

bitcoins¹ & cryptotokens:
Tax Issues with Cryptocurrency
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¹The little b is not a typo

Cryptocurrency Taxation Issues

- A number of taxpayers made large gains on cryptocurrency transactions. ATO's initial position was pro-revenue account – but they have not committed to this publicly.
- Technical issues related to these gains included (at least) whether such gains are a windfall gain, on revenue or capital account, whether bitcoins are CGT assets, whether Division 775 (TOFA 1&2) applies to such gains and losses and whether the trading stock provisions applies
- Taxpayers may be losing significant sums (realised and unrealised) – **won't someone think of the losses?**
- Taxpayers are raising significant sums via ICO (Initial Coin Offerings) – **won't someone think of the income derivation issues?**

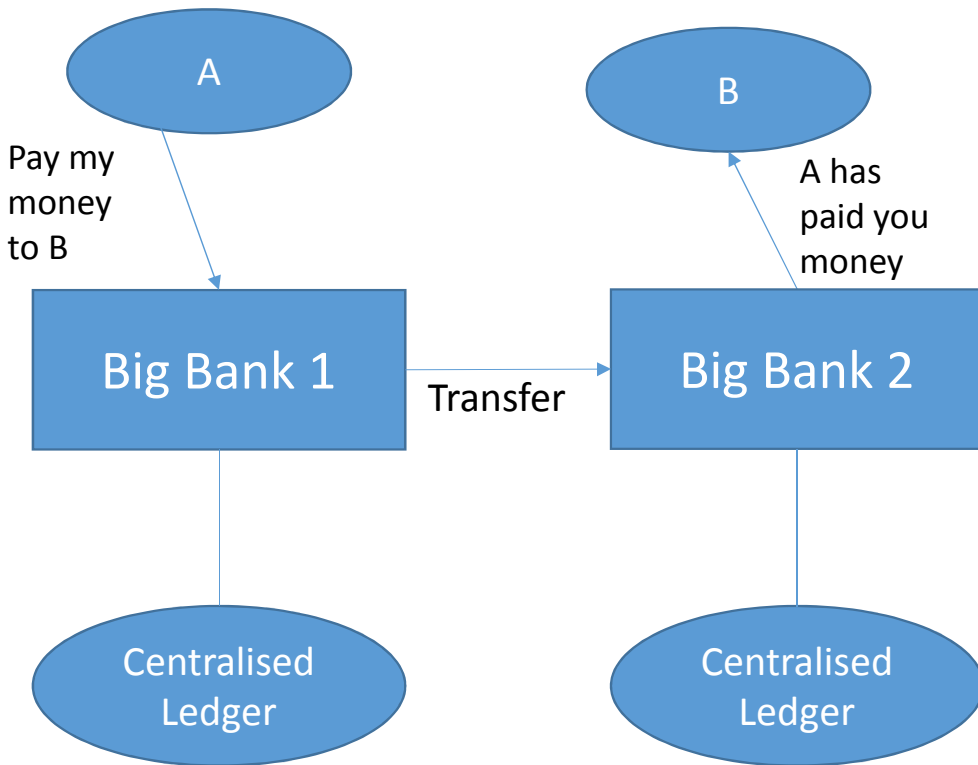
**What exactly is
cryptocurrency anyway?**

What is cryptocurrency anyway?

