex Ltd v. Commissioner of Taxation* [2008] FCA 1961, paragraph [25] per Emmett J.

⁶² See *Ruling Compendium Goods and Services Tax Ruling GSTR 2014/3EC* at <https://www.ato.gov.au/law/view/document?LocID=%22CGR%2FGSTR2014EC3%2FNAT%2FATO%2F00001%22&PiT=99991231235958> accessed 4 December 2015.

C. ATO View: The Definition Relates to Fiat Currency

Using this approach, the ATO'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.⁶³

The ATO 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 1965* (Cth), 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 1965* (Cth) 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 1965* (Cth) – must be any monetary unit recognised by another country's laws for the same purposes.⁶⁴ 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.⁶⁵

The reference to 'a sum certain in money' in the definitions of bills of exchange and promissory notes 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 payment in gold dust was not a promissory note.⁶⁶ 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.⁶⁷

⁶³ Goods and Services Tax Ruling GSTR 2014/13 paras 53 to 66.

⁶⁴ *Ibid* para 57.

⁶⁵ *Ibid* para 58; for example, *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).

⁶⁶ *McDonald v. Belcher* [1904] AC 429, 435 [Privy Council].

⁶⁷ Goods and Services Tax Ruling GSTR 2014/13 paras 71 and 72.

The term 'instrument' in the phrase 'negotiable instrument' referred to a formal legal document.⁶⁸ 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.⁶⁹

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.⁷⁰

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.⁷¹

The view of the ATO 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 recognise as payments of money a category of dealings which fell outside the framework for money transactions under the *Currency Act 1965* (Cth). The ATO considered that it would be a peculiar and inconsistent outcome if the GST Act recognised something as money but that thing could not be legally used to fulfill monetary

⁶⁸ *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').

⁶⁹ Goods and Services Tax Ruling GSTR 2014/13 paras 78 and 79.

⁷⁰ *Ibid* paras 80 to 82.

⁷¹ See Goods and Services Tax Ruling 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.

obligations in Australia as either Australian currency or foreign currency under the *Currency Act 1965 (Cth)*.⁷²

D. *What If a Payment Mechanism Serves a Similar Function to Money?*

It was argued that Bitcoin could be viewed as serving a similar function to 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.⁷³

However, the ATO considered that serving a function similar to that of '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 Subdivisions 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.⁷⁴

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 (Travelex)*.⁷⁵ 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).*⁷⁶

⁷² For example, *Ruling Compendium Goods and Services Tax Ruling GSTR 2014/3EC* para 1.4.

⁷³ For example, *ibid* para 1.1.

⁷⁴ For example, *Goods and Services Tax Ruling GSTR 2014/3*.

⁷⁵ [2008] FCA 1961 (19 December 2008) (sale of foreign currency at Sydney Airport, on the departure side of the customs barrier, to a passenger who has passed through immigration, is not exempt from GST).

⁷⁶ *Ibid* para [25].

While the High Court of Australia reversed this decision, it did not disturb Emmett J's characterisation in *Travellex* of banknotes as money and currency.⁷⁷

In *Messenger Press Proprietary Ltd v. Federal Commissioner of Taxation (Messenger Press)*,⁷⁸ Perram J considered the test in *Moss v. Hancock (Moss)*⁷⁹ 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:⁸⁰

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'⁸¹ and referred to a specific passage in the text by Charles Proctor '*Mann on the Legal Aspect of Money*'.⁸² In that passage, Proctor observed that the formulation in *Moss* reflects a purely functional approach to the idea of money:⁸³

*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.*⁸⁴

The ATO considered that according to the available evidence, the current levels of use and acceptance of Bitcoin within the community were 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 precisely the current number of Bitcoin users. According to recent estimates, while conservatively there were considered to be at least some 500,000 Bitcoin users worldwide – and the estimates vary widely – a more accurate estimate could be in the order of ten million users worldwide. However, notwithstanding that use of Bitcoin and

⁷⁷ *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.

⁷⁸ [2012] FCA 756 (17 July 2012) (gains and losses arising from exchanges of liabilities denominated in foreign currency for liabilities denominated in Australian dollars).

⁷⁹ [1899] 2 QB 111.

⁸⁰ [2012] FCA 756, at [196].

⁸¹ *Ibid.*

⁸² 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].

⁸³ *Ibid* at [1.07]-[1.14.]

