Crypto-assets update

Laurence F. White
Barrister

15 February 2022

Svenson Barristers CPD programme

Outline

- Introduction to crypto-assets and decentralized finance (DeFi)

- How are crypto-assets and DeFi regulated in Australia?

- Crypto-assets cases of note

- The Australian Government's plans for reform

- The international dimension

Introduction

What are crypto-assets?

- **Crypto-asset:** "a digital representation of value or contractual rights that can be transferred, stored or traded electronically, and whose ownership is either determined or otherwise substantially affected by a cryptographic proof. A crypto-asset may or may not have identifiable economic features that reflect fundamental or intrinsic value." (ASIC 2021)

- **Cryptography:** the conversion of data into private code using encryption algorithms, typically for transmission over a public network (Financial Stability Board 2019).

TYPES OF CRYPTO ASSETS

Crypto-currency

These crypto assets can be used to pay for everyday items. Examples include BTC, ETH, LTC and Bitcoin Cash. The likes of BTC and ETH can also be used as a store of value.

Stablecoins

Cryptocurrencies can be volatile, but stablecoins such as USDT aim to eliminate this by tying the value of the token to assets such as US dollars, pounds, euros and even precious metals

CBDCs

CBDCs are comparable to stablecoins in a way. The main difference is that they are issued by central banks rather than private companies. Europe and the US are considering whether to launch a CBDC, and China is trialling the digital yuan

Privacy coins

Amid concerns that transactions using Bitcoin are traceable because of blockchain, privacy coins such as Monero and Zcash aim to obfuscate the value of payments as well as their senders and recipients

Governance tokens

These crypto assets are commonly associated with decentralized finance protocols such as Yearn Finance and Uniswap. They allow people to vote on changes to the way a platform works

Utility tokens

Cryptocurrencies can also unlock access to particular services. Utility tokens, often created using the ERC-20 standard, represent subscriptions for example.

Non-fungible tokens

These crypto assets, often created using the ERC-721 standard, are designed to be completely unique and rare. CryptoKitties, a game involving collectible cats, is a good example of NFTs in practice

Source: Currency.com
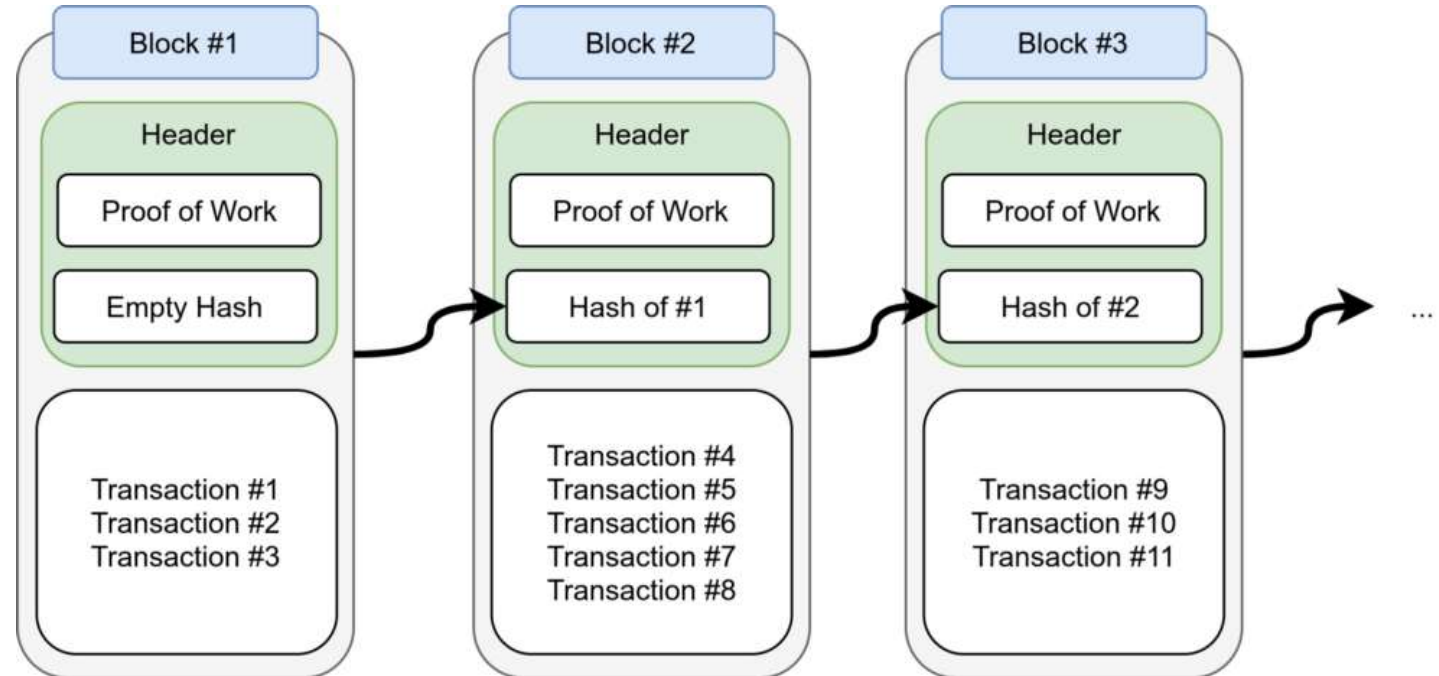
What is a distributed ledger?

Distributed ledger technology (DLT): a means of recording information through a distributed ledger. These technologies enable nodes in a network to propose, validate and record state changes (or updates) consistently across the network's nodes (FSB 2019).

Distributed ledger technology
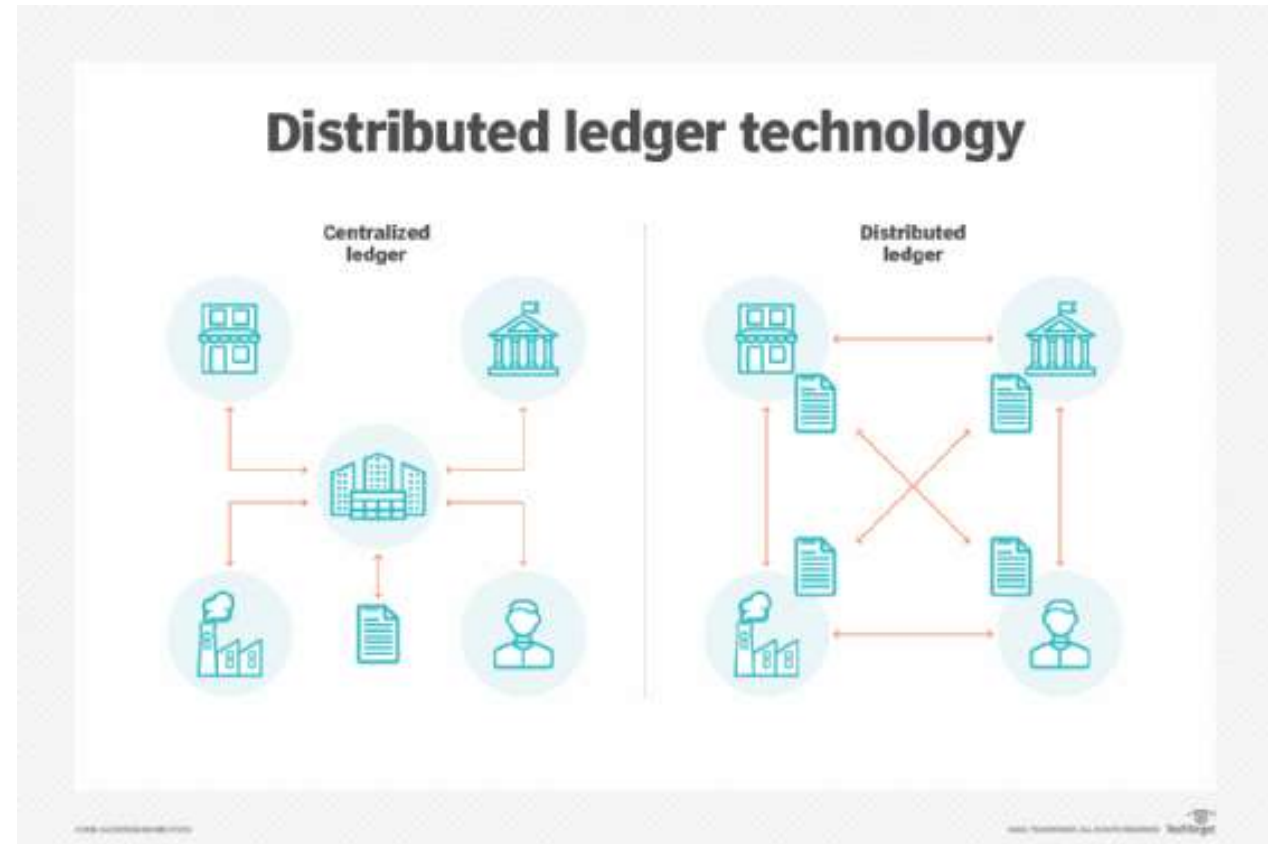
What is a blockchain?