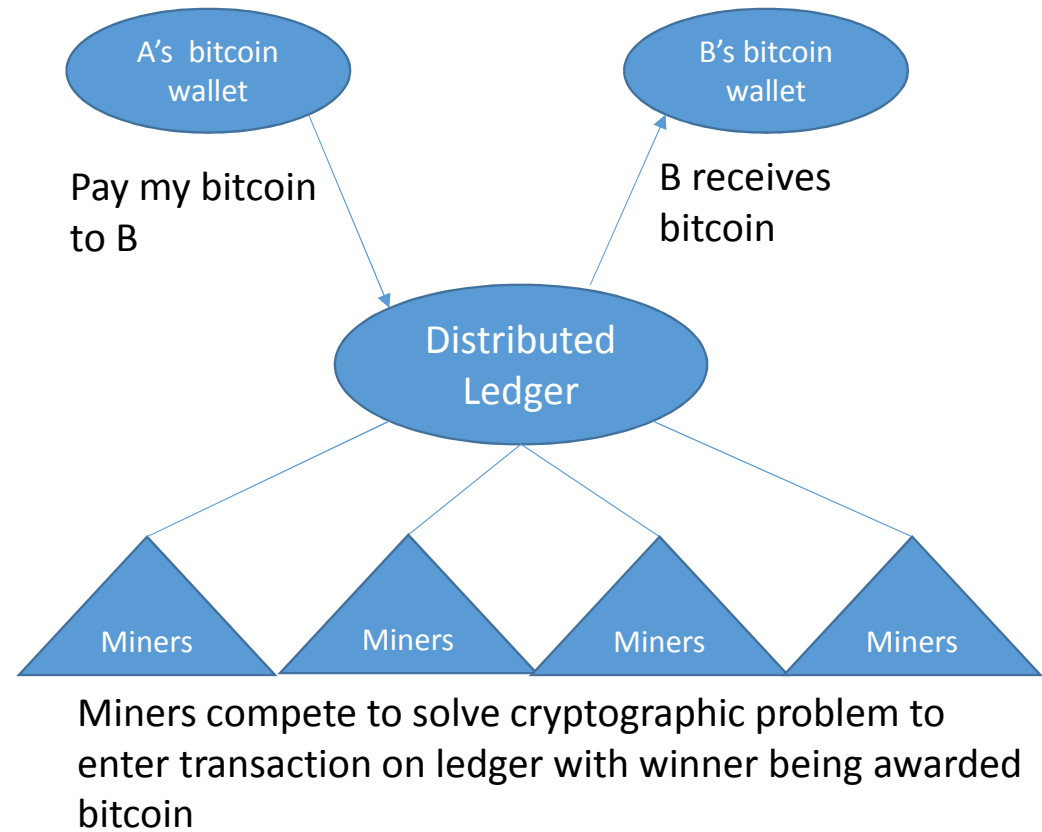
- Bitcoin (capital B) refers to the infrastructure used to handle trading of individual bitcoins (small b)
- **Bitcoin's** key innovation was the use of a *distributed ledger* to account for and verify transactions
- The *distributed ledger* verifies all transactions on the **Bitcoin** platform by requiring a computationally complex cryptography problem to be solved to commit a group of transactions to the ledger (hence, *cryptocurrencies*)
- **Each bitcoin miner contributes to solving the next iteration of this problem and is rewarded with parts of a bitcoin for doing so**

What is cryptocurrency anyway?

Traditional Banking



Bitcoin / Cryptocurrency



What is the nature of the cryptographic problem?

Wallet =
Very large
number



Wallet =
Very large
number



Wallet private keys are used to encrypt instructions for transactions – a group of such instructions is a BLOCK

bitcoin transactions are individually encrypted using public key cryptography:

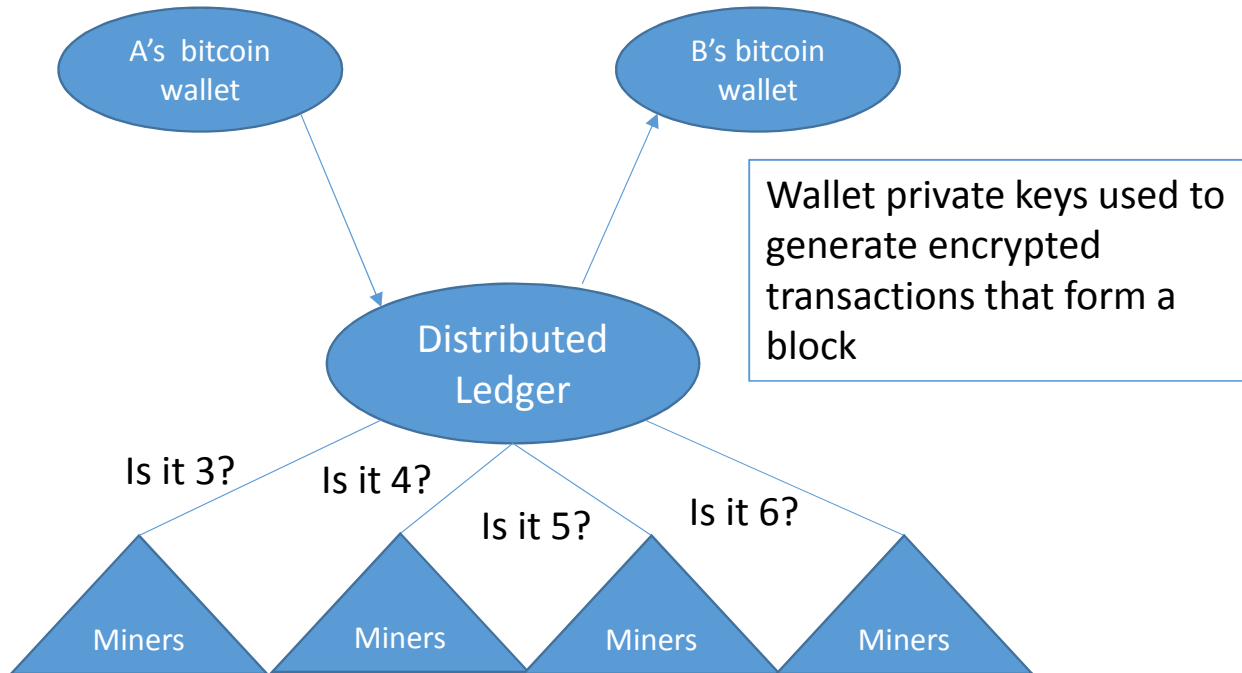
- a Bitcoin user (Alice) has a **public key** (which everyone can see) and a **private key** (which only she knows)
- Alice uses her **private key** to encrypt instructions to transfer bitcoin to another Bitcoin user (Bob)
- Any other Bitcoin user can use Alice's **public key** to verify that she gave the instruction
- If Bob wants to send bitcoin back to Alice he addresses it to her **public key** (also known as a wallet)