⁸⁴ [2012] FCA 756, at [196].

other digital currencies is likely to be quantitatively substantial, relatively it is likely that fewer than one in ten businesses would currently accept payment in Bitcoin even in the United States, where Bitcoin has been most widely used. These rough figures have suggested that Bitcoin use at present is far from universal, and is rather uncommon relatively or qualitatively in so far as such use pertains to all the attributes that money commonly has:⁸⁵

*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 ... and are not typically used as media of exchange. At present, there is little evidence of digital currencies being used as units of account.*⁸⁶

In the view of the ATO, 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 ATO 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’.⁸⁷

E. *Ramifications of International Comparisons*

The ATO received several comments which concerned the way 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 ATO’s approach, and that Germany had recognised 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.⁸⁸

⁸⁵ For further consideration of this issue, the ATO in Goods and Services Tax Ruling GSTR 2014/3, referred to Ali et al, [above n 45](#).

⁸⁶ Ali et al, [above n 45](#), 1.

⁸⁷ Goods and Services Tax Ruling GSTR 2014/13 para 73.

⁸⁸ 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 Bitcoin and safety of their investments) and *U.S. v. Faiella*, 39 F Supp. 3d 544 (2014) (Bitcoin clearly qualifies as ‘money’ or ‘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 ATO, the UK had given provisional advice regarding the VAT treatment of Bitcoin pending further developments.⁸⁹ 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 ATO 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 s 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.*⁹⁰

The European Court of Justice in *Hedqvist* has ruled that Bitcoin exchange transactions should be exempt from VAT.⁹¹ As noted by the Treasury in Australia, it is not clear how this applies to digital currencies other than Bitcoin'.⁹²

As suggested by the Treasury in Australia, there seems to be no compelling reason why in Australia digital currencies could not be treated 'as equivalent to "money" for GST purposes, alongside items in the current definition of "money"'⁹³ or 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.*⁹⁴

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

⁸⁹ 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 2015.

⁹⁰ *Ibid.* Any requirement on the part of the United Kingdom to comply with European Union directives will cease to be applicable should the United Kingdom leave the European Union.

⁹¹ Ian Allison, 'European Court of Justice: Bitcoin is a currency and exchanges are VAT-exempt' (22 October 2015) at <http://www.ibtimes.co.uk/european-court-justice-ruling-bitcoin-currency-exchanges-are-vat-exempt-1525169> accessed 12 September 2016.

⁹² Treasury, *GST treatment of digital currency* (May 2016) 4 [17.1] at http://www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2016/GST%20treatment%20of%20digital%20currency/Key%20Documents/PDF/GST_treatment_of_digital_currency.ashx accessed 12 September 2016.

⁹³ *Ibid* 10 [43].

⁹⁴ 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 2015 8 to 13 [36] to [51].

to regulation. Germany did not recognise Bitcoin as legal tender, nor did it consider Bitcoin foreign currency.⁹⁵ Implicit in the ATO's approach is that were Germany or any other country to recognise 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 analogously to that of United Kingdom's VAT.

VI. WHAT OF THE FUTURE?

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 the meaning of '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, focusing on what might soon become the redundant approach to '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*.⁹⁶ 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.⁹⁷

The Treasury has noted that:

*While the ATO's rulings were limited to clarifying the tax treatment of Bitcoin, they also provide guidance on how other digital currencies are likely to be treated to the extent they share similar characteristics to Bitcoin. Consequently, the Government's commitment is to address the GST treatment of all digital currencies, not just Bitcoin.*⁹⁸

The Treasury has stated that while Bitcoin and many similar digital currencies are intended to be included within the scope of the new proposed GST treatment, 'it is not the

⁹⁵ *Ruling Compendium Goods and Services Tax Ruling GSTR2014/3EC* para 2.1.

⁹⁶ Senate Economics Reference Committee, above n 23, 34 para 4.35.

⁹⁷ *Ibid* 36 para 4.45. The tax white paper process has now been discontinued: Luke Smith, *Tax White Paper scrapped in favour of Budget announcements* (8 February 2016) at <http://www.solepurposetest.com/news/tax-white-paper-scrapped-budget/> accessed 27 November 2016.

⁹⁸ Treasury, *GST treatment of digital currency* (May 2016) 3; [13] at [http://www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2016/GST%20treatment%20of%20digital%20currency/Key%20Documents/PDF/GST treatment of digital currency.ashx](http://www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2016/GST%20treatment%20of%20digital%20currency/Key%20Documents/PDF/GST%20treatment%20of%20digital%20currency.ashx) accessed 12 September 2016.