Blockchain: a form of distributed ledger in which details of transactions are held in the ledger in the form of blocks of information. A block of new information is attached into the chain of pre-existing blocks via a computerised process by which transactions are validated (FSB 2019).
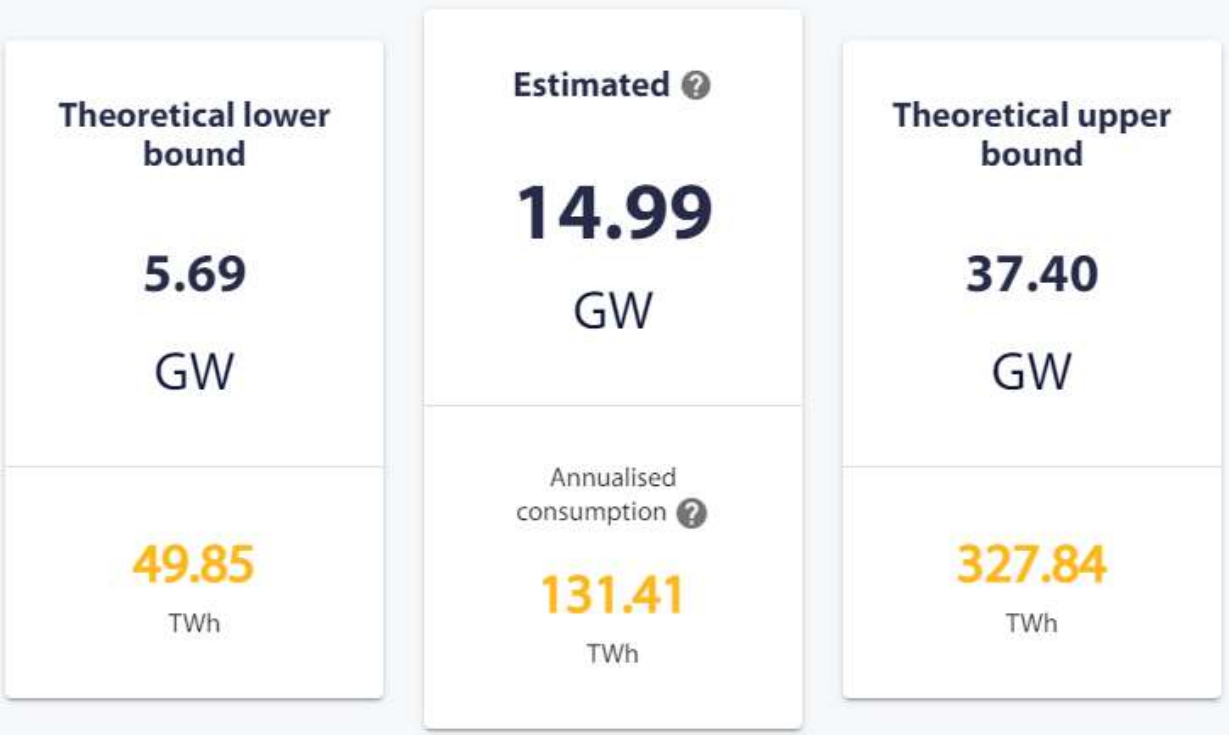
Each block is linked to the preceding one with a key, called a hash.

Sustainability and Proof of Work

LIVE

Bitcoin network power demand
updated every 24 hours

Theoretical lower bound	Estimated	Theoretical upper bound
5.69 GW	14.99 GW	37.40 GW
	Annualised consumption	
49.85 TWh	131.41 TWh	327.84 TWh

Loy Yang A = 2.21 GW

Blockgeeks

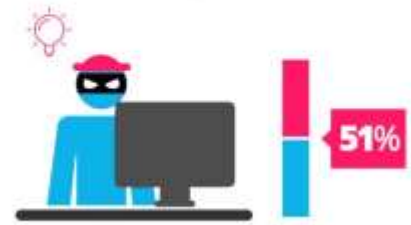## Proof of Work vs. Proof of Stake

To add each block to the chain, miners must compete to solve a difficult puzzle using their computers processing power.

There is no competition as the block creator is chosen by an algorithm based on the user's stake.

In order to add a malicious block, you'd have to have a computer more powerful than 51% of the network.

In order to add a malicious block, you'd have to own 51% of all the cryptocurrency on the network.

The first miner to solve the puzzle is given a reward for their work.

There is no reward for making a block, so the block creator takes a transaction fee.

What is Decentralised Finance or DeFi?

- "DeFi" broadly refers to a variety of financial products, services, activities, and arrangements supported by **smart contract-enabled distributed ledger technology**. This technology can reduce the use of traditional financial intermediaries and centralized institutions to perform certain functions, although the degree of decentralization across DeFi differs widely. – PWGFM, FDIC and OCC, *Report on Stablecoins* (Nov 2021)

- The cryptocurrency industry views "DeFi" as a term of art that refers more specifically to derivative contracts deployed on smart contract blockchains that facilitate asset swaps, programmatic leverage, and risk transformation. – Carter, N. in Jeng, L. (2022)

- **The decentralization illusion?:**
  - "In addition, certain features of DeFi blockchains favour the concentration of decision power in the hands of large coin-holders. Transaction validators need to receive compensation that is sufficient to incentivise them to participate without committing fraud. Blockchains based on proof-of-stake, which are expected to improve scalability, allow validators to stake more of their coins so that they have a higher chance of "winning" the next block and receiving compensation. [T]his setup naturally leads to concentration (Auer et al (2021)). Many blockchains also allocate a substantial part of their initial coins to insiders, exacerbating concentration issues." - Aramonte, Huang & Schrimpf (2021)

Crypto vs traditional financial system[1]

Table 1

Function	Service	Crypto financial system		Traditional finance
		Decentralised finance (DeFi)	Centralised finance (CeFi)	
Trading	Funds transfer	DeFi stablecoins (DAI)	CeFi stablecoins (USDT, USDC)	Traditional payment platforms
	Asset trading	Crypto asset DEX (Uniswap)	Crypto CEX (Binance, Coinbase)	Exchanges and OTC brokers
	Derivatives trading	Crypto derivatives DEX (Synthetix, dYdX)		
Lending	Secured lending	Crypto decentralised lending platforms (Aave, Compound)	Crypto centralised lending platforms (BlockFi, Celsius)	Broker-dealers active in repo and securities lending
	Unsecured lending	Crypto credit delegation (Aave)	Crypto banks (Silvergate)	Commercial banks and non-bank lenders
Investing	Investment vehicles	Crypto decentralised portfolios (yearn, Convex)	Crypto funds (Grayscale, Galaxy)	Investment funds

CEX = centralised exchanges; DEX = decentralised exchanges; OTC = over-the-counter; USDC = USD Coin; USDT = Tether.

[1] Illustrative examples are given in parentheses.