What is cryptocurrency anyway?

Bitcoin / Cryptocurrency

Wallet = Very large number

Wallet = Very large number



Miners compete to solve the hash to put the transaction into the blockchain winner being awarded bitcoin

- By solving the hash for the total block, the transaction is able to be committed to the ledger.
- This is referred to as a “block” being “mined”. It is recorded in the “blockchain”.
- Once the block has been mined, Alice’s bitcoin has become Bob’s bitcoin.
- This is a simplified summary of the **Bitcoin** platform.

What is the nature of the cryptographic problem?

**BLOCK X HASH = VALID
BLOCKCHAIN
ENTRY**

X = SHA-256 hashing algorithm function

- A set of transactions from Bitcoin users (Alice, Bob, Carol, etc) is grouped together (known as a block) to form a very very large number
- These transactions are committed to the distributed ledger when a further encryption algorithm known as a “hash” is solved for the **whole block of transactions**

What is the nature of the cryptographic problem?

**BLOCK X HASH = VALID
BLOCKCHAIN
ENTRY**

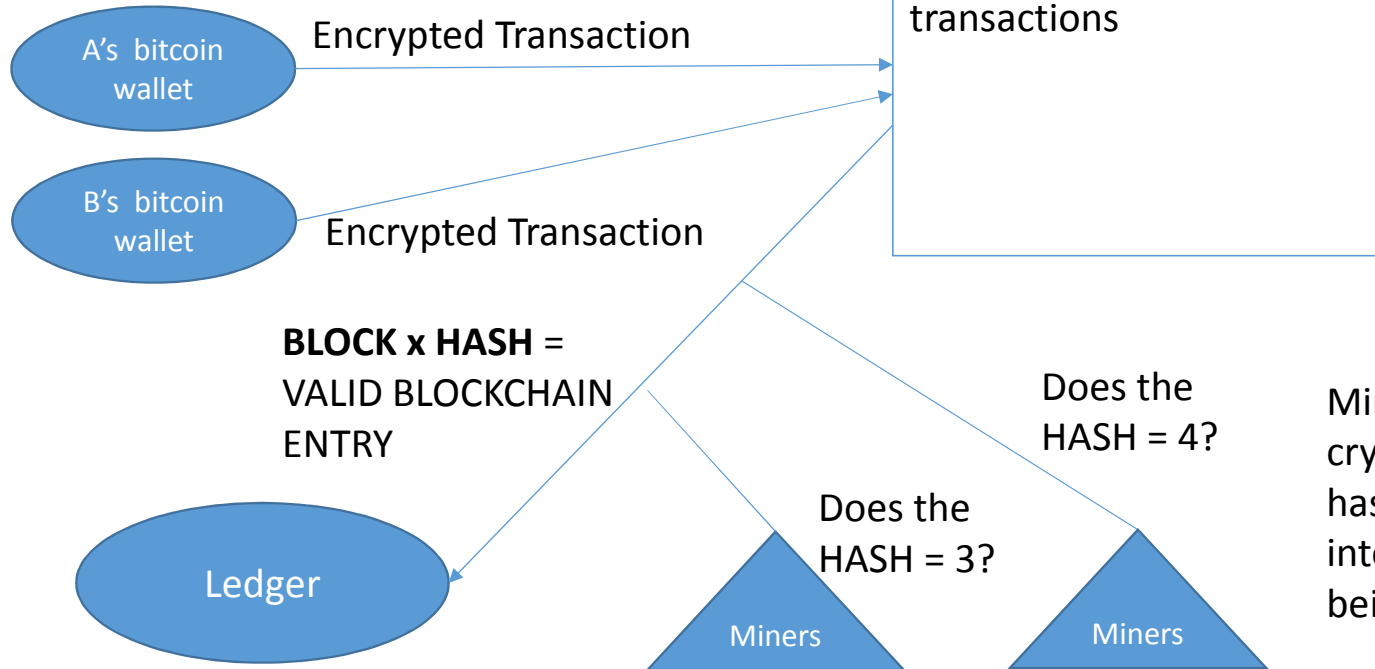
X = SHA-256 hashing algorithm function

- A “hash function” transforms the entire block of instructions into a smaller piece of data with specific mathematical properties (i.e. it is the same size and has other properties the same as every previous block on the chain)
- **The “hash” is solved by finding the number that is used in conjunction with the block of transactions to fit the rules of the blockchain**

What is cryptocurrency anyway?

Bitcoin / Cryptocurrency

Wallet = Very large number



Miners compete to solve the cryptographic problem (or hash) to put the transaction into the blockchain winner being awarded bitcoin

What is cryptocurrency anyway?

For the purposes of tax analysis you need to know at least the following:

- A bitcoin wallet is really just a very large number – if someone else has it they can transact (aka steal) your bitcoins.
 - A “software wallet” is a method of keeping this number secret electronically.
 - A “hardware wallet” is a method of keeping this number secret you physically control (e.g. encrypted hard drive, a long piece of paper, etc).
- A bitcoin (which is another number) is recorded as being attributable to that wallet.

What is cryptocurrency anyway?

- The **blockchain** or **distributed ledger** is a publicly available and verifiable record of every bitcoin holding and bitcoin transaction ever undertaken.
- Someone can create a new cryptocurrency by using publicly available software to “seed” a new block chain. Hence, the proliferation of new coins.