Government's intention to change the GST treatment of all internet-based currency-like products, due to the potential for unintended outcomes':⁹⁹

*Examples of internet-based currency-like products that are not intended to be in the scope of the Government's commitment include in-game currencies, loyalty scheme points, frequent flyer points and digital vouchers.*¹⁰⁰

In respect of the taxation treatment of digital currencies which is within the Australian Government's intention to change, the Treasury has raised three options to remove their double taxation for GST purposes. First, treating digital currencies as input taxed, so that the supply is not subject to GST, and also aligning the treatment of digital currencies with other synthetic financial instruments not involving any amendments to the definition of 'money' in the GST Act. Second, treating digital currencies as 'money' for GST purposes, so that the digital currency is outside the GST system when used in exchange for other goods and services, but is 'input taxed' when used in exchange for 'other money', resulting in differential outcomes only in relatively rare cases but potentially differentiating the concept of 'money' in the GST Act from other Commonwealth legislation. Third, making supplies of digital currencies GST-free, similar to the exemptions for food and healthcare but placing digital currency providers at a competitive advantage to suppliers of other currencies.¹⁰¹ The Treasury has also raised the issue of the way digital currencies should be identified for GST purposes.¹⁰²

In respect of the taxation treatment of digital currencies generally in Australia, the Treasury has stated that:

*The ATO and the Government will continue to monitor developments in the digital currency industry in order to consider the most appropriate income tax (including capital gains tax and fringe benefits tax) treatment of digital currencies, with no changes to the income tax treatment currently being proposed.*¹⁰³

At present, the crucial considerations in respect of whether a digital currency such as Bitcoin should be recognised as 'money' seem to be that there is no law in any country recognising Bitcoin as a currency and as legal tender of that country.¹⁰⁴ On the evidence, there seems to be as yet no country where the current use and acceptance of Bitcoin in the community could

⁹⁹ Ibid 6 [28.1].

¹⁰⁰ Ibid [28.2].

¹⁰¹ Ibid 4; [17.1].

¹⁰² Ibid 1,6-8; [5]-[7], [28]-[33].

¹⁰³ Ibid 5 [27].

¹⁰⁴ Compare reports which suggest that Japan may introduce regulations designating Bitcoin as a legal form of payment: for example, Nikkei, 'Japan to adopt new safeguards for Bitcoin users' (5 March 2016) at <http://asia.nikkei.com/Politics-Economy/Policy-Politics/Japan-to-adopt-new-safeguards-for-bitcoin-users> accessed 12 September 2016; and Treasury, *GST treatment of digital currency* (May 2016) 4 [20] at http://www.treasury.gov.au/~media/Treasury/Consultations%20and%20Reviews/Consultations/2016/GST%20treatment%20of%20digital%20currency/Key%20Documents/PDF/GST_treatment_of_digital_currency.ashx accessed 12 September 2016.

definitely be sustained as sufficiently deep or widespread to substantiate the claim that Bitcoin is a generally accepted medium and means of exchange, or a standard unit of account, or that Bitcoin has a significant 'niche' in these respects for the purposes of conducting any substantial kind or specie of 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 and impressed accordingly. This last consideration might appear otiose in the digital age (and 'money' does not necessarily have to be 'legal tender'), but the lack of this feature is still restricting Bitcoin to relatively limited uses in specialist kinds of markets, seemingly precluding it from being able to be prescribed as legal tender in any country. While money issued by sovereign governments and their central banks fluctuates 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 fulfil one of money's major attributes as a store of value.¹⁰⁵

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 ATO has adverted 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, if digital currencies are increasingly being treated as money, the pressure to legally recognise them as money might well become irresistible. With the private sector becoming increasingly important economically, it might not be prudent to presume that money will necessarily retain its character as something that can only 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 non-penal in character, distinguishing tax from a fine or other penalty. Tax envisages its imposition by reference to

¹⁰⁵ For example, as identified in *Travellex Ltd v. Commissioner of Taxation* [2010] HCA 33 (29 September 2010) at [26] per French CJ and Hayne J.

pre-determined non-discriminatory criteria which are certain and of general application.¹⁰⁶ It is said that tax exists because of 'the bald necessity to raise money for the government'.¹⁰⁷

VII. CONCLUSION

It should not be problematic for the Australian Government to persist with its current intention not to recognise in-game 'currencies', loyalty scheme points, frequent flyer points and digital vouchers as 'money'. None of these appear to ascribe to Bitcoin the characteristic of performing the functions of money. By comparison, an approach directed exclusively to removing the most egregious cases of double taxation by focusing only on GST and by making minimal amendments to the GST Act – such as those which would treat digital currencies as 'input taxed' – is unlikely to avoid the necessity to amend the definition of 'money' in the medium to long-term, both in the GST Act and in other taxation legislation generally. These digital currencies increasingly are functioning as money.

The concept of 'money' is pivotal to the taxation system. It would therefore be prudent to recognise digital currencies as 'money' for taxation purposes now, rather than deferring the response or taking piecemeal approaches. 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'. If money were no longer to be something which must be issued by the State, nor something which has to be managed and controlled by State agencies such as central banks, but instead included a range of competing moneys from 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 system, and they should be addressed now.

¹⁰⁶ Compare R I Barrett, *Principles of Income Taxation* (2nd ed 1981) 1 para [1.03] Butterworths, Sydney.

¹⁰⁷ At <http://www.yourdictionary.com/taxation> assessed 7 December 2015.