Smart contracts and oracles

- "A smart contract is neither a contract nor smart" - David G.W. Birch

- It is software, running on a blockchain (such as Ethereum) that executes certain steps automatically given certain conditions are met

- These conditions are signalled to the smart contract by "Oracles", also software running on a blockchain

- Oracles interact with data sources in the "outside world" off the blockchain

- Price feeds are one example of data source used in smart contracts

- Another would be a sensor

- Oracles can also send data to the outside world, e.g. to unlock a smart lock once a payment is made

Regulation of crypto-assets in Australia

Regulation of crypto-assets in Australia

- Intermediaries promoting, trading or mining crypto-assets may require one/more of the following licences/ authorisations/ registration

Category	Regulator	Legislation
Digital currency exchange providers	Austrac	AML/CFT Act
Australian financial services licence (AFSL)?	ASIC	Corps Act Ch 7
Australian market licence (AML)	ASIC	Corps Act Ch 7
Australian credit licence?	ASIC	NCCP Act
Authorised Deposit-Taking Institution	APRA	Banking Act
Purchased-payment facility	RBA/APRA	Banking Act

Anti-Money Laundering and Counter-Terrorism Financing Act 2006

- Part 6A provides for a system of registration for providers of **digital currency exchange** services.
    - Division 2 sets out offences and civil penalties in relation to the provision of "registrable digital currency exchange services" by persons who are not registered.
    - Division 3 requires the AUSTRAC CEO to maintain the Digital Currency Exchange Register and sets out the process of applying for registration.
- *registrable digital currency exchange service* means a designated service that:
    (a) is covered by item 50A of table 1 in section 6; and
    (b) is not of a kind specified in the AML/CTF Rules.
- Provision of a designated service – item 50A –
    - "**Exchanging digital currency for money** (whether Australian or not) or exchanging money (whether Australian or not) for digital currency, where the exchange is provided in the course of carrying on a digital currency exchange business"
    - The *customer* is the person the person whose digital currency or money is exchanged

Definition of digital currency

digital currency means:

(a)   a digital representation of value that:

      (i)   functions as a medium of exchange, a store of economic value, or a unit of account; and

      (ii)   is not issued by or under the authority of a government body; and

      (iii)   is interchangeable with money (including through the crediting of an account) and may be used as consideration for the supply of goods or services; and

      (iv)   is generally available to members of the public without any restriction on its use as consideration; or

(b)   a means of exchange or digital process or crediting declared to be digital currency by the AML/CTF Rules;

but does not include any right or thing that, under the AML/CTF Rules, is taken not to be digital currency for the purposes of this Act.

Digital Currency Exchange Register has the meaning given by section 76B.

Key obligations of a registered DCE:

- Customer identifying information and customer due diligence:
  - Collection before providing designated service: s 32
  - Verification in connection with specified events: s 35
  - Ongoing customer due diligence: s 36
- Reporting obligations:
  - Suspicious matter reports (SMRs): ss 41, 42
  - Threshold transaction reports: 43, 44
    - A 'threshold transaction' is the transfer of physical currency of A$10,000 or more (or the foreign currency equivalent) as part of a designated service.
  - International funds transfer instructions (IFTIs): ss 45, 46
  - AML/CTF compliance reports: ss 47
- Adopt and maintain an AML/CTF program for the provision of designated services (Part 7/Rules Ch. 8, Ch. 9)
- Record-keeping requirements (Part 10/Rules Ch. 20)
- Secrecy around SMRs and notices for information: s 123
- Offence of providing a designated service using a false customer name, or on the basis of customer anonymity: s 139(3)
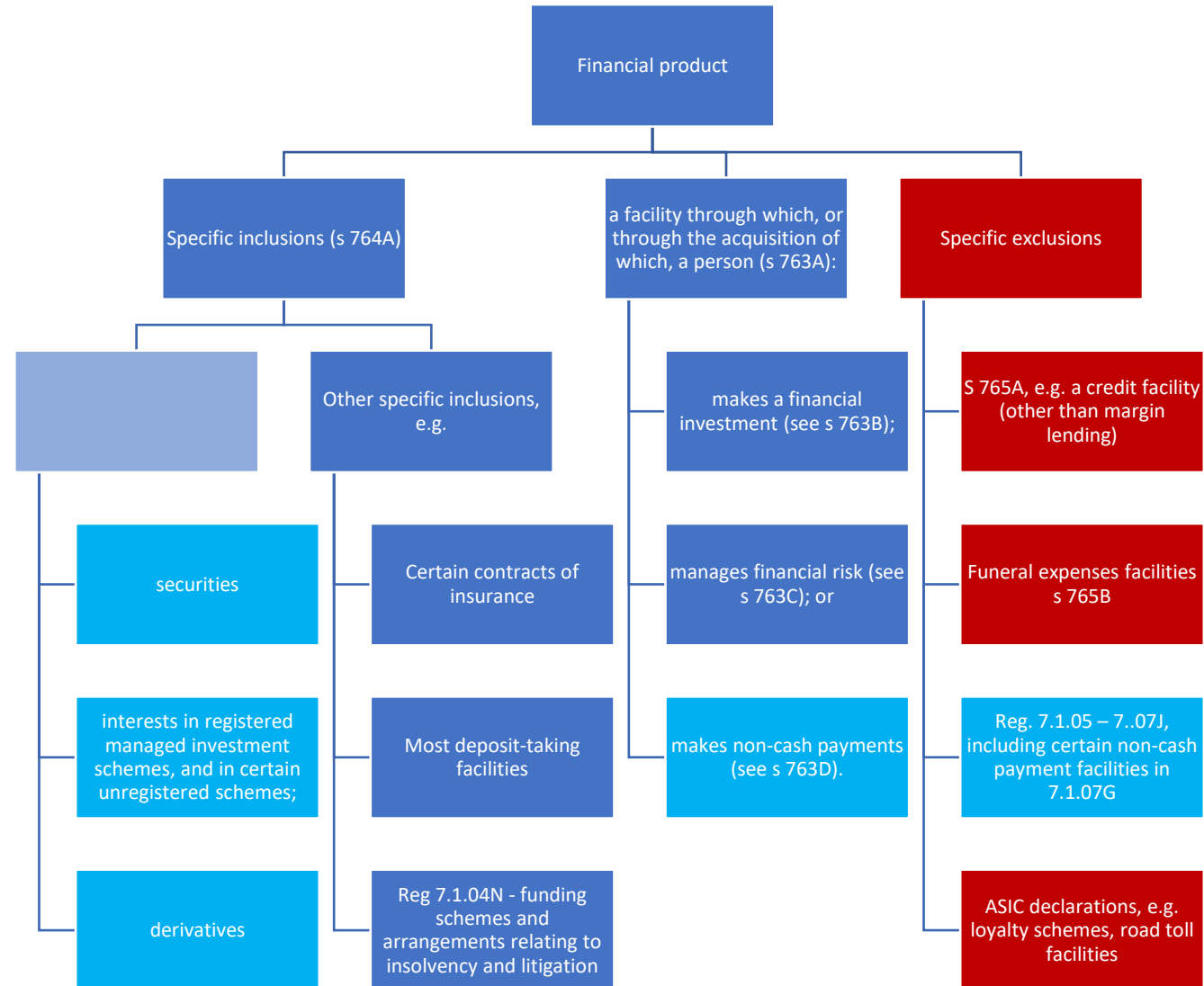
AML/CTF Rules

- Rule 18.2 (21A) – required content of a suspicious matter report involving digital currency

- Rule 19.3(8)(b) - Reportable details for threshold transactions involving digital currency

- Rule 18.4/19.6 – 'Digital currency wallet' means any service that allows a person to send, request, receive, or store digital currency.

