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Decoding the regulatory enigma: how Australian regulators should respond to the tax challenges presented by bitcoin

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Abstract

Bitcoin and its underlying technology present a range of opportunities, but also a number of significant challenges, especially for regulators. Not least of these challenges surround ensuring bitcoin's fair and effective taxation. In this respect, bitcoin raises two key questions. First, as bitcoin is a new technology, the taxation of which was not foreseen by the income tax or GST regimes in their present form, determining how these bodies of law should apply to bitcoin is complex and imperfect. Secondly, as bitcoin functions broadly like an electronic, virtual form of cash, ensuring bitcoin users' compliance, and minimising the risk that the technology is applied to tax evasion, raises a number of administrative and jurisdictional challenges. In a suite of rulings, the ATO took the view that bitcoin is money under the GST and income tax regimes, which causes a number of tax anomalies, particularly in the context of GST. Evidence heard at the Senate Inquiry suggested that the commercial consequences of these anomalies were significant. The regulatory question has received minimal consideration in an Australian context. This paper argues that there is some legal basis to treat bitcoin as money for the purpose of income tax and, in particular, GST. It contends that, although this may not be the best strict legal interpretation, it is arguably consistent with the policy of the provisions, and results in fairer, more 'equal' tax outcomes between bitcoin and traditional money. Importantly, international experience suggests that this approach would better foster the development of bitcoin intermediaries, the existence of which is likely to be an essential part of a regulatory platform. In this respect, a more purposive, liberal interpretation of the relevant law to promote short term fairness and equity in the tax regime, may also prove key to bitcoin's effective long-term regulation.

JEL Codes: K34, K42, K2.
Keywords: bitcoin; tax regulation; tax treatment; tax characterisation; money; regulation

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CONTENTS

I INTRODUCTION

In October 2009, a paper written under the pseudonym 'Satoshi Nakamoto' introduced a new digital currency: bitcoin (Nakamoto 2008). As the Global Financial Crisis eroded trust in banks and governments, bitcoin proposed an online, decentralised payment-system, theoretically free of external economic or political influences (Nakamoto 2008). Instead, bitcoin would be governed by mathematics and cryptography.

Between May 2010 and December 2013, bitcoin was rapidly adopted.[1] Its value rose by forty-two-million per cent (Coindesk 2015) and there was wide speculation about its implications on the future of international finance (Smith 2012, 436). Bitcoin gained notoriety for its use as payment system for nefarious activities (Greenberg 2013) its price volatility, and virtual 'bank thefts' from the leading bitcoin exchange.[2] These widely-propagated events brought digital currencies from relative obscurity into the public consciousness. Concomitantly, bitcoin and other burgeoning digital currencies were inaugurated firmly onto the legal and regulatory radar. In Australia, bitcoin and other digital currencies are the subject of an Inquiry by the Commonwealth Senate Economics References Committee ("the Senate Inquiry") (Senate Inquiry 2014-2015).

This paper considers one of the *mélange* of regulatory issues surrounding bitcoin; how it should be taxed, in the context of the Australian Income Tax and Goods and Services Tax ("GST") regimes. Taxing bitcoin presents two key challenges. First, like many new technologies and financial products, bitcoin's tax characterisation is contentious, as it fails to perfectly ascribe to definitions of any particular asset 'class' under the tax regimes. This is a key issue for bitcoin users, as bitcoin's tax characterisation informs how bitcoin transactions are taxed. Particular debate surrounds the fact that bitcoin's features resemble a commodity, yet bitcoin assumes the commercial role of money. Secondly, as emphasised by the OECD, bitcoin has significant potential as a vehicle for facilitating tax evasion and avoidance (Blundell-Wignall 2014; see also Marian 2013). Thus, ensuring bitcoin users' tax compliance is an important consideration for regulators.

[1] 'Bitcoin Wiki, *Bitcoin History* (20 July 2015) <https://en.bitcoin.it/wiki/History>.
[2] See *Bitcoin History,* ibid; Wikipedia *Mt Gox* (14 October 2014) http://en.wikipedia.org/wiki/Mt._Gox.

In examining bitcoin's taxation, Parts II and III provide an overview of bitcoin and its significance to taxation. Part IV discusses the first challenge to taxing bitcoin: ascertaining bitcoin's tax characterisation, and the Australian Taxation Office's ("ATO") response (ATO Rulings TD2014/25-28; GSTR2014/3). Under the current tax law, the ATO asserts that bitcoin is best characterised as a commodity for income tax and GST purposes. The ATO's characterisation has been widely criticised, and the Senate Inquiry extensively examines the impact of digital currencies' tax treatment on the bitcoin and broader technology industries (Senate Inquiry 2014-2015). Stakeholders emphasise that the ATO's characterisation results in anomalous and undesirable income tax and GST outcomes, as there is a misalignment between bitcoin's tax treatment and its commercial use (Senate Inquiry 2014-2015). Stakeholders vehemently argue that bitcoin should be characterised as money for tax purposes, as this would rectify these tax anomalies (Senate Inquiry 2014-2015; Senate Hearings 2014-2015).

Part V explores whether bitcoin could satisfy the definition of money under the current law. A reasonable basis exists, though this approach relies on a liberal interpretation of the relevant law. Arguably, the approach is less appropriate than the ATO's characterisation, and may not be justified for the *sole* policy reason of redressing tax anomalies. However, as outlined in Part VI, redressing tax anomalies provides only part of the policy rationale to adopt this alternative characterisation.

Part VI considers designing a regulatory framework for bitcoin's taxation. It argues that, based on experience in tax and Information Technology ("IT") regulation, regulating the intermediaries through which most individual users operate may provide a platform to increase bitcoin users' tax compliance. However, the lifeblood of a regulatory model reliant upon intermediaries, is their continued existence under Australian jurisdiction. Evidence from the Senate Inquiry indicates that the detrimental tax outcomes arising from the ATO's characterisation are likely to cause bitcoin intermediaries' exodus from Australia (Senate Inquiry 2014-2015). This would undermine Australia's best chance to regulate this new technology. Conversely, evidence indicates that characterising bitcoin as money for tax purposes would foster the growth of Australian bitcoin intermediaries (Senate Inquiry 2014, Submission 23).

Thus, Part VI introduces this paper's ultimate contention: namely, drawing on analysis surrounding bitcoin's tax characterisation *and* regulation, the author postulates that there is a substantial policy basis for characterising bitcoin as money. In particular, having established some legal basis to for this approach, the author argues such a characterisation (through ATO treatment, or legislative amendments) would be broadly consistent with the operation of the income tax and GST regimes. Importantly, treating bitcoin as money has a strong policy basis, as it is likely to encourage intermediaries' existence under Australian jurisdiction, to form the basis of an effective long-term regulatory model for this technology.

There is little Australian literature or empirical research on this topic. As bitcoin is a global, internet-based payment-system, Australian and overseas regulators face largely the same challenges. This paper therefore draws heavily from overseas experiences and regulatory approaches, as well as evidence from the Senate Inquiry.

II "BEHIND THE CODING" A BACKGROUND TO BITCOIN

Bitcoin is a form of digital 'cryptocurrency'. Cryptography, bitcoin's mathematical foundation, is nothing new; it is fundamental to modern banking and internet transactions (Oppliger 2005, 7) whilst 'cryptocurrencies' have existed since the 1980s (Griffith 2014). Bitcoin's novelty is its application of 'peer-to-peer' technology. Unlike banks, bitcoin account records (the "blockchain") are stored and administered by *individual users*, as a decentralised ledger of past and present ownership (Nakamoto 2012). As no *central* computer holds account records, no single computer is vulnerable to hacking; nor is there a need to trust a specific third party. This innovation is integral in establishing bitcoin's key benefit as a secure "trustless-transfer technology", but also presents major challenges for regulators (Blundell-Wignall 2013).