- The phrase cryptotoken is something exchanged and recorded on the blockchain to represent value – the Platform is separate.

Platform = Bitcoin, Ethereum, Litecoin, Dogecoin, etc

Cryptotoken = bitcoin, eth, litecoin, DOGE, etc

The Wild Wild West: initial taxation issues with bitcoin

Tax Issues with bitcoins: the Wild, Wild West

- There is no way to tell who actually owns a bitcoin wallet – it is just a number. Some people will use it to simply evade tax. This issue won't be discussed further.
- A lot of people made money when a small amount of bitcoin mined or purchased in 2010 or 2011 became worth multiple millions.
- First ever bitcoin transaction for real goods was an indirect purchase of two pizzas for 10,000 BTC. This would be worth (roughly) AUD\$100 million today.
- A lot of people were not experienced in tax laws. A period of interesting and novel arguments ensued.

Tax Issues with bitcoins: the Wild, Wild West

Issue 1: gains on bitcoin are a windfall gain and not taxable as they are not income

In determining whether an amount does not have the character of income Courts will have regard to:

- how, in what capacity, and for what reason the recipient received the prize or gift (*Squatting Investment Co Ltd v. Federal Commissioner of Taxation* (1953) 86 CLR 570 (1953); and
- whether the prize or gift is of a kind which is a common incident of the recipient's calling or occupation (*Scott v. Federal Commissioner of Taxation* (1966) 117 CLR 514).

Tax Issues with bitcoins: the Wild, Wild West

Issue 2: bitcoin are not cash and cannot be assessed under the tax law

Income is “what comes into the pocket” *Tennant v. Smith* (1892) A.C.150, 164. If an amount is not cash or convertible to cash then it is not income in the ordinary sense: *Commissioner of Taxation v Cooke & Sherden* (1980) 42 FLR 403. But a bitcoin is now clearly convertible into cash. Further section 21 of the ITAA 1936 provides that:

“Where, upon any transaction, any consideration is paid or given otherwise than in cash, the money value of that consideration shall, for the purposes of this Act, be deemed to have been paid or given”.

Also see section 21A: these sections may give rise to valuation issues (*Business & Research Management Pty Ltd* [2008] FCA 1652)

Tax Issues with bitcoins: the Wild, Wild West

Issue 3: bitcoin are subject to Division 775 of the ITAA 1997 (TOFA 1 &2 Forex)

Division 775 refers to currency which means (in the context of section 51(xiii) of the Constitution):

“units of account of a country and is issued under the laws of that country for use as a medium of exchange of wealth” (Leask v The Commonwealth (1996) 187 CLR 579, 595).