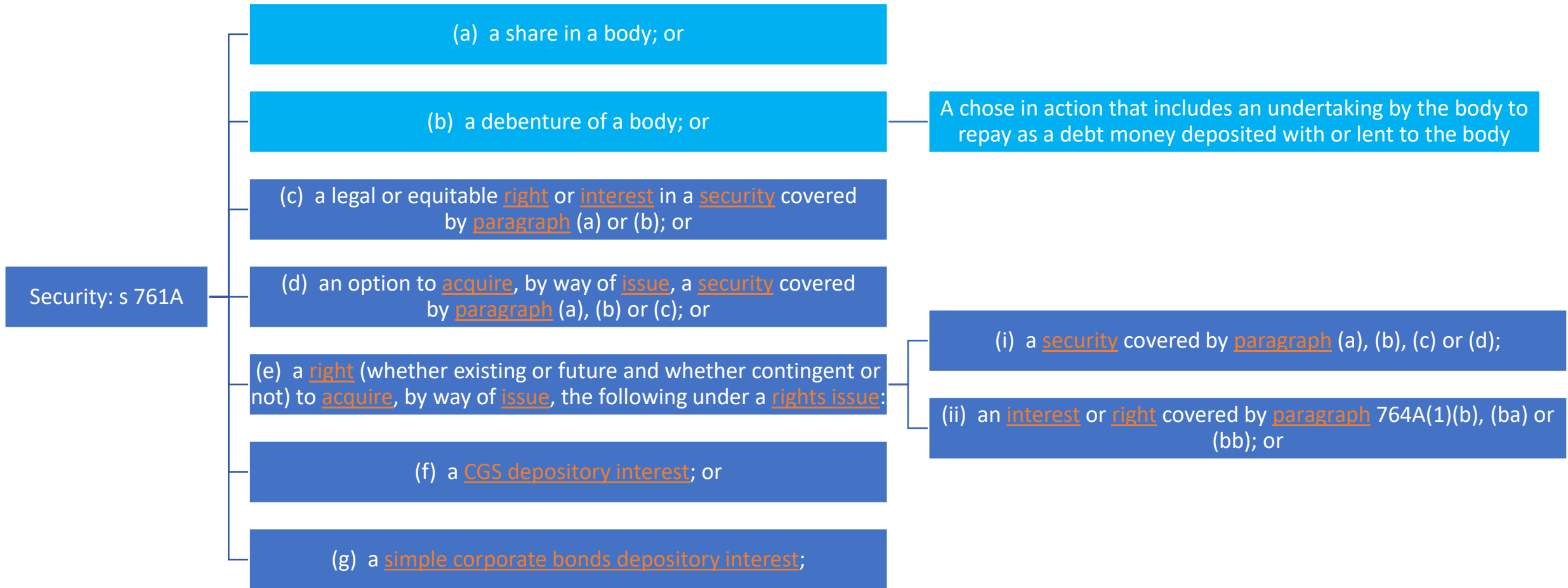- Chapter 76 – Rules about Digital Currency Exchange Register

Australian financial services licence (AFSL)?

- Under s 911A of the Corporations Act 2001 (Cth), a person who **carries on a business of providing financial services in Australia** must hold an AFSL covering the provision of the financial services. Failure to comply with this requirement is an offence (s 1311(1)), and is also a civil penalty provision (s 1317E).

- Section 761A provides that the expression **carried on in this jurisdiction**, in relation to a financial services business, has a meaning affected by section 911D. In turn **financial services business** is defined in s 761A as meaning "a business of providing financial services".
  - See also s 761A, 911D, 761C, Division 3 of Part 1.2, and RG 121.43 ff concerning connection to Australia.

- Section 766A(1) provides that a person provides a financial service if they:
  - (a) provide **financial product** advice (see s 766B); or
  - (b) deal in a **financial product** (see s 766C); or
  - (c) make a market for a **financial product** (see s 766D); or
  - (d) operate a registered **managed investment scheme**; or
  - (e) provide a custodial or depository service [in relation to a **financial product**] (see s 766E);
  - (f) engage in conduct prescribed by regulations (see Regulations Part 7.1, Div 3) (e.g., default fund advice: Reg. 7.1.28AA).
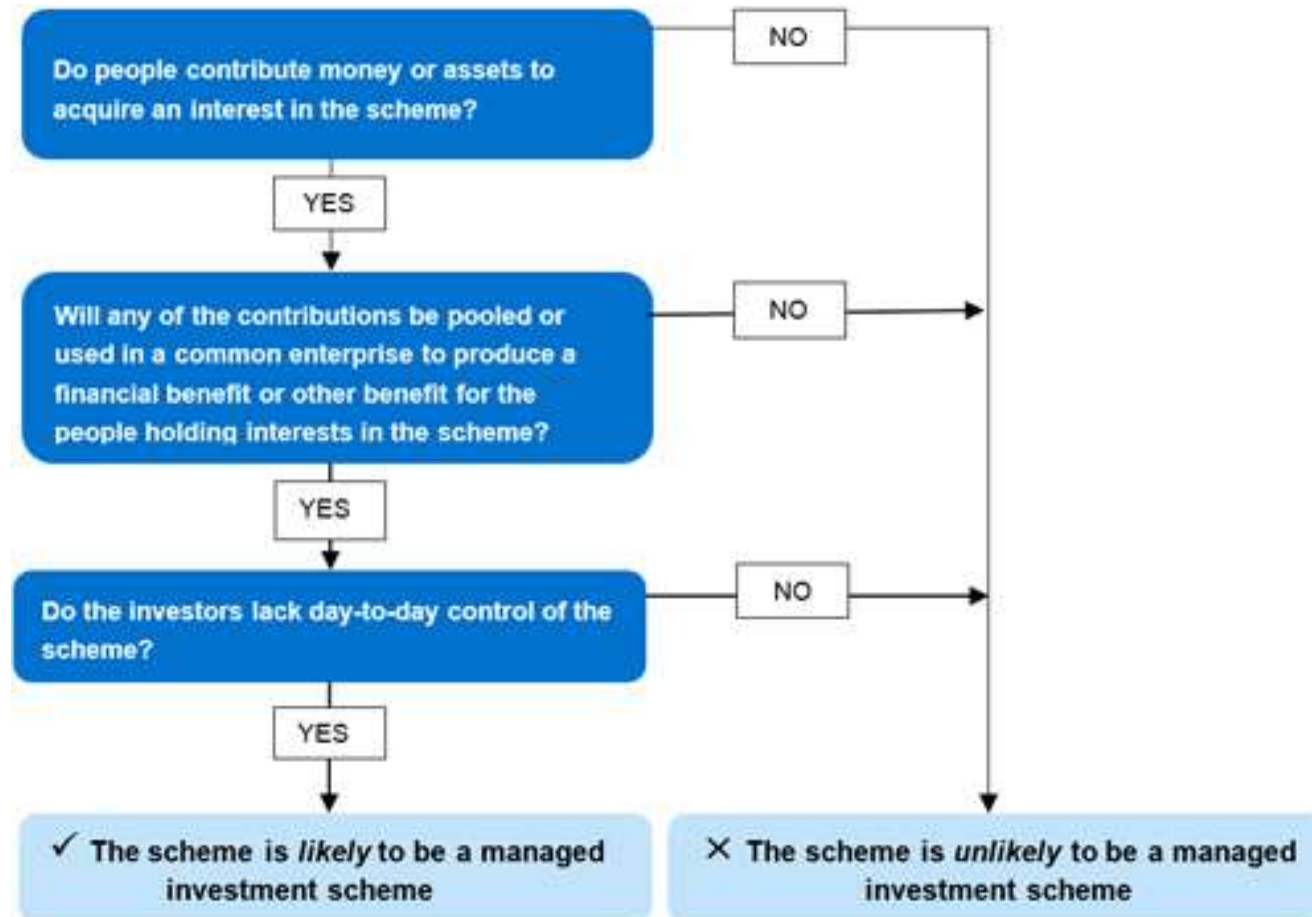
Financial products and crypto-assets

Is a token a security?

Security: s 761A

(a) a share in a body; or

(b) a debenture of a body; or — A chose in action that includes an undertaking by the body to repay as a debt money deposited with or lent to the body

(c) a legal or equitable right or interest in a security covered by paragraph (a) or (b); or

(d) an option to acquire, by way of issue, a security covered by paragraph (a), (b) or (c); or

(e) a right (whether existing or future and whether contingent or not) to acquire, by way of issue, the following under a rights issue:

  (i) a security covered by paragraph (a), (b), (c) or (d);

  (ii) an interest or right covered by paragraph 764A(1)(b), (ba) or (bb); or

(f) a CGS depository interest; or

(g) a simple corporate bonds depository interest;

Is a token offering a managed investment scheme?