A bitcoin is represented and administered by two sets of character sequences or 'keys' (Slattery 2014). The 'public key' represents the actual bitcoin, ownership of which is published in the blockchain. The 'private key' allows the bitcoin's owner to administer it. To transfer bitcoin, owners identify the bitcoin's public key, and the recipient's username. The transaction is approved by entering the private key as a password. Third parties cryptographically validate the bitcoin's ownership and private keys, through a process called 'mining' (The Economist 2014). The bitcoin system rewards the first miner to verify the transaction with an amount of newly-created bitcoin (Government Accountability Office 2013).

For factual accuracy, this paper refers specifically to bitcoin; the largest cryptocurrency (GAO 2013), though its analysis may apply to the numerous other digital currencies.

III “BEYOND THE DIGITAL” BITCOIN’S SIGNIFICANCE TO TAX LAW

Given bitcoin’s sudden ascendance from obscurity, it is worth clarifying why bitcoin’s taxation warrants the attention of governments, regulators, and policymakers. Examining the principles of ‘good’ tax law offers a number of key reasons. First articulated by Adam Smith in the Eighteenth-Century (Smith, in Burgess 2012, 12) these principles continue to influence Australian and overseas tax policy (Institute for Fiscal Studies, 2011). Australia’s recent tax reform papers; the *Re:Think Tax Discussion Paper,* and *The Henry Review*, reiterate these principles: a tax system should “meet its purposes efficiently, equitably, transparently, and effectively” (Treasury 2010, Executive Summary, 1; Treasury 2015). Accordingly, these principles inform this paper’s policy arguments.

‘Equity’ in the tax system dictates that the tax base “should be as comprehensive as possible” (Treasury 2010, 169) and should encompass all forms of economic activity, including bitcoin. Further, *horizontal* equity dictates that similar tax outcomes should arise from similar economic activities (Treasury 2010, 169-171). This principle is broadly mirrored in IT law: the *Model Law on Electronic Commerce*,[3] provides that new, digital interpretations of existing technology should be afforded similar legal treatment to their traditional counterparts. Bitcoin’s taxation should therefore be consistent with the taxation of traditional payment systems.

Importantly, considering Australian tax law’s application to bitcoin is more significant than short-term revenue-raising. Although bitcoin’s market capitalisation peaked at almost US$15 billion (Woo 2013) it is estimated that the Australian revenue at stake is relatively small (Senate Hearings, 4 March 2015). Further, Bitcoin’s continued existence is equivocal,[4] which historically induced an aversion to technology-specific regulation (Winn 1999, 691). However, “whether bitcoin thrives or fails, it is abundantly clear that virtual [assets] will be a part of society’s future” (Smith 2012, 436; Little 2014, 25; Blundel-Wignall

[3] Opened for signature 16 December 1996, 55 UNTS 162 (entered into force 17 January 1997).
[4] Binary Options Leader, *Is Bitcoin on its Way Out?* (14 January 2014) <http://www.binaryoptionsleader.com/bitcoin/bitcoin-on-its-way-out/>.

2013, 17). Thus, bitcoin's taxation may increase *long-term* revenue, and provide a useful platform for effectively taxing similar technologies.

Finally, over a decade ago, Milton Friedman foresaw that "cyberspace [will] make it much more difficult for governments to collect taxes" (Friedman, in Schlumgen 2010, 882). Evidence of the internet's effect on international tax is already profound: from the OECD's Base Erosion and Profit Shifting ("BEPS") Project (OECD 2014) to cases of individual's tax residency, "the internet increasingly renders national borders less significant",[5] and traditional international tax principles increasingly archaic (Marian 2013). As the first major example of this new technology, bitcoin provides an opportunity to examine the current tax regime and test the efficacy of tax policies, to ensure that future Australian tax law is better-equipped to address the tax challenges of the modern, digital world.

IV THE ATO'S TAX CHARACTERISATION: THE BEGINNING OF THE END FOR THE INDUSTRY?

A key challenge to taxing bitcoin is ascertaining its tax characterisation. Broadly, to reflect properties' differing legal and commercial features, there are various 'classes' of asset under the income tax and GST regimes.[6] There are significant distinctions in the tax treatment of different asset classes, making bitcoin's tax characterisation an important issue for stakeholders. As existing property classes predate contemplation of digital currencies, determining which class bitcoin best satisfies is complex and imperfect. Principally, debate considers whether bitcoin should be characterised as a commodity, or money (and currency) for tax purposes.

A The ATO Rulings

In December 2014, the ATO addressed the characterisation issue, releasing four income tax determinations outlining the Commissioner's position on bitcoin's tax characterisation, and thus, how bitcoin receipts will be treated under the *Income Tax Assessment Act 1936* (Cth) ("ITAA 1936"), the *Income Tax Assessment Act 1997* (Cth) ("ITAA 1997") and the *Fringe Benefits Tax Assessment Act 1986* (Cth) ("FBTA 1986") ("the income tax Acts").

[5] *Dempsey v FCT* (2014) ATC 10-363 [115].
[6] See e.g. Division 40, cf. Division 108 ITAA 1997.

These conclude that bitcoin should be characterised as a commodity, not a currency (ATO Rulings, 2014). Broadly, the ATO reasoned that, whilst bitcoin purportedly functions as money, it fails to ascribe to definitions of money or currency under the income tax and GST regimes, noting:

> "As bitcoin is not a monetary unit recognised and adopted by the laws of any other sovereign State as the means for discharging monetary obligations for all transactions and payments in a sovereign State, it is not 'foreign currency";[7]

And further:

> "Bitcoin is not a legally-recognised universal means of exchange and form of payment by the laws of Australia or the laws of any other country. Therefore, it is not currency."[8]

On the basis of this finding, the ATO provides that, where bitcoin is used as payment, the transaction is taxed as a barter.

The ATO also outlined its position on bitcoin's taxation under the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) (the "GST Act"),[9] concluding that, as bitcoin is not a currency, it cannot satisfy the GST exemption for money, nor is it an input-taxed financial supply. Thus, using bitcoin as payment is a barter transaction, and the *supply of bitcoin* is subject to GST.

B Legal Outcomes & Commercial Impact

These rulings cause disparity between bitcoin's taxation as a commodity, and commercial use as money. It is argued that this disparity creates detrimental tax outcomes, which threaten the commercial viability of Australian bitcoin intermediaries, who provide quasi-banking and financial services to the bitcoin community (White 2014). Although the Senate Inquiry addressed a range of issues, the tax treatment was seemingly the gravamen of most bitcoin users. To affirm the validity of stakeholders' concerns, the following identifies key incidences where bitcoin's characterisation as a commodity rather than money causes anomalous tax outcomes.

[7] TD 2014/25 [33].
[8] GSTR 2014/3 [66].
[9] Ibid.

1 GST Outcomes

The most commercially-significant issues surrounding bitcoin's characterisation arise under the GST regime. First, as a commodity, transactions using bitcoin as payment are barter transactions. In this respect, bitcoin does not present any novel taxation issues; rather, it emphasises pre-existing imperfections with the operation of the GST system that, until now, very rarely arose (M. Harding, Senate Hearings, 2015).

The problem with barter transactions is that there are two supplies subject to GST in a single transaction. This does not raise any problems for individuals; however, it is likely to result in double administration where two GST-registered entities transact, and one pays in bitcoin, as a single commercial transaction is treated as two legal transactions. This is demonstrated in **Figure 1** (at end of paper).

The second key GST issue is competitive disadvantage for Australia intermediaries who sell bitcoin to Australian consumers. Because bitcoin is not money, it is not an input taxed financial supply under Division 40 of the GST Act. Consequently, Australian intermediaries must impose GST at the prevailing rate on consumers who purchase bitcoin for use in Australia.[10] If the same taxpayer purchased bitcoin from an overseas intermediary (with the ease of logging onto a different website) they may avoid paying GST through the current operation of the GST provisions, as emphasised during the Senate Inquiry:

> "[U]nder the design of our GST, if I go onto a US bitcoin trader's website and buy bitcoin from them, even on the ATO's view there is no taxable transaction. Our reverse charge rules do not kick in" (A. Sommer, Senate Hearings, 2014).