There are things that are *money* but not *currency* and outside Division 775 (e.g. gold, silver, other commodities).

Policy considerations against this position: if bitcoin is, what about DOGE, etc?

Tax Issues with bitcoins: the Wild, Wild West

Issue 4: bitcoin are inherently revenue account assets as they do not produce dividends or yield

This has never been publicly advanced by the Commissioner but was a negotiating position put in certain cases.

Capital or revenue turns on the nature of the receipt and the role and use to which an asset is put (*GP International Pipecoaters Pty Ltd v FCT* (1990) 170 CLR 124).

If this were correct, a gain or loss on gold or silver could never be on capital account – c.f. the result in *Greig* [2018] FCA 1084.

Tax Issues with bitcoins: the Wild, Wild West

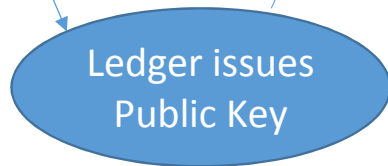
Issue 5: bitcoin cannot constitute a CGT asset

Interesting argument that:

Wallet = Very large prime



Wallet = Very large prime



- there is clearly no legal right as a chose in action against the issuer or seeder of a blockchain (c.f. money in the bank); and
- bitcoins are simply a number;
- a wallet is simply another number; and
- they are not property in the sense required by section 104-5 of the ITAA 1997.

Tax Issues with bitcoins: the Wild, Wild West

Issue 5: bitcoin cannot constitute a CGT asset

A CGT asset must be “any kind of property”: section 104-5 of the ITAA 1997.

Yanner v Eaton (1999) 201 CLR 351 at 366:

“property does not refer to a thing; it is a description of a legal relationship with a thing. It refers to a degree of power that is recognised in law as power permissibly exercised over the thing.”

Grove Land Rights Case (1971) 17 FLR 141 at 272 property generally implies, *“the right to use or enjoy, the right to exclude others and the right to alienate.”*

Tax Issues with bitcoins: the Wild, Wild West

Issue 5: bitcoin cannot constitute a CGT asset

A formal register (oral or written) is not a necessary precondition to determining proprietary rights exist (*Grove Land Rights Case*), but it may be demonstrative of the factors: the right to use, the right to exclude others and the right to alienate.

The existence of an orderly market indicates property exists: *Jabetin Pty Ltd v Liquor Administration Board & Ors* [2005] NSWCA 92 at [53].

Courts have also applied the notion of proprietary rights to things held to be of commercial value: *Halwood Corporation Ltd v Chief Commissioner of Stamp Duties* (1992) 33 NSWLR 395, 403.

Tax Issues with bitcoins: the Wild, Wild West

Issue 6: bitcoin may be a personal use asset

- A bitcoin may be a personal use asset **depending on the facts**. However this requires it to be on capital account. Good result for gains, bad result for losses.
- Whether or not a particular bitcoin is a personal use asset will depend on circumstances: why was it purchased?
- ATO agrees it is possible: TD 2014/26.
- If it is part of a profit-making scheme then it is unlikely to be on capital account.

Tax loss issues with bitcoin

Tax Issues with bitcoins: won't someone think of the losses?

- A lot of these positions reflected a period when bitcoin upside was very high.
- A lot of positions are now in losses and taxpayer would like to take an unrealised loss if possible. Will this result in “wash sales” or other transactions to generate taxing events?
- What about the trading stock provisions in Division 70 of the ITAA 1997?
- These all turn on the facts of a particular position and need to be carefully considered to at least RAP level.