Is a token a derivative?

"**CORPORATIONS ACT 2001 - SECT 761D**

Meaning of derivative

(1) For the purposes of this Chapter, subject to subsections (2), (3) and (4), a **_derivative_** is an arrangement in relation to which the following conditions are satisfied:

      (a) under the arrangement, a party to the arrangement must, or may be required to, provide at some future time consideration of a particular kind or kinds to someone; and

      (b) that future time is not less than the number of days, prescribed by regulations made for the purposes of this paragraph, after the day on which the arrangement is entered into; and

      (c) the amount of the consideration, or the value of the arrangement, is ultimately determined, derived from or varies by reference to (wholly or in part) the value or amount of something else (of any nature whatsoever and whether or not deliverable), including, for example, one or more of the following:

        (i) an asset;

        (ii) a rate (including an interest rate or exchange rate);

        (iii) an index;

        (iv) a commodity.

      (2) Without limiting subsection (1), anything declared by the regulations to be a derivative for the purposes of this section is a derivative for the purposes of this Chapter. A thing so declared is a derivative despite anything in subsections (3) and (4).

CORPORATIONS REGULATIONS 2001 - REG 7.1.04
Derivatives

(1) For paragraph 761D(1)(b) of the Act, the prescribed period is:

      (a) for a foreign exchange contract-- 3 business is days; and

      (b) in any other case--1 business day.

   (2) For subsection 761D(2) of the Act, and subject to this regulation, an arrangement is declared to be a derivative if the following conditions are satisfied in relation to the arrangement:

      (a) the arrangement is not a foreign exchange contract;

      (b) under the arrangement, a party to the arrangement must, or may be required to, provide at some future time (which may be less than 1 day after the arrangement is entered into) consideration of a particular kind or kinds to someone;

      (c) the amount of the consideration, or the value of the arrangement, is ultimately determined, derived from or varies by reference to (wholly or in part) the value or amount of something else (of any nature whatsoever and whether or not deliverable), including, for example, one or more of the following:

        (i) an asset;

        (ii) a rate (including an interest rate or exchange rate);

        (iii) an index;

        (iv) a commodity.

Is a token a non-cash payment facility?

- Section 763A(1)(c) provides that for the purposes of Chapter 7, the concept of financial product includes a facility through which, or through the acquisition of which, a person makes a non-cash payment.

- The concept of **non-cash payment** is defined in turn in s 763D and broadly refers to making or causing payments to be made "otherwise than by the physical delivery of Australian or foreign currency in the form of notes and/or coins".

  - A statutory example is "making payments by means of a **purchased payment facility** within the meaning of the Payment Systems (Regulation) Act 1998, such as a smart card".

- "**Facility**" is defined in s762C to include:

  (a) intangible property; or

  (b) an arrangement or a term of an arrangement (including a term that is implied by law or that is required by law to be included); or

  (c) a combination of intangible property and an arrangement or term of an arrangement.

- A range of exclusions applies including by Regulations (see Reg. 7.1.07G, relating to certain types of EFTs, such as telegraphic transfers and international money transfers offered by banks and remittance dealers).

- See also ASIC Regulatory Guide 185, Non-cash payment facilities

Exclusions and exemptions
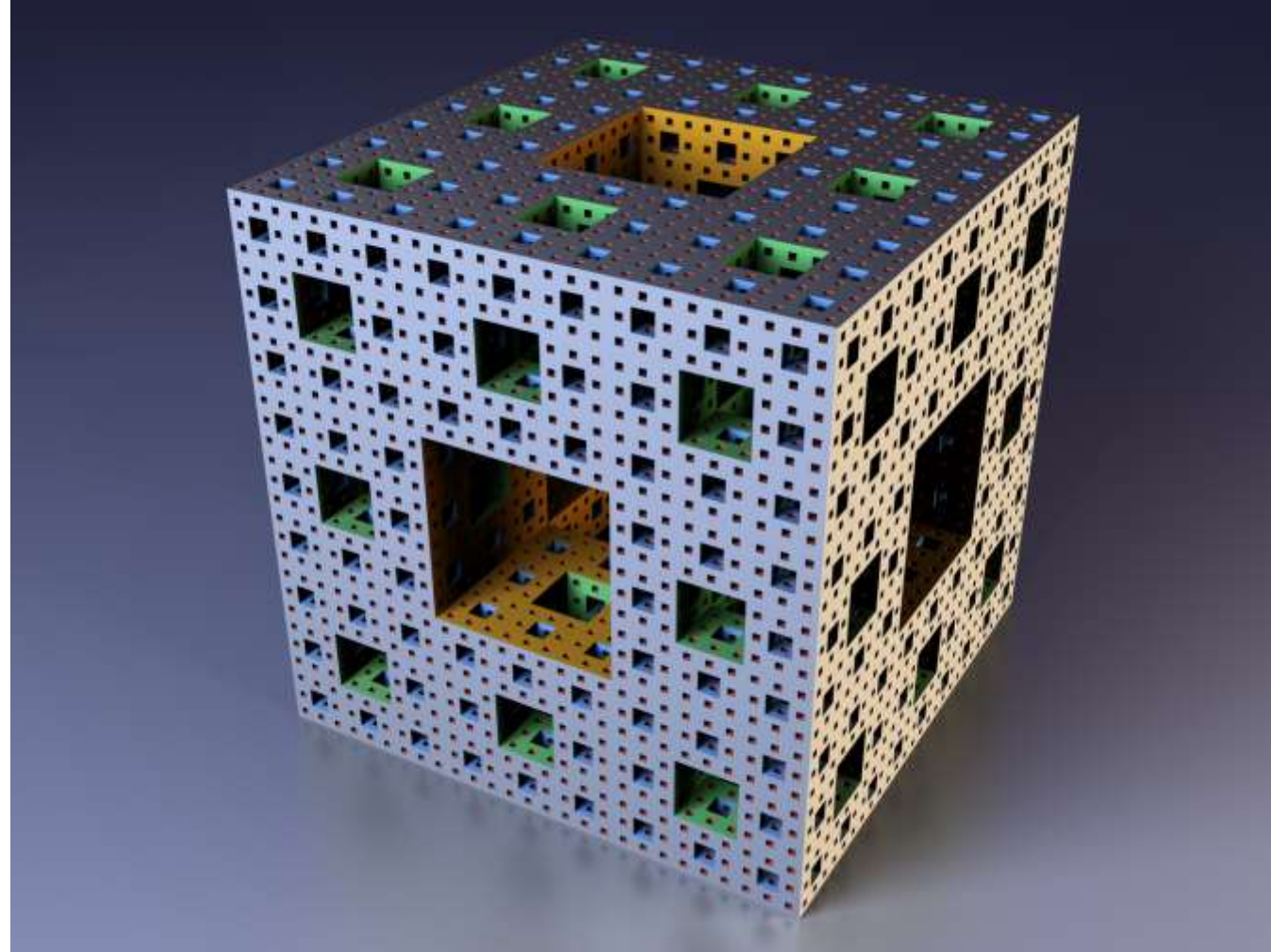
Exclusions and exemptions

- Each financial service is subject to multiple exclusions and exemptions, deriving from the Act, Regs and ASIC Instruments.

- The table at right illustrates those applicable to financial product advice

- Each financial service has a similar structure of exemptions and exclusions

- ASIC has also published extensive regulatory guidance on the various financial services, e.g. RG 36 Licensing: Financial product advice and dealing

Figure 11.2: Summary overview of advice-related exclusions and exemptions

Australian market licence (AML)   ASIC

Section 791A(1) of the Act prohibits a person from operating, or holding out that the person operates, a financial market in Australia, unless the person has: (a) an Australian market licence that authorises the person to operate the market; or (b) an exemption from the licensing requirement.