Even if these provisions were amended, enforcing them on overseas entities is jurisdictionally problematic (Senate Inquiry, Submission 23, 2014). Importantly, this outcome differs from the taxation of traditional payment systems, which are treated as input-taxed financial supplies. This disparity is illustrated in Figure 2 (end of paper).

[10] ATO Rulings summary, (18 December 2014) < https://www.ato.gov.au/General/Gen/Tax-treatment-of-crypto-currencies-in-Australia---specifically-bitcoin/>.

This treatment inflates bitcoin's practical cost, potentially undermining its key benefit as a cost-effective payment system. Notably, this outcome is inconsistent with the underlying principle of a value added tax; that it is only the 'value added' that should be taxed. Input taxed supplies are not subject to GST because:

> "There is no readily agreed identifiable value for supplies consumed by customers of financial services."[11]

Bitcoin intermediaries employ a similar business model to traditional banks and exchanges; thus, the 'value added' is theoretically just as difficult to identify. Treating bitcoin as input taxed is therefore likely to be more consistent with the policy behind input taxing.

Evidence suggests the GST treatment is particularly detrimental for Australian bitcoin intermediaries:

> "The GST… is the main issue… [and the] most difficult problem … [which] means that it is 10% more expensive for them to acquire bitcoin from an Australian supplier… [Thus,] very soon after the release of the ATO guidance … it became common practice for Australians to buy bitcoin from overseas suppliers…
>
> [Consequently] the Bitcoin Association of Australia is aware of a number of Australian-based bitcoin businesses moving operations offshore to remain competitive".(Senate Inquiry, Submission 13, 18-19).

Stakeholders therefore claim "treating digital currency as a commodity … [will] guarantee its rapid demise" (Senate Inquiry, Submission 15, 10).

2 *Income Tax*

A number of income tax issues arise from characterising bitcoin as a commodity. First, bitcoin is treated as a CGT asset, and every bitcoin transaction is a CGT event. This may impose an administrative burden, though software now exists to address this (Marian, 2013). Further, the CGT treatment may affect bitcoin's fungibility. Broadly, as bitcoins have differing CGT implications, a bitcoin's value to a taxpayer differs from its face value, limiting its efficacy as money. However, in doing so, users obtain tax planning opportunities. Whilst

[11] Explanatory Memorandum *Not A New Tax (GST) Bill 1998* (Cth) [5.140].

the CGT outcomes are arguably somewhat awkward, they are not decidedly detrimental for users.

Some question the certainty and jurisdictional independence of the characterisation. In determining bitcoin's characterisation, the ATO define 'currency' under the tax regimes as money recognised by a foreign act of sovereignty. The Tax Institute highlighted the ensuing anomaly that the *Australian* tax treatment is therefore wholly subject to *foreign* sovereign-treatment of bitcoin (Senate Inquiry Submission 16, 2014).

Some criticise the FBT treatment, noting that, if employers pay salaries in bitcoin, they would be subject to FBT. Some claim the tax characterisation effectively imposes a tax 'penalty' where it is used as money (Senate Inquiry, Submission 13, 19) although one might question the true significance of this outcome.

3 General Commercial Consequences

The Senate Inquiry heard extensive evidence that the tax treatment was undesirable, and has a significant adverse impact on the industry. CoinJar, a leading digital currency intermediary, argued that treating bitcoin in a manner inconsistent with its commercial use leads to ambiguity, and characterising digital currencies as money would increase clarity (Senate Inquiry, Submission 12, 5). The Institute of Public Affairs claimed the ATO's tax treatment could stifle the development of this technology (Senate Inquiry, Submission 10, 3) whilst the Bitcoin Foundation; bitcoin's leading advocacy group contended that:

> "The result [of the tax treatment] is already hindering bitcoin adoption and innovative start-ups in Australia, and has the potential to severely hinder the growth of the nascent FinTech space in Australia" (Senate Inquiry Submission 13, 18-19)

Market-leading payment-systems such as PayPal and MasterCard, argued the tax (and broader) uncertainty inhibited their adoption of bitcoin (Senate Inquiry Submission 18, 1, 7). Somewhat dichotomously, some further argued the disparate characterisation may provide potential arbitrage opportunities and competitive advantage for bitcoin intermediaries. The Australian Bankers' Association noted the ensuing unfairness, (Senate Inquiry Submission 45, 6-9) whilst MasterCard affirmed the desirability of consistency in the regulation of modern and traditional payment systems, arguing:

> "All participants in the payments system that provide similar services to consumers should be regulated in the same way to achieve a level playing field." (Senate Inquiry, Submission 45, 6).

It is therefore reasonable to accept the contentions of stakeholders that there are reasonably significant, undesirable legal anomalies arising from the ATO's tax treatment, particularly in the context of the GST regimes.

C Bitcoin as Money

It is worth clarifying that these issues are theoretically resolved if bitcoin is characterised as money or currency. As currency, bitcoin would be GST-free. It would also be a financial supply under the definition in the GST Regulations,[12] and be input taxed. This overcomes the two major detrimental outcomes. Further, whilst the income tax anomalies are seemingly less profound, bitcoin would also be able to access the foreign currency provisions under Division 775, and the exemption from FBT, avoiding the income tax anomalies. The Senate Inquiry anticipated few (if any) notable adverse commercial implications would arise by characterising bitcoin as money. Thus, the issue with characterising bitcoin as money is its satisfaction of the relevant definitions.

V "MORE THAN BINARY?" UNRAVELLING THE COMPLEXITIES OF BITCOIN AS MONEY

A Overview

Based on a strict interpretation of the current law, the author accepts the ATO's conclusion that bitcoin is best characterised as a commodity. However, treating bitcoin as money would absolve the issues described above, and better-reflect bitcoin's commercial use. This alternative characterisation would thus adhere to the IT and tax policy principles of legal consistency, horizontal equity and technological neutrality between bitcoin and its traditional counterparts and is therefore desirable for policy reasons.

Further, evidence to the Senate Inquiry, including by Clayton Utz's Andrew Sommer, The Tax Institute's Kathleen Dermody, and a joint submission by the author and Miranda

[12] *A New Tax System (GST) Regulations 1999* (Cth) Reg 40-5-09 ("GST Regulations").

Stewart of the Australian Tax and Transfer Policy Institute, argued that there is at least some basis under the current law to define bitcoin as money or currency (A Sommer, Senate Hearing; Senate Inquiry, Submissions 16 & 23).

It may be opined that an asset with characteristics of a commodity *and* money could be afforded 'dual characterisation'. However, a core basis for this paper's proposal, and a key concern of industry stakeholders, is increasing simplicity and consistency with traditional payment systems. The complexity of this approach is likely to undermine the benefits associated with characterising bitcoin as money. Similarly, as outlined above, characterising bitcoin as money would resolve the issues with anomalous tax outcomes. It is therefore unnecessary to create a new asset 'class' for digital currencies, where their features are sufficiently similar to their traditional counterparts that existing tax law could adequately encompass this technology.

B Bitcoin as Money or Currency: The Legislative Framework

Under subsection 9-10(4) of the GST Act, "money" is exempt from the definition of a "supply" subject to GST. Section 195-1(1) of the GST Act relevantly 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 not:

> *(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.*

Further, the GST Regulations provide that 'foreign currency' is an input taxed financial supply. In an income tax context, 'foreign currency' is defined in section 995-1 as "a currency other than Australian currency". Thus, if bitcoin satisfies the definition of 'currency' and 'money', it should be treated as such under the income tax and GST regimes. However, neither the tax regime actually *defines* the term currency or money, beyond the above examples (which are considered later). One must therefore consider other sources to determine the terms' meaning.