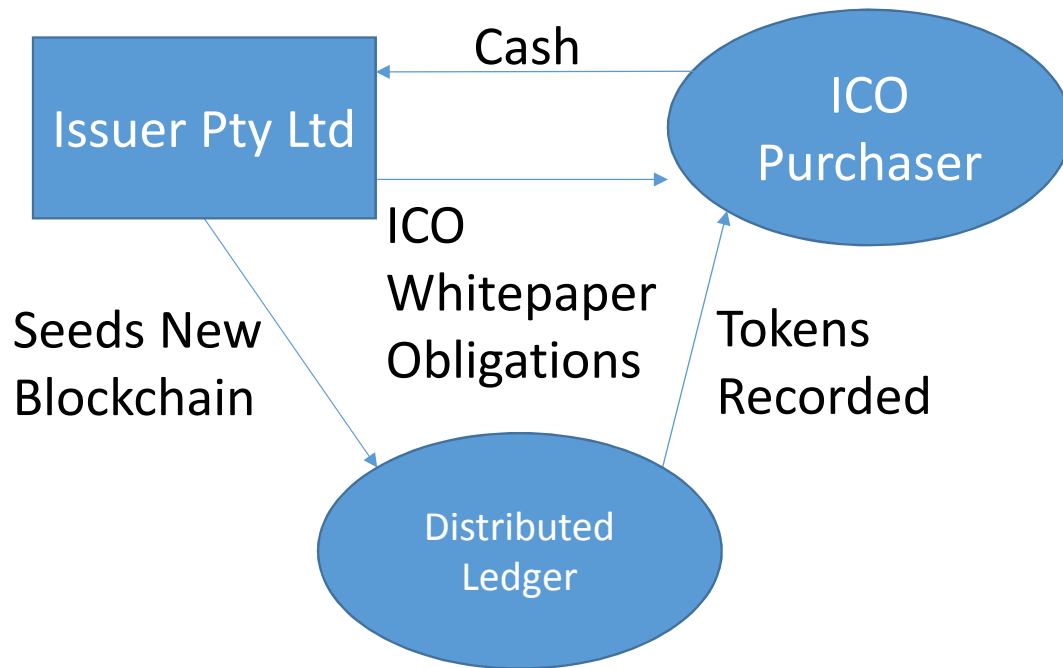
Tax Issues with bitcoins: won't someone think of the losses?

- “Wash sales” generally give rise to Part IVA concerns
- Positions relying on Division 775 for realisation will need to be carefully considered (n.b. some form of translation required)
- Taxpayers need to manage penalty exposure as – if particularly advantageous – the Commissioner may argue the position taken was not reasonably arguable
- Highly likely a tax auditor will not understand what bitcoin is initially!

Initial Coin Offering issues

What is an ICO?

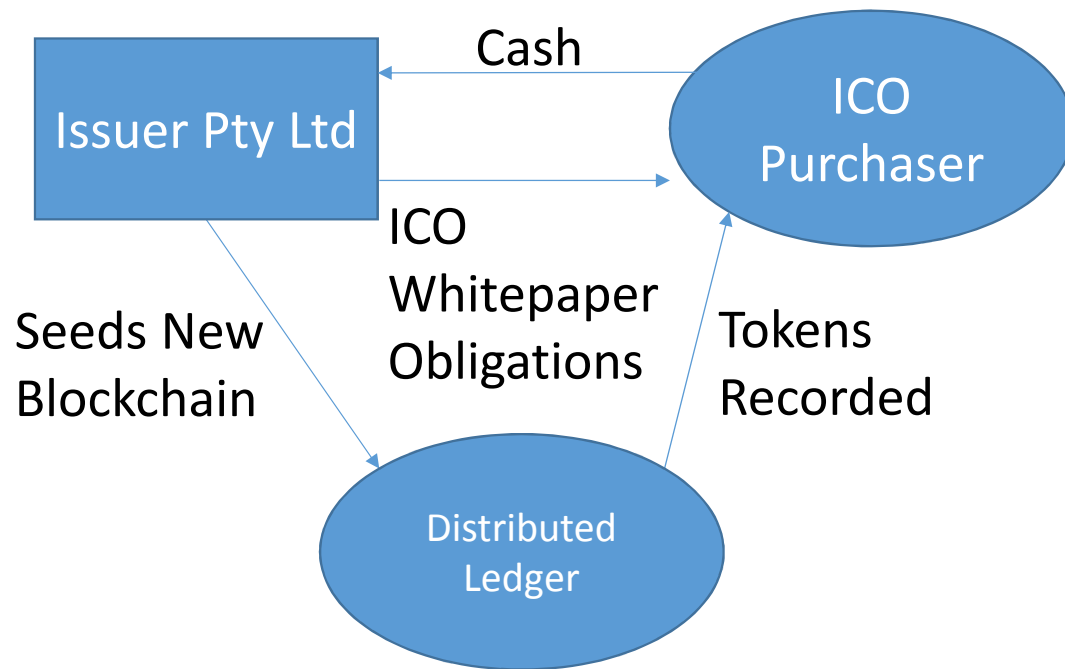
Structure of an ICO



- The software to seed a new **blockchain** or **distributed ledger** is free.
- A new coin is often issued as an “Initial Coin Offering”.
- Under an ICO you exchange something (e.g. money) for a coin which records an obligation to you that has been defined in an ICO whitepaper.

What is an ICO?