Section 767A defines a financial market for the purposes of Chapter 7 as a facility through which:

    (a) offers to acquire or dispose of financial products are regularly made or accepted; or
    (b) offers or invitations are regularly made to acquire or dispose of financial products that are intended to result or may reasonably be expected to result, directly or indirectly, in:

        (i) the making of offers to acquire or dispose of financial products; or

        (ii) the acceptance of such offers.

Section 761A provides that the term *operated in this jurisdiction* in relation to a financial market, has a meaning affected by section 791D.

Section 791D provides that, for the purposes of Chapter 7, a financial market is taken to be operated *in this jurisdiction* if it is operated by a body corporate that is registered under Chapter 2A. Subsection (2) provides that Subsection (1) does not limit the circumstances in which a financial market is operated *in this jurisdiction* for the purposes of this Chapter.

ASIC RG 172.60 A further glosses these provisions and states that a market venue operates in Australia if:

(a) the market venue is operated by a body corporate that is registered under Ch 2A;

(b) the market venue is located in Australia, which means all or a significant part of the market infrastructure is located in Australia; or

(c) the market venue:

(i) has one or more participants in Australia (see the definition of 'participant' in RG 172.44 – 46); or

(ii) is targeted at Australian investors (see further 172.62 – 64).

Australian credit licence

A person must not engage in a credit activity if the person does not hold a licence authorising the person to engage in the credit activity: *National Consumer Credit Protection Act 2009* (Cth), s 29(1).

Wide range of exemptions set out in Regulations 20 – 23D, 24, 25.

"Credit activity" definition in s. 6 includes (among many other activities including credit advice):

- (a) the person is a credit provider under a credit contract; or

- (b) the person carries on a business of providing credit, being credit the provision of which the National Credit Code applies to; or

- (c) the person performs the obligations, or exercises the rights, of a credit provider in relation to a credit contract or proposed credit contract (whether the person does so as the credit provider or on behalf of the credit provider).

"Credit contract" means a contract under which credit is or may be provided, being the provision of credit to which the National Credit Code (i.e., Sch. 1 of the NCCPA) applies.

"Credit" is provided if under a contract:

- (a) payment of a debt owed by one person (the debtor) to another (the credit provider) is deferred; or

- (b) one person (the debtor) incurs a deferred debt to another (the credit provider) (s. 3 of NCCPA/s 3 of NCC).

The National Credit Code applies only to credit that is:

- (a) provided to a natural person or strata corporation (i.e. a consumer);

- (b) provided wholly or predominantly for:
  - (i) personal, household or domestic purposes; or
  - (ii) residential property investment;

- (c) charged for, or may be charged for, by the credit provider; and

- (d) provided in the course of carrying on a business of providing credit in Australia or as part of, or incidental to, any other business of the credit provider carried on in Australia (NCC s 5).

Regulatory Guide RG 203 Do I need a credit licence? (asic.gov.au)

27

Authorised Deposit-Taking Institution?

"Banking business" is defined in s. 5 of the Banking Act 1959 (Cth) as:

(a) a business that consists of banking within the meaning of paragraph 51(xiii) of the Constitution; or

(b) a business that is carried on by a corporation to which paragraph 51(xx) of the Constitution applies and that consists, to any extent, of: (i) both taking money on deposit (otherwise than as part-payment for identified goods or services) and making advances of money; or (ii) *other financial activities prescribed by the regulations for the purposes of this definition*.

Banking Regulation 2016 (Cth) in turn provides that the provision of a purchased payment facility (within the meaning of the *Payment Systems (Regulation) Act 1998*) is banking business if APRA determines that the facility:

> (a) is of a type for which the purchaser of the facility is able to demand payment, in Australian currency, of all, or any part, of the balance of the amount held in the facility that is held by the holder of the stored value (within the meaning of the *PSR Act 1998*); and

> (b) is available, on a wide basis, as a means of payment, having regard to:

>> (i) any restrictions that limit the number or types of people who may purchase the facility; and

>> (ii) any restrictions that limit the number or types of people to whom payments may be made using the facility.

APRA is responsible for supervising PPF providers that have payment obligations over $10 million that are payable on demand, redeemable in Australian currency and available on a 'wide basis' (more than 50 users). Providers of these facilities are deemed to be conducting 'banking business' under the Banking Regulations 2016, and are authorised and supervised by APRA as a special class of ADI.

The RBA has regulatory responsibility for all other (non-ADI) PPF providers – i.e. those that are not widely available or redeemable on demand in Australian currency – and is required to authorise or exempt non-ADI PPF providers from regulation. To date, the RBA has not authorised any PPF providers because the facilities that have been established have been relatively small and/or limited purpose. The RBA has granted class exemptions for certain low-value and limited purpose facilities.

Payment Systems (Regulation) Act 1998
Sect 9 Meaning of purchased payment facility and holder of the stored value
(1) A purchased payment facility is a facility (other than cash) in relation to which the following conditions are satisfied:
(a) the facility is purchased by a person from another person; and
(b) the facility is able to be used as a means of making payments up to the amount that, from time to time, is available for use under the conditions applying to the facility; and
(c) those payments are to be made by the provider of the facility or by a person acting under an arrangement with the provider (rather than by the user of the facility).

However, a facility covered by a declaration under subsection (3) is not a purchased payment facility for the purposes of this Act.

ASIC crypto regulatory guidance

- INFO 219 Evaluating distributed ledger technology
- INFO 225 Crypto-assets
- INFO 230 Exchange traded products: Admission guidelines
- Submissions to Senate inquiry, 2021
- Submission to Senate inquiry into digital currency, 2014
- Speeches …

INFO 225

INFO 219

CP 343

Submissions

INFO 219 Evaluating DLT

- General info for those considering DLT / smart contract applications.
- Contains a link to a questionnaire Assessment tool for evaluating DLT-based services – questions include one highly relevant to 'smart contracts':

Is the DLT sufficiently flexible for the purpose it was created?	There are many cases where the legal system does not permit the enforcement of a contract solely on its terms, for example insolvency laws (clawback of transactions). The DLT may need to have the flexibility to reflect the legal system in full, and not just selected parts. Also, flexibility to correct identified breaches needs to be considered.

INFO 225 Crypto-assets

		More info…
Issuers	If you are issuing crypto-assets that fall within the definition of a 'financial product', Australian laws apply, including the requirement to hold an Australian financial services (AFS) licence	RG 1
Crypto-asset intermediaries	If you are giving advice, dealing, providing insurance, or providing other intermediary services for crypto-assets that are financial products a range of Australian laws apply, including the requirement to hold an AFS licence	RG 36
Miners and transaction processors	Where miners and transaction processors are part of the clearing and settlement (CS) process for tokens that are financial products Australian laws apply	RG 211
Crypto-asset exchange and trading platforms	If you are operating a market for crypto-assets that are financial products, a range of Australian laws apply, including the requirement to hold an Australian market licence	RG 172
Crypto-asset investment products	If you are operating an investment product that offers investors exposure to crypto-assets, a range of Australian laws may apply. [Discussion limited to inclusion as a financial product due to the product being a security, a derivative, an interest in a managed investment scheme, or a non-cash payment facility.]	
Crypto-asset payment and merchant service providers	If the payment service involves a 'non-cash payment facility' a range of Australian laws apply, including the requirement to hold an AFS licence	RG 185
Wallet providers and custody service providers	If tokens stored by your business fall within the definition of a 'financial product', you need to ensure you hold the appropriate custodial and depository authorisations	RG 1

INFO 225 also sets out how prohibitions against misleading or deceptive conduct apply to all ICOs and business involved with crypto-assets, regardless of whether they are financial products or not.

Crypto ETPs

- ASIC's "good practices" are set out in <u>Information Sheet 230</u> *Exchange traded products: Admission guidelines* (INFO 230).

- The admission guidelines in INFO 230, "which largely reflect current market practice", cover:
    - approving ETP issuers
    - underlying assets
    - disclosure of portfolio holdings
    - liquidity provision and market making
    - securities lending
    - ongoing supervision of ETPs and issuers
    - waivers
    - product-naming considerations, and
    - other types of ETPs

- See also CP 343 <u>Crypto-assets as underlying assets for ETPs and other investment products</u>

INFO 230...