C Legislative Confusion? 'Money, Currency, Legal Tender…?'

The *Acts Interpretation Act 1901* (Cth) does not define 'money' or 'currency'. The *Currency Act 1965* (Cth)[13] and *Reserve Bank Act 1959* (Cth),[14] introduce a related term: 'legal tender', Australia's legal currency. Bitcoin is not legal tender as it does not satisfy the definition under the Currency Act.

Beyond 'legal tender', the legislative meaning of 'money' and 'currency' is unclear. The *Encyclopaedic Australian Legal Dictionary* provides that 'currency' is "a unit of money in actual use in a country". 'Money', is "an imprecise term" (Butt Ed., 2011, 151, 384) meaning "a generally-accepted medium of exchange for goods, services, and the payment of debts." These definitions imply that the terms 'legal tender', 'currency', and 'money', are all forms of the 'root' term money, but 'legal tender' and 'currency' require a degree of legal-recognition. However, these definitions are broadly drawn from the common law, which is unresolved,

[13] Section 8(1).
[14] Part V.

and there is no obvious legal basis for this conjecture, nor does it seem to obviously accord with the approach or intent of the legislature's use of the terms.

The underlying confusion is described by the seminal text on the subject: Proctor's *Mann on the Legal Aspects of Money* (Proctor, 2005). In the absence of legislative direction, Proctor argues there is ensuing inconsistency and interchangeability in the legislative and common law use of the terms 'currency', 'cash', and 'money', (Proctor, 2005, 1) an issue which is further obfuscated by two divergent common-law definitions of 'money' and 'currency'.

1 The Sovereignty Definition

The first interpretation, "the sovereignty definition", argues a fundamental aspect of money is that it "must be issued or authorised by an act of sovereignty" (Stewart, 2014). This approach was elucidated by the Full High Court in *Leask v Commonwealth of Australia,* in which Brennan J argued that under section 51(xii) of the *Constitution*, currency is "units of account… *issued under the laws of that country"* (emphasis added).[15] Similarly, Gummow J argued that 'currency' means the currency of Australia, or the currency of some other country.[16] Subsequently, in *Watson v Lee,* the High Court reasoned that the power to "control and regulate the use of Australian and foreign currency" derives from section 51(xii) of the *Constitution*.[17] As 'foreign currency' in this context is used as the counterpoint to Australian legal tender, foreign currency must be foreign legal tender, which is inherently "authorised by an act of sovereignty". This definition also maintains a functional aspect: money must be a "unit of account", but money's defining feature is the exercise of sovereign power.

2 The Functional Definition

The alternative; "the functional definition", defines money according to social convention and economic principles. Thus, money can be anything: "carvings of a throne were used by the Ashanti tribe", for example (Bollen, 2013). The idea that money's status derives solely from social convention originates in the Eighteenth-Century UK case, *Miller v Race*,[18] where the court considered whether bank notes had become a socially-accepted form of cash.

[15] (1996) 187 CLR 579 [5077].
[16] Ibid [5089-5092].
[17] (1979) 144 CLR 374 (Mason, Stephen, Gibbs JJ).
[18] [1758] 97 ER 398, 401 [40].

This principle formed the basis of the functional definition of money, first articulated in *Moss v Hancock*[19] in the Nineteenth-Century. At first incidence in *Travelex v FCT*,[20] the Australian Federal Court considered whether foreign currency purchased at an exchange in an airport was GST-free, as it was purchased for use overseas. Considering this question, Emmett J adopted the functional definition to determine what constituted money under the GST Act. On appeal, the Full Federal Court and High Court did not contest this interpretation, though unfortunately did not discuss the issue. Following *Travelex,* the functional definition was applied (albeit cautiously) by the Federal Court in *Messenger Press*; seemingly the only other recent Australian tax case to consider the meaning of 'money'.[21]

D Which Definition is more Appropriate?

The functional and sovereignty definitions both have basis in Australian and overseas jurisprudence. The sovereignty definition is generally the preferred approach. Proctor concludes that money must "represent or reflect an exercise of monetary sovereignty by the State concerned." (Proctor, 2005, [1.11]) Similarly, renowned economist John Maynard Keynes noted that "money is that which the State declares… a good discharge of… contracts" (Keynes, 1923, ix). Given that a sound medium of exchange is fundamental to a capitalist system, sovereign recognition of money is important to "buttress that position" (Procter, 2005, [1.09]). Further, courts and academics alike have noted the limitations of the functional definition, particularly when considering certain financial arrangements.[22] Proctor criticises the *Moss v Hancock* functional definition as merely "a description" (Procter, 2005, 12).

Nevertheless, the functional definition has utility by affording money "a variety of different meanings in different situations" (Procter, 2005, [1.04]). In *Re Diplock*,[23] in equity, money was considered broader than 'mere' cash, to allow the tracing of non-cash assets. An expansive definition of money has also been applied in other areas of law, including liquidation and succession (Procter, 2005, [1.03]).

[19] [1899] 2 QB 111.
[20] [2008] FCA 1961.
[21] *Messenger Press Proprietary Ltd v FCT* (2012) 90 ATR 69 [196].
[22] *Messenger Press* (2012) 90 ATR 69 [196].
[23] [1948] Ch 465, 517, 521.

Further, the functional definition arose to address changes in finance. This broader definition may thus increase the law's ability to adapt to new technologies like e-money and electronic transactions (Procter, 2005, [1.59]). Importantly, the (albeit few) Australian cases considering the meaning of 'money' in a tax context, have applied the functional definition.

Finally, with the advent of monetary unions, a number of countries have foregone crucial aspects of monetary sovereignty. For example, the European Monetary Union restricts nations' seigniorage rights, (Sinn, 1997, 665), whilst the General Counsel of the International Monetary Fund recently noted that IMF-membership eroded States' monetary sovereignty (Gianviti, 2004). Thus, in the modern age, the sovereignty definition should be considered far from a legal panacea.

E Which Definition should be Applied?

Given the basis for adopting either the functional or sovereignty definition, it is worth considering whether the statutory construction of the GST and income tax Acts contemplates which definition of money or currency is favoured. In ascertaining the appropriate meaning of a provision, McHugh, Gummow, Kirby and Hayne JJ in *Project Blue Sky Inc. v Australian Broadcasting Authority* held that:

> "The primary object of statutory construction is to construe the relevant provision so that it is consistent with the language and purpose of all the provisions of the statute… the process of construction must always begin by examining the context of the provision". [24]

The Explanatory Memorandum to the GST Act outlines the purpose of an exemption for money:

> "Money that is provided as consideration for a supply is not in itself a supply … otherwise … payment … could be a taxable supply"[25]

This indicates that the purpose of establishing an exemption for money GST was pragmatic; to avoid the 'clunky' operation and double GST liability discussed above, and

[24] [1998] 194 CLR 355 [69].
[25] *Explanatory Memorandum* above n 11 [3.7].

ensure consistency with input taxing provisions, where the ‘value added’ cannot be easily determined.

Further, the maxim, *noscitur a sociis*, indicates that, “the meaning of a doubtful word may be ascertained by reference to… associated words” (Broom, 1939, 369). The GST Act’s definition in subsection 195-1(1) includes a plurality of examples of what constitutes ‘money’, beyond mere legal tender, many of which seem focused on the function of money, rather than its sovereign status. Indeed, bitcoin functions as a form of decentralized, account-based payment system, debiting and crediting users’ accounts on the blockchain. Thus, bitcoin may constitute ‘[something] supplied as payment by way of… crediting or debiting an account’ under subsection 195-1(1)(e)(ii). In any case, adopting a statutory construction that permits consideration of the functional definition is arguably more consistent with provisions whose purpose is seemingly to avoid double taxation on common forms of functional payment, through an expansive definition of the term ‘money’.

