In search of a regulatory framework for cryptocurrencies

Professor Julie Cassidy (Professor of Law and Taxation, University of Auckland, Commercial Law Department)

Dr Man Hung Alvin Cheng (Lecturer, Department of Finance and Accounting, The University of Nottingham)

Dr Toan Le (Lecturer, Monash University, Department of Business Law and Taxation)

- Bitcoins are by far the most popular cryptocurrency, but many others exist. The popular "coins" fluctuate dramatically in "prices", where realised and unrealised gains are being made by coin-holders.
- The economic substance of cryptocurrencies give them value, but to date the law has not definitively defined this substance. The difficulty is that the transfer of value between the parties involves the transfer of a unique digital file that in itself has no intrinsic value.
- Regulating cryptocurrency is a difficult task for regulators.
- At the moment, there is no clear and authoritative definition of cryptocurrency, making it difficult for regulators to determine which aspects (if any) require regulation and, if so, how to control and monitor activities.
- This difficulty exists at two levels: initial coin offerings (ICO) that brought the cryptocurrency into existence and trading in the cryptocurrencies themselves.

- Defining the legal nature of cryptocurrencies and in turn ascertaining what gives them value is important for many reasons. At its most fundamental level the answer to these matters will determine the regulatory framework within which trading in cryptocurrencies may or may not occur.
- The government may simply prohibit the issuing of ICOs and/or prohibit trading in cryptocurrencies.
- At the other end of the spectrum ICOs and trading may not only be legal, but be facilitated by government concessions, such as recognising cryptocurrencies as legal tender or a form of "digital currency", as in Australia (for GST purposes)

- If the government decides it is not "currency", how will it be characterised?
- The government may, as in the case of New Zealand, determine that transactions involving cryptocurrencies merely involve the sale of property.
- Sales of cryptocurrencies could be akin to the sale of shares or futures or, as in New Zealand, gold bullion.
- The government may simply prohibit the issuing of ICOs and/or prohibit trading in cryptocurrencies.

- A further related issue is whether that characterisation will be embraced for all purposes, such as in New Zealand, or whether a government will be 'schizophrenic', as in Australia, and pick and choose which characterisation it will utilise for different purposes.
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- If ICOs and trading are allowed then it must be determined if current laws will be applied or a new legal framework will be developed for cryptocurrency exchanges/business.
- If the former, do existing consumer protection laws apply to both ICOs and trading?
- Are they a financial product subject to the control of relevant government securities regulators?
- In New Zealand the Financial Markets Authority has taken a strong stance on this matter and asserted that no matter their configuration, cryptocurrencies are financial products that are regulated under its regime.
- In Australia, the ASIC has asserted that they *may* be a financial product. Will existing money laundering rules apply in this context or, as in Australia, will the law needed to be extended to specifically deal with cryptocurrencies?
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- What of the tax ramifications?
- As property, not only will transactions made in the course of business be subject to tax as ordinary/business income, but non-business trading may also be subject to income/capital gains tax.
- On the other side of the coin (sorry for the pun!) what if employees are paid in bitcoin?
- Will it be taxed as salary and/or bonuses or as a personal property/ capital gains?
- In the tax context, financial products are traditionally exempt / "zero rated" in terms of value added taxes (VAT)/goods and services taxes (GST). If the cryptocurrency is akin to currency it will not only be exempt from (VAT)/ (GST) but also taxes such as capital gains tax.
- As to which way a government might turn is anyone's guess: A toss of a (bit)coin!



Objective of this study

- The current analysis is confined to two key Asian Nations, China, and Japan and South Africa. These Asian nations have been specifically selected as they represent the extreme positions that have been taken in this context.
- At one end of the spectrum, China has effectively banned trading in cryptocurrencies, particularly Bitcoin.
- Japan, by contrast, has taken the polaristic view that cyroptocurrencies are legal tender and sought to support and foster trading in same.