Structure of an ICO

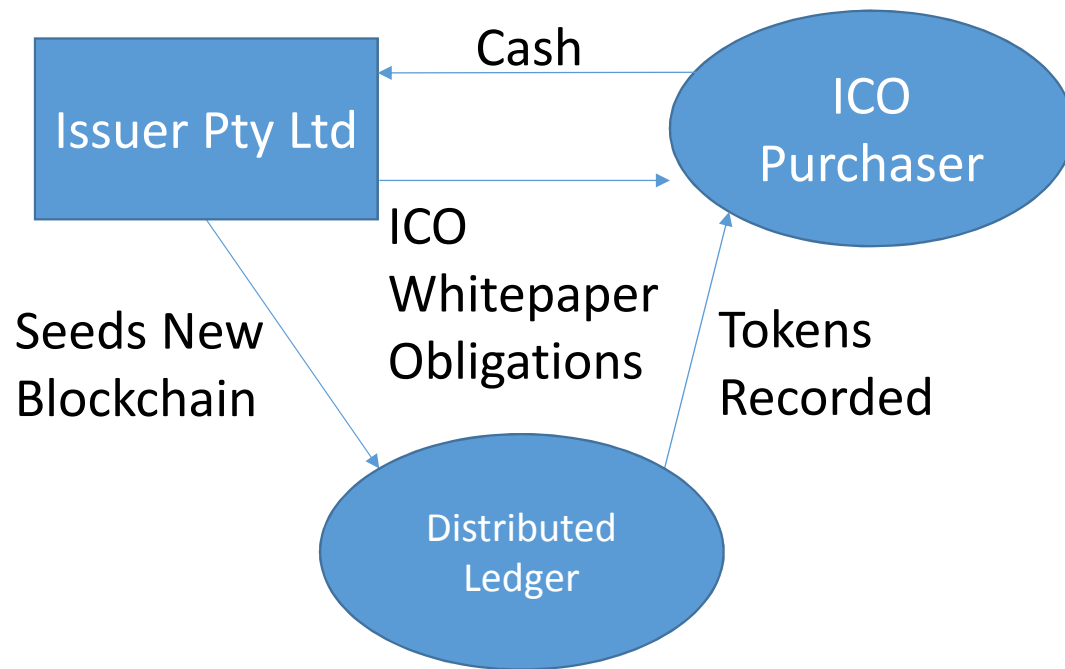


ICOs are big business:

- ChainLink raised \$32m in September 2017 to fund a secure contracts platform and tokens issued now trade at 4x issue price.
- secure messaging app Telegram are planning a \$500m ICO to launch its own cryptocurrency (Grams).

What is an ICO?

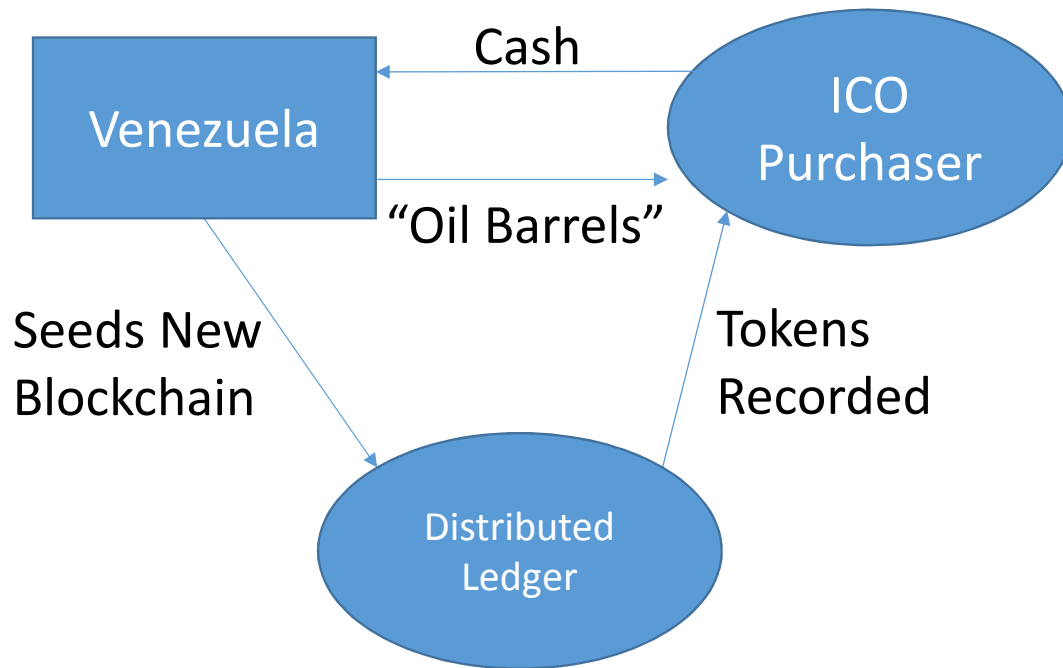
Structure of an ICO



- An ICO in no way has to be similar to an offer of shares or debt – it can be effectively a Kickstarter. It is defined by the ICO whitepaper.
- Some ICOs offer tokens which are intended to be traded for goods and services on their platform, some as a currency, some as a prepayment for future goods.