Similarly, the provisions for foreign currency in Divisions 775 and 960, where the term ‘currency’ appears, were introduced as part of the *Taxation of Financial Arrangements (“TOFA”)* reforms. Broadly, these are designed to align taxation with commercial realities.[26] Such is the importance the TOFA regime places on reflecting commercial realities, that tax treatment may overlook the legal character of certain arrangements to create a legal fiction.[27] The argument that a bitcoin exemption would be legally inconsistent with the intention of the relevant provisions is therefore relatively weak, and there is a sound basis to apply the functional definition under these provisions, to ensure consistency with commercial realities.

F Does Bitcoin Satisfy either Definition?

As outlined above, bitcoin has not been recognised as currency by an act of sovereignty. It therefore cannot satisfy the sovereignty definition.

The ATO’s rulings argue that “current use and acceptance… is not sufficiently widespread’ to satisfy the functional definition” (ATO Rulings, 2014). Whilst the ATO does not indicate the level of acceptance required to satisfy the functional definition, its finding is supported

[26] Explanatory Memorandum, *Tax Laws Amendment (TOFA) Bill 2008* [5].
[27] See e.g. debt equity rules in Division 974; tracing through the ‘corporate veil’ in Division 166 ITAA 1997.

elsewhere (Sonal, 2013). However, the author respectfully disagrees; as at July 2015, bitcoin arguably satisfies the functional definition of money.

As outlined above, neither definition of money has Australian *legislative* basis. However, jurisprudence outlines three elements to the functional definition: (1) a unit of account, (2) a medium of exchange, and (3) a store of value (Procter, 2005). Thus, this paper considers whether bitcoin satisfies this common law test.

1 Unit of Account

A unit of account is "a common denominator, allow[ing] individuals to… compare the values of different goods and services".[28] Whilst one bitcoin's *circa* AUD400 value is impractically high, bitcoin is divisible into small enough denominations for use in daily transactions, and it has a recognised market value (Coindesk, 2014). It is therefore a functional unit of account.

2 Medium of Exchange

A medium of exchange is an item of recognised and definite value, which can be exchanged for goods or services to avoid the inconvenience of bartering (Bal, 2014 [3.1]). Australian and UK courts have refined this definition, finding that a 'medium of exchange', is something that, based on social convention,[29] (1) "passes freely from hand-to-hand [as payment]" and is (2) "used throughout the community", (3) "without reference to [a person's] character or credit", and (4) "without the intention of [the receiver] to consume it, or apply it to any other use".[30]

Bitcoin ownership is transferred tens of thousands of times a day (Coindesk, 2014). It therefore passes freely from hand to hand, satisfying criteria (1). One of bitcoin's major technological advancements is its ability to verify bitcoin's ownership. Thus, a seller need not enquire as to the character of the bitcoin owner, fulfilling requirement (3).

Satisfying requirement (4) is slightly more dubious: many hold bitcoin as an investment; is this 'any other use'? Pragmatism indicates that it is not: money is often invested, and there

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[28] *Messenger Press* (2012) 90 ATR 69 [196].
[29] Ibid.
[30] *Moss v Hancock* [1899] 2 QB 111 1; *Travelex* [2008] FCA 1961; Peter Nutt (ed), E*ncyclopedic Australian Legal Dictionary* (LexisNexis 1997) 759.

are major currency trading markets. Such a narrow interpretation of ‘any other use’ would therefore impede the world’s major currencies’ satisfaction of the phrase.

Fulfilling requirement (2) is the least obvious, particularly given a lack of clarity as to the terms used. What is meant by ‘community’, and when is something used ‘throughout’ it? This question is the focus of debate regarding bitcoin’s satisfaction of the functional definition.

Australia occupies “a minute segment [of bitcoin usage]”, and is unlikely to satisfy this requirement (Wong, 2014, 123). Moreover, the ATO argues that bitcoin is not yet used throughout *any community* as:

> “Fewer than one in ten businesses currently accept payment in bitcoins even in the United States, where bitcoin is most widely used… suggest[ing] that bitcoin use… is rather uncommon.”[31]

However, by defining the community as *all* US businesses, the ATO overlooked an important argument.

(a) *The bitcoin ‘community’*

Despite the ATO’s assertions, bitcoin’s usage in the US is rapidly reaching the necessary point of acceptance (Woo, 2013). Demonstrating this, a US couple successfully lived for three months solely using bitcoin.[32] However, the experiment also highlighted that the ‘community’ accepting bitcoin was not an obvious *physical* community.

This paper argues that the Court’s use of the term ‘community’ is particularly significant. Common sense indicates that a functional currency need only be accepted within a particular group; the *global* community may not commonly accept AUD outside Australia, so the definition must reflect this nuance. However, ‘jurisdiction’ or ‘location’ would have successfully created this distinction. Community is a broader term, the ordinary meaning of which is ‘a group of people with a common characteristic’.[33] This definition can be applied to a wide range of groups of people. For example, in prison, cigarettes may be so readily

[31] ATO Rulings, TD2014/25 [note 29].
[32] *Life on Bitcoin* (22 September 2014) < http://lifeonbitcoin.com/>.
[33] *Oxford English Dictionary* (online) (‘OED’) 7 August 2014 <http://www.oxforddictionaries.com/definition/english/community>.

accepted that they satisfy this aspect of the functional definition (Radford, 1945, 189). Arguably, the use of such a broad term, when a narrower term would have sufficed, indicates intention that 'community' should be applied broadly and malleably to varied factual circumstances.

In light of this assertion, perhaps the term 'community' does not necessitate concentration in a particular *physical* location. Online groups could be communities: 'Hi-Tec', internet-based businesses, for example. Bitcoin is readily accepted by internet-based companies such as Ebay, Amazon, and Overstock.com, as well as online groups such as Bit-torrent and Wikepdia (Coindesk, 2015). Given that bitcoin is an internet-based technology, it is unsurprising that its usage is concentrated within a multinational collection of people, connected extraterritorially by the internet, rather than a physical location.

(b) *'Throughout'*

Jurisprudence and the *Australian Legal Dictionary* do not clarify the meaning of 'throughout'. The word's ordinary meaning is 'in every part of'.[34] In context, 'through the community' implies that bitcoin must be prevalent and widely accepted within that community. Unfortunately, there is no data regarding how often the above-defined community uses bitcoin as money. There is therefore no clear answer as to whether bitcoin is used in every part of the community. However, Coinometrics, a body that researches bitcoin's usage compared to rival payment systems, provides some useful insights.

First, whilst it has subsided recently, bitcoin is a vast payment system. Although an imperfect comparison, at its peak, the value of bitcoin in circulation was around half the value of all circulating Australian dollars, and approximately equal to all circulating currency in Bulgaria or Slovenia.[35] In late 2013, bitcoin's daily transaction value surpassed Western Union,[36] and bitcoin remains a major, global payment-system.[37] Bitcoin thereby has the overall scale of a currency.

However, several studies, including evidence from the Senate Inquiry, argue that whilst bitcoin is widely used, a significant proportion of its use derives from trading, rather than

[34] *OED* (online), (14 August 2014) <http://www.oxforddictionaries.com/definition/english/throughout>.
[35] Coinometrics *Bitcoin Transactions* (22 December 2014) <http://www.coinometrics.com/bitcoin/mix>.
[36] Business Insider, *Bitcoin Versus Paypal Comparison* (online) 12 December 2013 <http://www.businessinsider.com.au/bitcoin-versus-paypal-comparison-2013-12>.
[37] *Coinometrics,* above n 35.

use as money (Yermack 2014 11; Senate Inquiry Submission 7). Whilst traditional money is also traded, this is superfluous to money's use as a 'medium of exchange'. In determining whether money satisfies this aspect of the definition, currency trades should therefore be excluded. Coinbase, the largest bitcoin exchange, estimates 80% of global transactions use bitcoin as an investment.[38] Although this estimate might not be particularly reliable, in the absence of alternative, empirical data, it is worth briefly considering this information.