Crypto-assets

Licensed exchanges may determine that crypto-assets can be permissible underlying assets for ETPs admitted to their market. In conducting this assessment for crypto-assets that are not financial products, we expect market operators to be satisfied that:

- there is a high level of institutional support and acceptance of the crypto-asset being used for investment purposes

- reputable and experienced service providers (including custodians, fund administrators, market makers and index providers) are available and willing to support ETPs that invest in, or provide exposure to, the crypto-asset

- there is a mature spot market for the crypto-asset

- there is a regulated futures market for trading derivatives linked to the crypto-asset, and

- robust and transparent pricing mechanisms for the crypto-asset are available, both throughout the trading day and to strike a NAV price.

As at October 2021, bitcoin (BTC) and ether (ETH) appear likely to satisfy all five factors identified above to determine appropriate underlying assets for an ETP. We expect the range of non-financial product crypto-assets that can satisfy these factors will expand over time.

For crypto-assets that are also financial products, licensed exchanges may determine that a particular crypto-asset is a permissible underlying asset on the basis that the relevant class of financial product is a permissible underlying asset. The licensed exchange must still be satisfied that the crypto-asset is an acceptable underlying asset for ETPs admitted to its market and is consistent with maintaining a fair, orderly and transparent market.

Pricing mechanisms which rely on a single crypto-asset spot market are to be avoided.

ASIC submission to Senate inquiry, July 2021

- ASIC makes it clear in INFO 225 that whether a crypto-asset is within or outside the financial regulatory framework depends on particular characteristics of the crypto-asset offering. This can cause uncertainty for investors and consumers as well as issuers and distributors of these assets. **It is a policy matter for the Australian Government whether or not there should be clarity on this issue.**
- All exchange-traded products (ETPs) are financial products and are regulated by ASIC under the *Corporations Act 2001* (Corporations Act). Exchange-traded funds (ETFs) and managed funds are registered managed investment schemes. Structured products are generally classified as securities or derivatives.
- The crypto-asset marketplace is technologically complex, online and global. These factors have resulted in a substantial increase in unscrupulous operators seeking to **defraud** consumers.
- From the beginning of 2021 to date, ASIC has received a significantly higher number of crypto-related **scam** reports, compared to previous years.

ASIC submission to Senate, 2014

49 ASIC … considers that a digital currency is not a facility through which a person makes a non-cash payment. Digital currencies do not afford the holder any rights to make payments using the digital currency or to redeem it for cash. The ability of a person to use a unit of digital currency for making a payment depends on other arrangements under which another party agrees to accept payment in that form. Accordingly, **ASIC considers that it is unlikely that a digital currency is a facility through which a person makes non-cash payments.** It follows that **digital currencies are themselves not financial products**. …

63   Digital currencies can be received into, held in and sent from virtual wallets. Wallet software is available to be downloaded online, either as the software designed as part of the digital currency network or from other entities that have designed different wallet software. **Whether any particular software will be a financial product will depend on its features**. …

65 ASIC understands that when a person uses wallet software to transfer digital currency to another person's address, the person initiating the transfer retains ultimate control. Once authorised, the transfer takes place without the assistance of intermediaries. **Wallet software that merely facilitates the direct movement of digital currencies from the transferor to the recipient does not involve the use of a non-cash payment facility**. As a result, wallet software with the features outlined above would not be a financial product or involve the provision of a financial service. …

"Digital currency" is not defined in the submission. It may be that the 2014 submission, is confined to Bitcoin style decentralised tokens and doesn't necessarily apply to tokens with an identifiable issuer.

Speeches…

"To support healthy innovation in the industry, there will be a **need for innovation in regulation and new rules**, such as the prudential treatment of crypto-assets under consideration by the Basel Committee on Banking Supervision,"

APRA Policy Priorities for 2022

ASIC Corporate Plan, 2021-25

The implications for consumers are potentially huge. It is almost an article of faith that no one should invest in something they don't understand. Who among us can say they really understand crypto-assets and cryptocurrencies? In my view **consumers should approach investing in crypto with great caution**. The maxim 'don't put all your eggs in one basket' comes to mind.

ASIC Chair Joe Longo, 22 Nov 2021

Where appropriate, we will take targeted enforcement action. We will focus on areas of greatest harm, including: › perpetrators of **egregious digital and other financial sector scams**

The adoption of crypto-assets by Australians seeking better investment yields continued to grow during the quarter. … Investor protection lay at the core of our actions and advice in this space. … [In H2 2021] we worked with domestic and international counterparts to consider regulatory responses in this fast-shifting landscape and **took the first steps towards regulating crypto-assets which underlie exchange-traded products**.

ASIC Chair Joe Longo, 3 Feb 2022

Crypto-assets cases of note

Some common themes/questions

- Characterisation of crypto-assets as property or otherwise
- Exchanges, smart contracts/electronic contracting, client assets
- ICOs and scams
  - Crypto-hacks/thefts
  - Defamation and ICOs
- Other
  - Crime and crypto: Sentencing considerations and crypto/dark web
  - Family law and valuation
  - Employment law
  - Tax

Ruscoe v Cryptopia Ltd (in liquidation) [2020] NZHC 728

- Large crypto-exchange based in NZ with around 1 million clients world-wide. Lost NZ$30 M in a hack, NZ$217 M in total assets remained. Went into voluntary liquidation. 500+ different coins offered at time of cessation.
- Liquidators sought opinion of the court whether the funds were held in trust for clients. This would affect priority of ordinary creditors vs clients.
- The four characteristics of "property" in *Ainsworth* met in this case: identifiable subject matter, identifiable by third parties; capable of assumption by third parties; some degree of permanence or stability.
- Held, there was an express trust over client balances in favour of the clients, on the basis that there was an express contractual term mentioning the funds held in trust; other contractual language about "your" coins; the client balances not shown on balance sheet of company.
- Each coin (not each wallet) treated as a separate trust pool. Some ETH investors might lose everything while others might lose nothing.

[120] I am satisfied that cryptocurrencies meet the standard criteria outlined by Lord Wilberforce to be considered a species of "property". They are a type of intangible property as a result of the combination of three interdependent features. They obtain their definition as a result of the public key recording the unit of currency. The control and stability necessary to ownership and for creating a market in the coins are provided by the other two features – the private key attached to the corresponding public key and the generation of a fresh private key upon a transfer of the relevant coin.

Gendall J

Characterisation of cryptocurrencies

- *Seribu Pty Ltd* [2020] AATA 1840; 111 ATR 882: Whether Bitcoin is a foreign currency under Div 775 of the Income Tax Assessment Act – decision of Commissioner of Taxation affirmed.

AAT Dep. Pres. McCabe

> [29] I have already pointed out the expression 'foreign currency' is defined in s 995-1 as "a currency other than an Australian currency". While the definition is expressed awkwardly, the meaning is clear enough: the reference to "an Australian currency" is plainly a reference to the unit of exchange established in the Currency Act, and the reference to "[an]other currency" must be interpreted in light of that comparator. It follows the "other currency" in question must be an official currency issued or recognised by a sovereign state.

- *Asz21 v Commissioner of Taxation* [2021] FCA 1304 – whether ETH is a "personal use asset" for CGT purposes.

- C.f *Skatteverket v. David Hedqvist* (ECJ, C-264/14, 22 October 2015): An exchange of Bitcoin for a traditional currency is a supply of services. The court (following the Advocate-General's opinion) held that an exchange of Bitcoin fell within the exemption in Article 135(1)(e) of the VAT Directive. **This exempts transactions 'concerning currency, bank notes and coins used as legal tender' from VAT.**

- *United States v. Faiella*, 39 F. Supp. 3d 544 (SD NY, 2014) - Bitcoin clearly qualifies as "money" or "funds" under plain meaning definitions in statute governing money transmission business. Bitcoin can be easily purchased in exchange for ordinary currency, acts as a denominator of value, and is used to conduct financial transactions.