Objective of this study

- South Africa has been very cautious in its approach to cryptocurriences, mindful of the risks posed
- Initial approach "buyer beware"
- Mindful of the need for a coherent regulatory approach at a national level and the need for co-ordinated global approach
- To date no separate regulatory regime(s)
- Need to carefully reflect on the appropriateness of regulatory intervention and potential unintended consequences (ie implicit endorsement)

Objective of this study

- Cryptocurriences are not currency; not akin to local or foreign currency; not fiat currency; not legal tender
- To date not banned because of limited usage, but SA reserves the right to amend its policy stance if they pose a material risk (Note Currency and Exchanges Manual for Authorised Dealers prevents foreign exchanges for purchasing cryptocurrencies)
- While, not widely accepted, they can be used as payments (akin to barter) at the discretion of consumers and willing merchants
- No specific legislation
- Existing laws apply

A Brief Technical Outline of Cryptocurrencies

- There is no clear and authoritative definition of Cryptocurrency. The best way to understand cryptocurrencies is to highlight its unique features.
- First, cryptocurrencies such as Bitcoin, are entirely digital. Cryptocurrencies have no physical form. Their foundation lies in no more than the data strings that represent each 'coin'. A 64-character long identifier represents each coin. The final coin is a 'chain' of data strings as each transaction is recorded, adding a new link to the chain. By contrast, other forms of electronic representation of money, known as fiat currencies, may be involved in digital environment, but they still have a physical form, namely coins and notes.

Outline of Cryptocurrencies (cont'd)

- A second feature of cryptocurrencies is the use of cryptography- the crypto prefix.
- Cryptocurrencies are "an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party."
- Each Bitcoin is effectively the solution to a complex algorithm. The solution to the encryption is partially in a public key, and partially in the owner's private key. These keys are both required to confirm the validity and ownership of a Bitcoin. In turn, you must have the private key, like a pin code, to transfer a Bitcoin. While the private key is needed as proof of ownership, ultimately the system is based on cryptographic proof alone it provides a system of, albeit recorded, anonymity.

Outline of Cryptocurrencies (cont'd)

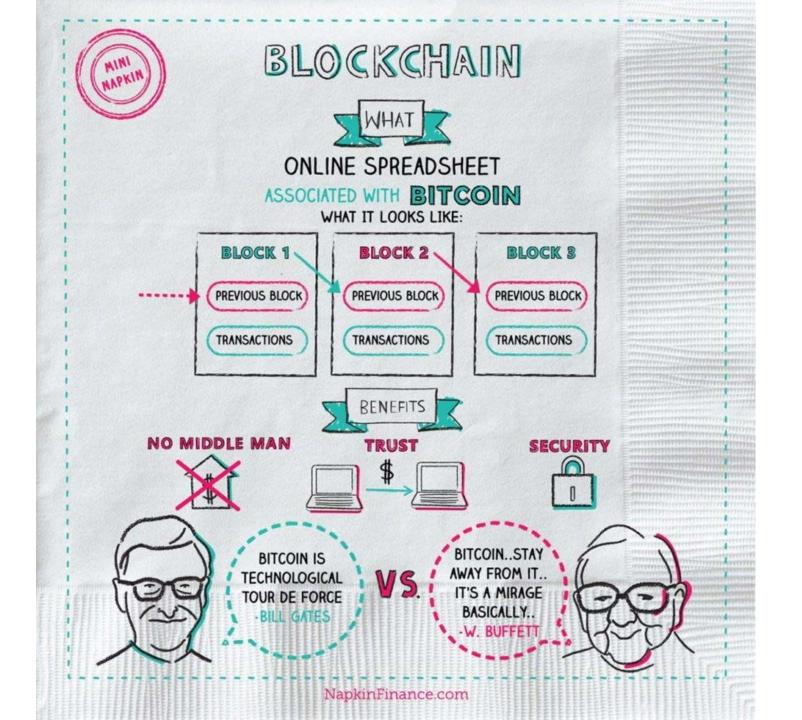
- Third, cryptocurrencies are a form of 'currency' that is not issued by a sovereign nation; thereby having no connection to a government or state bank.
- Instead each cryptocurrency is contained in its own network. Each time a person interacts with a cryptocurrency, the computer joins that network to record the transaction. More correctly, the transaction is recorded in a public ledger that is constantly 'talking' to all the computers in the network. Computers in the network are constantly updating the information and sealing of the recorded parts of the digital ledger by encrypting the record using the above discussed complex mathematical algorithm.
- To incentivise the recording and sealing off of a block in the ledger, computers are rewarded with new currency, known as "native tokens". In turn, the process of recording and sealing of blocks in the ledger is known as "mining." The ledger is stored on every computer in the network rather than a central server.