Even if only 20% of the daily transaction value is money, bitcoin remains larger than major payment provider Xoom, and larger than many national currencies. However, the 20% estimate indicates that only 16,000 transactions per day use bitcoin, presenting an interesting paradox. To be money, bitcoin must be accepted by a relatively large number of users, yet if the bitcoin community is defined as *all* businesses than accept bitcoin, (100,000 businesses) then bitcoin transactions would be relatively uncommon (fewer than one transaction per day, per business).

However, most bitcoin ownership and transactions are reportedly concentrated within a smaller group of people and businesses (*circa* 72,500 of the total *circa* 7.25 million; still a group larger than some nations with their own currencies) (Fung 2014). Within this group, bitcoin transactions are therefore relatively common. Thus, if the community is defined as this relatively select, multinational, internet-based group of users, then bitcoin is 'accepted and used throughout the community'. Although this may, *prima facie,* seem tautological (the bitcoin-using community are people who use bitcoin), this community is defined on the basis of its engagement in *the internet or technology industry*, rather than their *use of bitcoin*, or their *physical location*. Therefore, this reasoning does not differ from traditional definitions of 'use throughout the community' except insofar as it modernises communities' common features.

3 Store of Value

Due to its volatility, bitcoin is criticised as a poor store of value (Mittal, 2014, 7). However, this volatility is largely a result of high-volume trades.[39] During the 1997 Asian Financial Crisis, the Thai Baht was similarly unstable due to currency-trading attacks (Elangkovan 2013, 622). This fluctuation did not invalidate the Baht as a currency; it reflected financial

[38] Ibid.
[39] Ibid.

under-regulation. Likewise, if speculative bitcoin trading was better-regulated, and once regulations are more certain, this volatility is likely to subside (De Roure, 2014). In any case, bitcoin clearly retains value, and is therefore a 'store of value'.

G Conclusion

Accordingly, there is a reasonable basis to expand the interpretation of money and currency under the income tax and GST regimes. Such an approach may modernise the tax law meaning of money. Arguably, bitcoin satisfies this broader definition of money, although this probably requires more extensive empirical research, particularly given reports of bitcoin's use as an investment.

Consequently, it may be difficult to contend that bitcoin's tax characterisation should be varied on the *sole* basis of this alternative legal definition, and the desirability of achieving consistency in the tax treatment of modern and traditional payment systems. However, upon considering the second key issue to taxing bitcoin; regulation and enforcement, a broader, significant, long-term policy basis for adopting this alternative definition becomes readily apparent.

VI A SOLUTION TO BITCOIN'S TAX REGULATION

A The Underlying Problems

Regulating bitcoin is the most challenging aspect of its taxation, and raises three major regulatory concerns. The former two relate to the practicalities of regulatory enforcement; the latter, to the jurisdictional complexities of taxing a stateless, virtual asset. It is bitcoin's *combination* of the features associated with key forms of tax evasion (cash-like anonymity and decentralisation, and the ability to transfer funds out of a jurisdiction), with little jurisdictional nexus (associated with international tax avoidance) that causes particular concerns. Bitcoin therefore has significant potential to increase the tax gap,[40] and is recognised as a potential "super tax haven" (Marian 2013).

[40] That is, the discrepancy between tax collected and tax that *should* be collected, notwithstanding avoidance/evasion, see e.g. OECD *Monitoring Taxpayers' Compliance: A Practical Guide Based on Revenue Body Experience* (OECD Publishing, 22 June 2008) 10 [21].

1 Cash-Based Tax Evasion – Decentralised Non-Compliance

Underreporting cash transactions is a significant form of tax evasion (Potas, 1993, 4). The underlying problem is that administrative resources are typically insufficient to enforce tax law, given cash transactions' profligacy, and the relative difficulty of tracing decentralised, quasi-anonymous transactors (Kahn 2014, 163). IT regulation faces a similar issue, as it is administratively impractical to regulate each *individual* internet-user. Concerningly, bitcoin software's 'peer-to-peer', decentralised nature and pseudo-anonymity combines the administrative challenges of IT *and* tax regulation.

2 Untaxed International Transfers

The extra-jurisdictional transfer of funds is problematic as, in its most fundamental interpretation, international-law norms of sovereignty restrict a State's jurisdictional remit to within its sovereign boundaries (Burgess 2012, 309). Thus, once funds (and taxpayers) vacate a jurisdiction, a State's ability to assert taxing rights, or bring the infringing party to account, is often muted, notwithstanding international co-operation (Marian 2013).

3 Jurisdictional Ubiquity

In addition to potentially facilitating fraudulent tax evasion, bitcoin's lack of jurisdictional nexus neatly exemplifies a key issue with modern international taxation:

> "Digital currency transactions and services may lack a clear nexus to a particular jurisdiction for tax purposes. Most tax principles rely, to a certain extent, on principles of physical presence in defining source of profit, or place of delivery or consumption of services." (Senate Inquiry Submission 23, 6).

Considering this issue is particularly pertinent for regulators, and is a key focus of the OECD BEPS Project.[41] The essence of this problem is evident in the current articulation of the fundamental international-law principle *juste partage de souveraineté*, which dictates that sovereignty should be shared justly (Oxman 1987, 277). Adherence to this principle in the context of international taxation is traditionally expressed through considering 'fiscal attachment', which questions whether a State has a sufficient, legitimate connection to the

[41] OECD, *Addressing the Tax Challenges of the Digital Economy, Action 1*, (OECD Publishing, 16 September 2014).

putative taxation subject. This principle seeks to appropriately limit States' fiscal jurisdiction, and align taxing sovereignty with national sovereignty (Martha, 1996, 22).

However, the internet's trans-nationality, and rise of stateless intangibles, creates jurisdictional confusion in the spheres of public and private rights (Kohl 1998). This paradigm shift in international commerce increasingly renders the current expression of this principle increasingly archaic, obfuscating a State's fiscal attachment (OECD 2014). Bitcoin's jurisdictional omnipresence threatens to further erode jurisdictional clarity as to a State's sovereign right to tax, by lacking any connection to a State or physical locale. This may result in certain transactions escaping jurisdiction, being the subject of tax contention, or the basis of tax avoidance (OECD 2014, 6-7).

This combination of challenging features for tax regulators compound to make bitcoin a potential 'super tax haven' for tax evaders (Marian 2013) and a legal minefield for tax enforcement.

B Regulatory Precedents: Intermediary Regulation

1 Decentralised Non-Compliance

Broadly, the increase in non-cash payment methods may assist administrators in regulating high volumes of transactions. Payment systems (such as EFTPOS) are typically administered by financial services companies, which act as intermediaries to transactions. Administratively, it is more viable to regulate a smaller number of intermediaries who are vicariously involved in most transactions, than vast numbers of individual transactors (Potas 1993). Consequently, intermediaries provide a platform to regulate transacting parties, by, for example, imposing record-keeping and disclosure obligations on intermediaries, where they act in transactions that may involve tax-evasion (Potas 1993).

Similarly, in an IT law context, intermediaries provide an effective platform for regulating individual activity (Swire 1998) and are arguably contributory wrongdoers, by facilitating the illicit activity (Rowland 2012, 72). Accordingly, many regulations target the *hosts* of illicit, internet-based activities.[42] A major challenge to internet-regulations reliant upon intermediaries, is the use of peer-to-peer software, where, *prima facie*, no intermediary is

[42] *LICRA & UEJF v Yahoo! Inc & Yahoo France*, France Tribunal de Grande Instance (de Paris) 169 F.Supp 2d 11812 May 2000.

involved (as is the case with bitcoin). In this context, authorities may impose regulations on Internet Service Providers ('ISPs') who act as intermediaries by providing users' internet access. However, given the abstraction between ISPs and individual users, Australian courts have shown reluctance to conclude that ISPs are liable for internet users' activity.[43] Ideally, regulations should therefore focus on intermediaries with a closer connection to the relevant activity.