What is an ICO?

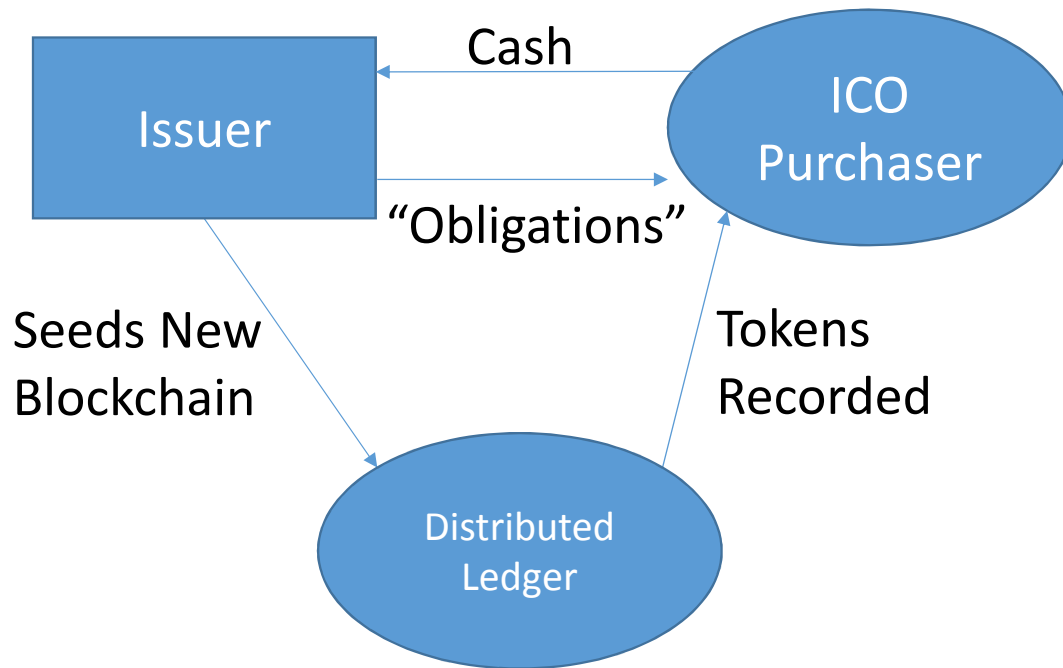
Structure of an ICO



- Venezuela issued a cryptotoken “representing” value of barrels of oil: the petro.
- However, it was not exchangeable for a barrel of oil only a credit against Venezuelan income tax liability for the value of a barrel of oil.
- It has not gone well for investors. Issued at \$60 USD it is now trading at 1.3 cents.

ICO tax issues

Structure of an ICO



- Has a company derived an amount of income by issuing a new token?
- Unless it confers rights similar to that of a stock or bond holder, then it **may** not be a capital transaction.
- If they have no obligations in the future to do anything, is it simply just income or is it a donation or gift or cost-free capital?
- If they do have an obligation in the future, is it an *Arthur Murray* amount that has not come home?
- Does jurisdiction matter?

ICO tax issues

- ICOs have developed as a market and there are intermediaries who are experts in raising funds via placing ICO issues.
- These intermediaries are generally rewarded with coins issued under the ICO at least in part.
- Valuation issues arise: *Business & Research Management Pty Ltd [2008] FCA 1652* per Edmonds J indicates assessable income under section 21 / 21A may be less than the face value **if the taxpayer can discharge their burden of proof!**

Commercial Issues that Impact Tax

- What will happen to the value of each token?
- bitcoin, as the best known, appears to be heading towards being a store of value due to its limited (and now very high cost) of production – aka “digital gold”
- Ethereum is best understood as a platform to serve applications with distributed computing power and on which you need eth to transact. So is eth more akin to a consumable (i.e. fuel)?
- Each ICO and set of tokens turns on its own commercial dealings!

Any Questions?

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