BTC Mining in progress

Blockchain technology

- This sealing off process of new transactions in turn relies on the information contained in previously sealed off blocks in the ledger. Thus each block is a link which relies on earlier links. The linking of the blocks in this way provides the reason why the technology used by cryptocurrencies is known as 'blockchain'.
- In each cryptocurrency's blockchain system, there are different players. These players are cryptocurrency exchanges, who facilitate the "purchase, sale and trading of cryptocurrencies", digital wallets that stored cryptocurrencies, payment systems that facilitate payments using cryptocurrencies (where the cryptocurrencies are used to purchase goods and services) and the above discussed miners who secured the public ledger.
- Definitions of what a blockchain is vary, but the general consensus is that it is a database or ledger of transactions which is distributed over a peer to peer network (such as the internet). It uses a variety of cryptographic techniques and validity rules to reach consensus between participants over changes to the shared database without needing to trust the integrity of any of the network participants.



New Zealand

- Trading in cryptocurrencies in a NZ platform is relatively new
- They are not widely accepted, so mainly traded on unregulated, online exchanges
- Bitconia was an Auckland based currency trader
- Bitconia's cash and bitcoin assets are held in Mt Gox exchange in Japan, at the time the largest bitcoin trading exchange
- It put into liquidation in April 2014
- The liquidation of the company spurred the IRD to clarify the tax treatment of cryptocurrencies

New Zealand

- The Reserve Bank has also issued concerns for "consumer protection, anti-money laundering, and counter-terrorism financing"
- Recent reports of more than 980,00 Bitcoins stolen per month
- FMA has warned that using cryptocurrencies places consumers in a risky position to be targeted by scammers

New Zealand

- April 2018 IRD "Questions & Answers: Cryptocurrencies and Tax"
- Key aspect was to deny it is a currency at all; not fiat currency or legal tender
- not akin to local or foreign currency
- They are a commodity
- Akin to gold bullion as unlike shares there is no return (ie dividends) or other benefits (ie membership rights) from holding cryptocurrencies

Tax position in New Zealand

- Payments to employees: IRD recently recognised as remuneration taxable as salary and wages under s CE1
- Subject to taxation under, inter alia, s CB4 ITA 2007: Personal property acquired for the dominant purpose of profitmaking from resale
- Deductions for purchase price and any other related expenditure ('mining' expenditure?)
- As they are a commodity, not an exempt financial product, GST should be payable on transactions
- "Value transfer service"

Securities position in New Zealand

- FMA, October 2017 "Initial Coin Offers"
- Security for the purposes of the FMCA
- ICOs are debt securities, equity securities, managed investment products or derivatives

And then there is Australia

- Australian businesses were more comfortable that New Zealand accepting Bitcoin as legal tender
- However, the limited use was such that ATO refused to consider it currency, in particular not foreign currency as not recognised as "Money"
- 2013 Reserve Bank issued a briefing paper discussing some of the issues stemming from the trading of cryptocurrencies
- Again many concerns about consumer protection, anti-money laundering and counter-terrorism financing

- ATO followed with a series of public rulings
- Australia is schizophrenic (to be explained)
- For income and CGT purposes (it is treated as property within the definition of an assets(s 108-5) and the sale same taxable under CGT Event A1 (s 104-10) disposal of an asset
- In determining its CGT character focus was on the control of the Bitcoin and its value in the digital wallet