2 International Transfers

In response to international tax evasion through overseas funds transfers, revenue agencies have been forced to adopt a more international approach to taxation. They have begun to build transnational tax networks, with greater co-operation and information exchange, founded in multi-lateral and bilateral treaties (Stewart, 2012). As a significant proportion of international tax evasion relies on intermediaries to transfer funds out of a jurisdiction, governments and regulators have sought to international tax evasion by designing regulatory models focused on legal intermediaries who facilitate the transfer (Stewart, 2012, 152).

Revenue agencies' ability to address tax avoidance has been supplemented by the implementation of agreements like the US *Foreign Account Tax Compliance Act ('FATCA'*), to which Australia is a signatory.[44] Broadly, this Act requires intermediaries to report on certain transactions, and disclose a range of financial interests of resident taxpayers to revenue agencies, increasing their knowledge of transactions, and thus, their ability to detect and address tax evasion (Marian 2012). Accordingly, the regulation of corporate and financial intermediaries is considered a critical element in governments' response to international tax evasion, and may be the key to regulatory success (Marian 2012, 118; Stewart, 2012.)

3 Jurisdictional Ubiquity

Regulating intermediaries may assist in asserting jurisdiction over funds, by virtue of entities' place of incorporation or registration. Australian-resident intermediaries are subject to withholding taxes and other requirements, to ensure that funds derived in that jurisdiction

[43] *Roadshow Films Pty Ltd v iiNet Ltd (No 3)* [2010] FCA 24 [430]-[442].
[44] *Tax Laws Amendment (Implementation of the FACTA Agreement) Act 2014* (Cth).

were subject to an ‘appropriate’ level of Australian taxation, prior to being transferred outside the ATO’s jurisdictional confines.[45] This may provide a partial solution to the lack of jurisdictional nexus, increase jurisdictional clarity, and thus, reduce the potential for bitcoin-based BEPS or territoriality disputes over jurisdiction or fiscal attachment (Senate Inquiry, Submission 23).

Thus, regulatory experience suggests regulating intermediaries connected to the relevant activity may by the key to addressing jurisdictional issues, and curbing international tax evasion and illicit internet-based activity.

C Bitcoin Intermediaries: A Solution to the Bitcoin Tax-Gap?

As bitcoin was envisaged as a decentralised, ‘peer-to-peer’ technology, one may overlook the fact that most bitcoin transactions and accounts are managed by intermediaries (Marian, 2013). There are a number of bitcoin intermediaries currently based in Australia (Wong, 2014, 126; Senate Inquiry Submission 19, 4).

Given the relative success of intermediary-based regulatory models in addressing the above tax and IT law issues, commentators, most notably Omri Marian, advocate the introduction of regulatory framework grounded in regulating bitcoin intermediaries.[46] The author, in a joint submission to the Senate Inquiry with Professor Miranda Stewart, proposed a similar solution in an Australian context.[47] The concept appears to have widespread support amongst stakeholders (including key regulators such as the Australian Federal Police (“AFP”), the Commonwealth Attorney-General (“AG”), and the Reserve Bank of Australia) and academics (Senate Inquiry Submissions 19; 34; 42; & 44).

Whilst there are obvious alternatives to regulating bitcoin intermediaries, evidence and experience in IT and tax regulation suggests that other approaches (such as banning bitcoin or targeting individual users) would be less effective (Senate Inquiry Submission 23, 5-9; Bollen, 2013, 283-290; Swire, 1998). Indicative of the support for the intermediary-based regulatory-approach, other regulatory proposals assume intermediary regulation an obligatory precursor to future regulations (Marian 2015).

[45] See e.g. Division 11A, ITAA 1997.
[46] Marian, 2013; Danton Bryans, ‘Bitcoin and Money Laundering: Mining for an Effective Solution’ (2014) 89 *Indiana Law Journal* 441, 472.
[47] Senate Inquiry Submission 23.

This author suggests intermediary regulations should be specific to digital currencies, and designed to increase transparency, clarify the jurisdictional of bitcoin ownership, and restrict the ability of users to transfer untaxed bitcoin overseas. Doing so would address the three fundamental concerns surrounding bitcoin and tax compliance. Drawing on regulatory experience described above, regulations may include:

i) Requiring Tax File Numbers (and Australian Business Numbers) of Australian bitcoin account holders;
ii) Imposing withholding taxes on bitcoin transfers where one or more user(s) account is not Australian resident taxpayer or is not disclosed;
iii) Reporting details of Australian resident taxpayers' accounts; and
iv) Common reporting standards in accordance with the OECD guidelines.

Obtaining more information regarding bitcoin transactions is a crucial aspect of this solution. The more information enforcement agencies have regarding the identity of general bitcoin users, the easier it becomes for regulators to examine the blockchain records to trace bitcoin ownership, and, crucially, regulate users who do not directly use intermediaries (Doguet 2013, 1153). This would make it more feasible to trace tax evaders and bitcoin-derived gains during investigations and audits of taxpayers, an assertion supported by the Bitcoin Foundation and AFP, and facilitate other solutions to regulating *all* bitcoin users (Marian 2012; Senate Inquiry Submission 23).

D A Major Omission? – Ensuring the Continued Existence of Australian Bitcoin Intermediaries

Given that intermediaries' continued existence under Australian jurisdiction is instrumental to the foremost regulatory solution to bitcoin, ensuring that intermediaries are not dissuaded operating in Australia, or cease to exist altogether, is of paramount importance to bitcoin's taxation generally. The author notes a distinct absence of proposals to ensure that bitcoin intermediaries continue to exist.

An inextricable aspect of intermediary regulation is that, for regulations to be enforceable, intermediaries must be subject to the relevant jurisdiction directly, or through treaties. As Marian notes, absent international co-operation, there is a lack of leverage through which strict regulations can be enforced (Marian 2013 116). Agreements like FATCA rely upon the need for financial intermediaries to operate in the US market, and are enforced through some international co-operation (Mrian, 2013; Stewart 2012). Relying on international co-operation is very difficult, particularly when jurisdictions disagree over something's repugnancy or acceptability.[48] The multiplicity of government opinions of bitcoin (Library of Congress 2014) implies that achieving international co-operation may be a distant aspiration.

Further, bitcoin's internet-based, peer-to-peer platform grants it global-omnipresence, and there is little need for bitcoin intermediaries to be physically present in a jurisdiction. It would be practically difficult to exclude bitcoin intermediaries from operating within that jurisdiction via the internet (Rowland 2012, 24, 322; Kohl 2007). Thus, regulators have no leverage to ensure intermediaries operate under Australian jurisdiction, and must therefore encourage them to do so.

As highlighted above, evidence suggests that the ATO's tax characterisation and resultant unfavourable tax outcomes inhibit bitcoin intermediaries' development, and may cause their exodus from Australian jurisdiction. Changing this tax characterisation therefore has a significant policy basis, grounded in the longer-term need to foster intermediaries' growth, to form a platform for the regulation of bitcoin and similar technologies. As outlined above, characterising bitcoin as money and currency would overcome these issues, and promote the development of the Australian bitcoin industry. Whilst not a 'perfect' interpretation of the current law, this characterisation has sufficient legal basis to be consistent with the policy behind the current tax treatment of money and currency, and viable alternative. The characterisation would also promote equity and consistency in the tax law treatment of bitcoin and its traditional counterparts.

E Would it Work?

In the absence of empirical research, it is difficult to determine the efficacy of this proposal. Accordingly, any changes should continue to monitor developments, and place a strong emphasis on research. Nonetheless, it is worth briefly noting some key pieces of evidence.

First, however trite it may seem from bitcoin advocacy bodies, the Bitcoin Foundation and Bitcoin Association of Australia contend that Australia "has the potential to become a hub of digital currency innovation" if regulations were more favourable, noting that Australia is ranked first of G20 countries' e-Trade Readiness and internet infrastructure (Senate Inquiry,

[48] *R v Perrin* [2002] EWCA 747; see also Rowland, 2012, 30-52.

Submissions 12, 5; & 13, 12). The Bitcoin Foundation noted the need for an appropriate regulatory approach to facilitate growth, and the need for regulations to align with bitcoin's commercial use (Senate Inquiry, Submission 13, 14-15).

Secondly, and most significantly, there is a significant international precedent suggesting that treating bitcoin as money, if only for GST (or VAT) promotes the industry. In 2014, the UK revised their tax treatment to exempt bitcoin from VAT. This approach was very well-received. Major bitcoin businesses claimed that the decision "could have a profound effect on the long-term success of [virtual] currencies", (Johnson 2014 971) and there was speculation Britain may become a global epicentre for bitcoin intermediaries (Sparkes, 2014). Such is the impact of the bitcoin tax treatment on attracting and promoting bitcoin businesses that rival EU jurisdictions challenged the legality of the VAT exemption in the European Court of Justice.[49] Therefore, available evidence strongly suggests that money and currency tax characterisation is likely to effectively promote the Australian bitcoin industry.

VII CONCLUSION

There are two key issues to taxing bitcoin: ascertaining its tax characterisation, and ensuring users' compliance. The ATO addressed the former issue, concluding that bitcoin should be characterised as a commodity. This characterisation is inconsistent with bitcoin's traditional counterparts and its commercial use, and creates anomalous tax outcomes that are detrimental to Australian bitcoin businesses. Characterising bitcoin as money would redress the tax anomalies, and increase consistency in the tax treatment of bitcoin and its traditional counterparts.

There is some basis to characterise bitcoin as money or currency current income tax and GST regimes. However, this relies on adopting a more liberal, purposive approach to the meaning of currency and money, and bitcoin's satisfaction of the definition arguably requires further empirical research. Accordingly, this approach may not be justified for the sole policy reason of addressing tax anomalies and inconsistencies arising from the ATO's characterisation of bitcoin.

[49] *Skatteverket v David Hedqvist* (2 June 2014), ECJ C-265/14.

Ensuring bitcoin users' tax compliance is challenging, as bitcoin has potential to become a 'super tax haven'. Precedents from IT and tax regulation suggest that regulating entities that act as intermediaries to individual bitcoin users' activity offers the most promising solution. However, evidence indicates that the ATO's characterisation of bitcoin is likely to render this solution redundant in the long term, by dissuading bitcoin intermediaries from operating in Australia.

It is widely considered that characterising bitcoin as money for tax purposes would avert the key anomalous tax outcomes, and encourage Australian bitcoin intermediaries' growth. Accordingly, characterising bitcoin as money may ultimately ensure Australian intermediaries persist, to provide a platform for effective long-term regulation of this technology.

Through analysing these two key issues to taxing bitcoin, this paper thereby outlines a legal justification for characterising bitcoin as money under the current law, and substantial policy rationale for doing so. Consequently, the author argues that bitcoin should be treated as money for the purposes of the Australian income tax and, particularly, GST regimes, through legislative exemption, or ATO treatment, as this approach may be key to solving bitcoin's regulatory enigma.

Figure 1: GST Remission Process Using Conventional Currency Contrasted to Using Bitcoin

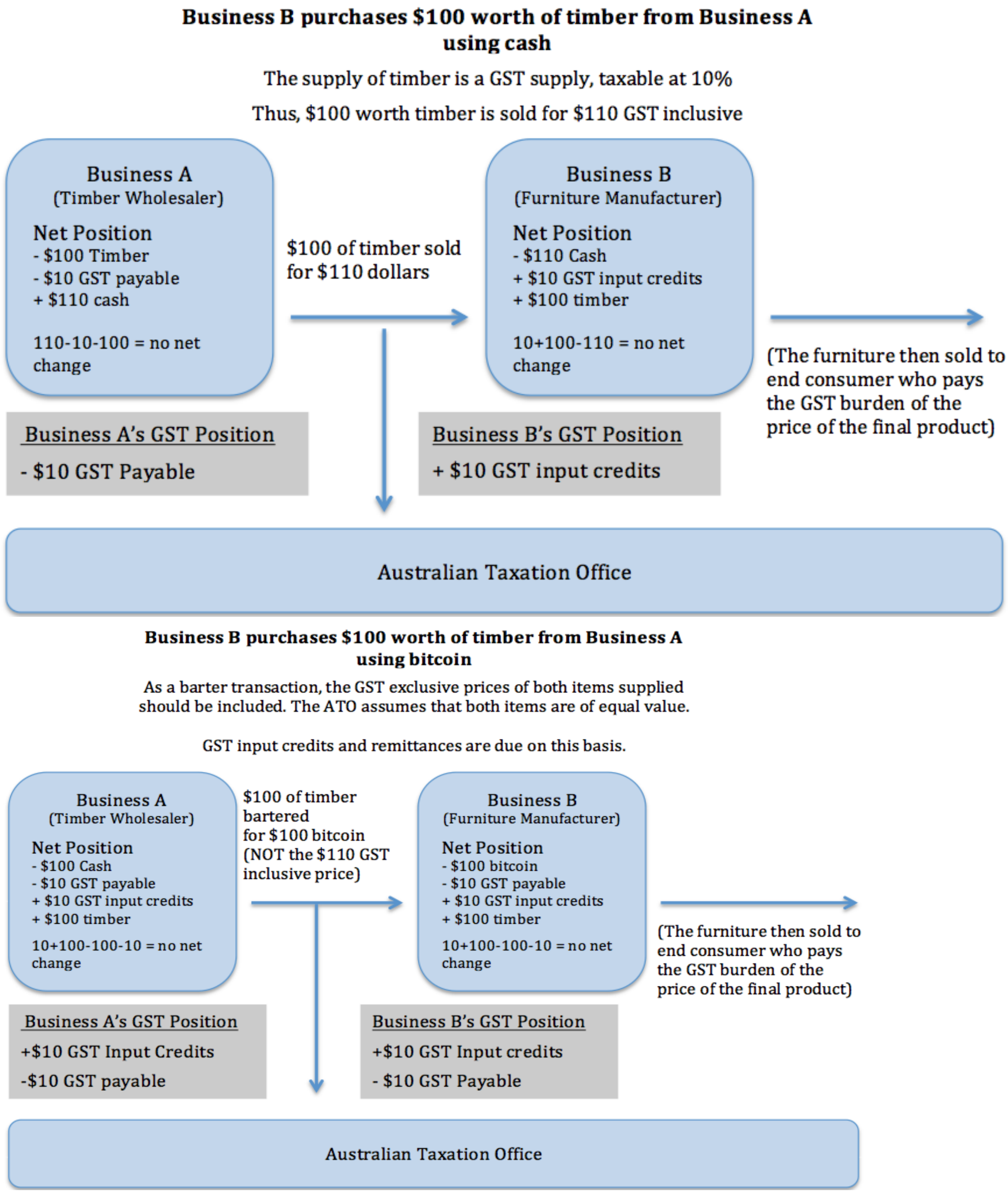

Figure 2: GST on a Purchase of a Financial Supply Contrasted with GST on a Purchase of Bitcoin

Purchase of $100 of a Financial Supply	**Purchase of $100 bitcoin at a bitcoin exchange** (non-financial supply)
$100 x 0% GST = $100 GST inclusive price	$100 x 10% GST = $110 GST inclusive price
For a $100 outgoing, purchasers receive $100 of financial supply, minus transaction fees	For a $110 outgoing, purchasers receive $100 of bitcoin, minus transaction fees

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