- For GST it is property
- Therefore 10% GST must be charged on transactions
- By contrast exchange of currency would be exempt
- Businesses accepting Bitcoin for purchases were potentially subject to double taxation
- Other jurisdictions extended the exemption to cryptocurrencies

- FinTech industry lobbied for an exemption
- Led to Senate Economics Reference Committee Inquiry ("SERC") into Bitcoin and digital currencies
- 2015 SERC report highlighted the consequent double tax treatment issue and recommended an amendment to the GST ACT
- Productivity Commission "Business Set Up, Transfer and Closure"
 Report 2015 agreed that to be competitive the law had to be changed
- The "Backing FinTech Statement" supported the reforms, in particular the needed changes to the GST

- Outcome: new definition of digital currency
- Effect: supplies and acquisitions using digital currencies are exempt from GST
- GST will only apply for transactions using digital currencies to buy or sell other digital currencies

- For Courts have held that for ASIC regulation it is not a financial product
- ASIC is moving forward on how to regulate initial coin offerings

- For FBT, it is also property
- This means that business who pay their employees will be subject to FBT.

Australia: New Developments

- In 2015, the SERC also recommended that the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 (Cth) (AMLC) be amended to bring cryptocurrencies within the regime.
- In 2017, a new bill was passed to give effect to the above recommendation by including a definition of digital currency. Implemented from 3 April 2018.
- The current version of the AMLC Act require digital currency exchange ("DCE") to register with AUSTRAC, and to identify and assess possible money laundering and terrorist risks.
 - DCEs to implement Know Your Client rules.
 - Report suspicious transactions and produce a threshold transaction report to AUSTRAC

Australia: New Developments

- ATO receives records from DCEs, including foreign based exchanges via common reporting standards requirements, which it can use to assist with tax compliance
 - ATO expect to collect \$3 billion return from a \$1 billion campaign
- However, there remains many uncertainties (and inconsistency) surrounding the tax treatment of cryptocurrency transactions.

Australia: Uncertainty in Tax Treatments

The uncertainties in tax treatments include:

- Determining the source of cryptocurrency transactions
- Determining the application of the personal use asset exemption under CGT
- Knowing whether foreign currency taxation rules apply to sovereign tokens

Australia: Future issues

- The uncertainty and inconsistency in tax treatments give rise to question of whether the current policies and tax concepts are inadequate or outdated to tax cryptocurrencies transactions?
 - Should cryptocurrencies be considered as property and not currency?
 - Should cryptocurrencies transactions be characterised as a barter transaction?

- South Africa has been very cautious in its approach to cryptocurriences, mindful of the risks posed
- Mindful of the need for a coherent regulatory approach at a national level and the need for co-ordinated global approach
- To date no separate regulatory regime(s)
- Need to carefully reflect on the appropriateness of regulatory intervention and potential unintended consequences (ie implicit endorsement)

- SARS (2018) Cryptocurriences are not currency; not akin to local or foreign currency; not fiat currency; not legal tender
- While, not widely accepted, they can be used as payments (akin to barter) at the discretion of consumers and willing merchants
- They can be used for investment
- To date not banned because of limited usage, but SA reserves the right to amend its policy stance if they pose a material risk (Note Currency and Exchanges Manual for Authorised Dealers prevents foreign exchanges for purchasing cryptocurrencies)

- IFWG: Crypto Assets Regulatory Working Group
- Need to carefully reflect on the appropriateness of regulatory intervention and potential unintended consequences (ie implicit endorsement)
- Concerns for the need for a global response
- Proposal for "limited regulation" in the future
- Concerns for money laundering and financing terrorism (AML/CFT)

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- Need to carefully reflect on the appropriateness of regulatory intervention and potential unintended consequences (ie implicit endorsement)
- Proposal for "limited regulation" in the future
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- Currently no requirement for cryptocurrency holders to be identified
- No specific rules providing for consumer protection
- Initial approach "buyer beware"
- No rules governing market manipulation

- SARS (2018) media statement: Existing tax laws will apply
- SARS does not regard it as a currency for income tax or CGT thus no exemptions
- Treated as an asset intangible in nature
- Value is included in "gross income"
- Equally deductions allowable where related to trading or income earning activities (esp mining)
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- Barter transactions subject to "normal barter transaction rules". What are they?
- Cryptocurrency received as remuneration is subject to employee tax

- If capital in nature (ie investment) a CGT within the Eighth Schedule
- Cost base adjustments under the CGT regime
- 2019 amendment includes cryptocurrency in the definition of "financial instrument"
- Therefore subject to a number of provisions, including not a personal use asset for CGT purposes
- Whether income or capital determined under existing case law
- 2019 amendment included in "suspect trades" within s 20A

- SARS has asserted that will require VAT registration
- (2019) amendment "issue, acquisition, collection, buying or selling or transfer of ownership of any cryptocurrency" added to the definition of a financial service
- Thus is treated as an exempt financial service for VAT purposes
- Criticism re potential for double taxation
- Fees charged re exchanges are subject to VAT

Conclusion

- The above discussion highlights the very different stances that governments may take towards cryptocurrencies.
- At one end of the spectrum, China has effectively banned trading in cryptocurrencies, particularly Bitcoin. Concerns as to cryptocurrencies use in money laundering and illegal activities clearly underpin this approach in China, Vietnam and Korea. In the case of Vietnam it is also probably a protectionist measure to protect the VND.
- Japan, by contrast, has taken the polaristic view that cyroptocurrencies are "currency" and sought to support and foster trading in same. Clearly this is spurred by this Nation's embrace of e-commerce and the benefits that flow from same. As to which way a government might turn is anyone's guess: A toss of a (bit)coin!

Conclusion (cont'd)

- This in turn raises many difficult tax issues. Due to the rapid growth of the digital economy, the taxation of cryptocurrencies presents a great challenge to the existing tax system. In particular, the nature of cryptocurrencies often poses problems in determining the source of tax. Both domestic tax laws and double tax agreements ('DTA') are based on the core notions of "source" and "residence", at times domicile.
- One challenge to the application of an income tax system to trades in cryptocurrencies is the difficultly in determining the source of the income. In turn, should the tax be imposed by the source country of the enterprise/exchange or to the tax resident trader? In an era of digital economy, electronic transactions are often characterised by a lack of physical nature. In particular, it is difficult to apply the traditional concept of tax residency in the context of cryptocurrency trading. This impacts not only on issues of source and residence, but also complicates the tax collection process.

Conclusion (cont'd)

- Characterising the cryptocurrency is going to be the key to the assessability of any gains made through trades. If they are treated as a commodity, then existing business income, personal income and capital gains tax provision can apply and assess these gains.
- A further issue relates to the valuation of the sales and cost base from the exchange of cryptocurrency. As the price of cryptocurrency is fluctuating, there is a lack of objective valuation method and trading platforms to determine the value of the cryptocurrency.
- A related issue is to decide the types of expenditure eligible for tax deduction. For example, should the electricity expense related to the mining of the cryptocurrency be deductible? Also, many taxpayers are holding their cryptocurrency in "paper wallets" or other physical devices. Should cost/loss be tax deductible when the taxpayers lost access to their crypto wallets or when their cryptocurrency being embezzled by hackers such as Coinbase in Japan.

Conclusion (cont'd)

- Whether it is consider a financial product akin to a share, also entails further tax and non-tax issues. Financial products and regulated under securities legislation, normally administered by a State authority. If cryptocurrencies are not considered financial products they will not be under the umbrella of such regulations. From a tax perspective, if they are considered financial products, trading in cryptocurrencies will again be subject to existing business income, personal income and capital gains tax provisions. However, financial products are normally exempt from GST/VAT.
- There are further issues in the context of GST/VAT. If a cryptocurrency is deemed to be a commodity in as in China and Vietnam, the trade between a legal and a digital currency for a consideration would constitute a supply for VAT purposes. By contrast if it is treated as currency, as in Australia and the European Union, the exchange of cryptocurrency and a digital currency is VAT exempt.