- *See also Commissioner of the Australian Federal Police v Bigatton* [2020] NSWSC 245 – "money or money's worth"

Crypto and freezing orders/asset confiscation orders

ASIC v A One Multi Services Pty Ltd [2021] FCA 1297

ASIC v Dawson [2020] FCA 1144

ASIC v Remedy Housing Pty Ltd [2021] FCA 673

Commissioner of the Australian Federal Police v Bigatton [2020] NSWSC 245

Commissioner of the Australian Federal Police v Kogan [2019] NSWSC 1866

Noicos v Dawson [2019] FCA 2197

New South Wales Crime Commission v Ward [2019] NSWSC 140

- In all cases, orders were granted (normally *ex parte*) by way of freezing or confiscatory orders, over cryptocurrencies. Wording of orders is instructive and quite varied.

- There was very little argument reported on whether cryptocurrency was capable of being an asset or property; typically this was simply assumed.

- In *Noicos,* the Court was prepared to hold for the purposes of extending a Freezing Order that there was a prima facie case of a breach of s 12DA ASIC Act (m & d conduct) "in relation to financial services" for a failed **"cryptocurrency hedge fund"** named "Countinghouse global" where the investments appeared to have been lost.

- In *Bigatton*, the order given on the basis of a suspicion that an **unregistered managed investment scheme** was being carried out through the "BitConnect lending program", an investment vehicle that allowed investors to profit from BitConnect trading bot and volatility software. Accepted (for the purposes of the reasonable suspicion test" that Bitcoin could be "money or money's worth".

- In *Kogan*, an order requiring that a defendant provide information about passcodes and the like relating to cryptocurrency, albeit not on oath, was held authorised by s 39 of the POC Act (Cth) as "relevant to identifying, locating or quantifying **property**".

- *Hague v Cordiner (No. 2)* [2020] NSWDC 23 - A BTC Markets cryptocurrency account was considered a sufficiently secure asset to be used in a **security for costs** undertaking. Aspects of the undertaking were crafted to deal with BTC's volatility.

See also: *Australian Securities and Investments Commission v AGM Markets Pty Ltd (in liq) (No 3)* [2020] FCA 208 and (No 4) [2020] FCA 1499; 148 ACSR 511 – CFDs over assets including crypto – unlicensed investment advice - $75M in penalties

Quoine Pte Ltd v B2C2 Ltd [2020] SGCA(I) 02

- Crypto-asset exchange automatically matching buying and selling interest

- Was it entitled to reverse trades made automatically, far from market prices?

- Held, no mistake in the circumstances, the prices were as programmed, and the contract didn't provide leeway to reverse.

- Held also, in the circumstances no trust over client funds – the fact that client assets were held in separate account wasn't determinative. (c.f. result in *Ruscoe v Cryptopia Ltd*)

- Extended discussion of contracting by deterministic algorithms, both contract formation and also the application of the doctrine of mistake.

- A contract could emerge from the interaction of two deterministic algorithms.

  - *Software Solutions Partners Ltd, R (on the application of) v HM Customs & Excise* [2007] EWHC 971 and *Thornton v Shoe Lane Parking Ltd* [1971] 2 QB 163, followed and applied.

- Mistake

  - "[T]he relevant inquiry might be framed thus: when programming the algorithm, was the programmer doing so with actual or constructive knowledge of the fact that the relevant offer would only ever be accepted by a party operating under a mistake and was the programmer acting to take advantage of such a mistake?" (at [103])

  - "If at the point of programming, the programmer contemplated or ought to have contemplated that a mistake might arise on the part of a counterparty to a future contract and designed the algorithm to exploit such a mistake, then it does not matter for the purposes of establishing the requisite knowledge that the relevant mistake had occurred after the algorithm had been programmed." (at [104])

- Query whether the focus on the programmer (as opposed to the operator) is really apt. What if the organisation tailors or configures the program? What if there are multiple developers, or the program is open source? (see Chopra and White 2009)

Collapse of crypto platform a cautionary tale

The mysterious collapse of a cryptocurrency trading platform highlights the risks of the speculative and effectively unregulated currency.

James Frost

Financial services writer

Mar 1, 2021 – 12.01am

Twelve months after Melbourne based cryptocurrency platform ACX ceased operating and froze the accounts of its users, investors caught up in the debacle are none the wiser to what happened.

Around 200 investors are understood to have lost as much as $10 million in this little corner of the investment world's Wild West.

ACX has been banned for life by the peak industry body while the financial intelligence regulator AUSTRAC has revoked the digital currency license used by the platform.

Yet investors still have no visibility over a path to restitution or justice. Many of them believe they are victims of a well-planned scam and have given up hope of ever getting their money back.

ACX was a platform or "digital currency exchange" that allowed investors to hitch their wagon to the crypto trading craze by depositing money to buy Bitcoin and its many, many variants.

(L-R) Jim Chen, Sam Lee, Allan Guo in front of associates from Bitcoin Group in happier times. **Paul Jeffers**

ACX collapse (so far)

- *Liu v Blockchain Global Limited* [2021] VCC 798 – ex-wife of director Allan Guo recovered for breach of an agency contract. BGL had undertaken to gain her a placement of USD400K in the planned Telegram ICO. When the ICO was pulled due to SEC concerns, BGL obtained a refund of 75% of the placement fee (paid in BTC), but she never received any funds. BGL claimed Allan Lee, its ex-director, had defrauded it.
  - An argument that D should give an account of profits for the present Bitcoin value was rejected on the basis that:
    - no evidence of how the Bitcoin had been dealt with upon return
    - the remedy of an account of profits had not been pleaded
    - it would be a novel remedy as the contract between P and D excluded liability of D as a fiduciary.
    - it would require a further inquiry and the matter had been set down for trial on all issues.
  - An application to appeal was permanently stayed upon administrators being appointed

ACX collapse (so far)

- *Re Blockchain Global Limited (Admins Apptd)* [2021] VSC 762
  - Administrator seeking extension of time before second meeting of creditors on the basis inter alia of size of asset pool, complexity of claims against the company, and complexity of the assets (crypto-currencies).
  - 4 separate proceedings against the company, including one group proceeding in relation to approximately $10M of missing assets.
  - Extension of 3 months granted
  - Useful discussion of cryptocurrency wallets at [9]-[10]
- *Re Blockchain Tech Pty Ltd* [2021] VSC 640 – subpoena fight involving some ACX-related parties

Dr Jemma Green
@msjemmagreen

@elonmusk I am told you might be interested in us at @PowerLedger_io we do blockchain energy for democratisation of power & citizen utilies

10:53 PM · Sep 15, 2017 · Twitter for iPhone

The West Australian

Jemma Green wins $400,000 payout over articles blasting her Elon Musk guerrilla campaign and Power Ledger

Neale Prior | The West Australian
Thu, 23 December 2021 7:19PM | Comments |

Green v Fairfax Media Publications Pty Ltd [No 4] [2021] WASC 474

- Power Ledger was an energy blockchain trading platform.

- It raised A$34 in ICO and presales.

- POWR tokens could be earned by making social media posts which referred to Power Ledger.

- AFR articles and web posts implied this and other conduct including tweet amounted to market manipulation.

- Judgment found that AFR articles conveyed the imputations that:
  - Dr Green by her creation, promotion and operation of Power Ledger, defrauds the public and investors
  - Dr Green by her creation, promotion and operation of Power Ledger misleads the public and investors.

- The judge found DD had not made out the defences of justification or honest opinion.

- Damages of $400K, including aggravated damages, awarded.

- See also *Gluszak v Yeap [No 2]* [2021] WASC 283 - Plaintiff complained of being defamed by a series of posts – on Telegram and in Bitcoin Bytes – by the defendant to the effect that Invacio was a scam and the plaintiff was involved. Interlocutory only.

439 . The White Paper and other statements by Power Ledger are only misleading if in the circumstances what it said and didn't say was misleading. The defendants have led no evidence that investors or anyone else was actually misled. I am not satisfied that by saying the things it said in the favourable statements and not drawing attention to or emphasising the vulnerabilities, Power Ledger misled anyone.

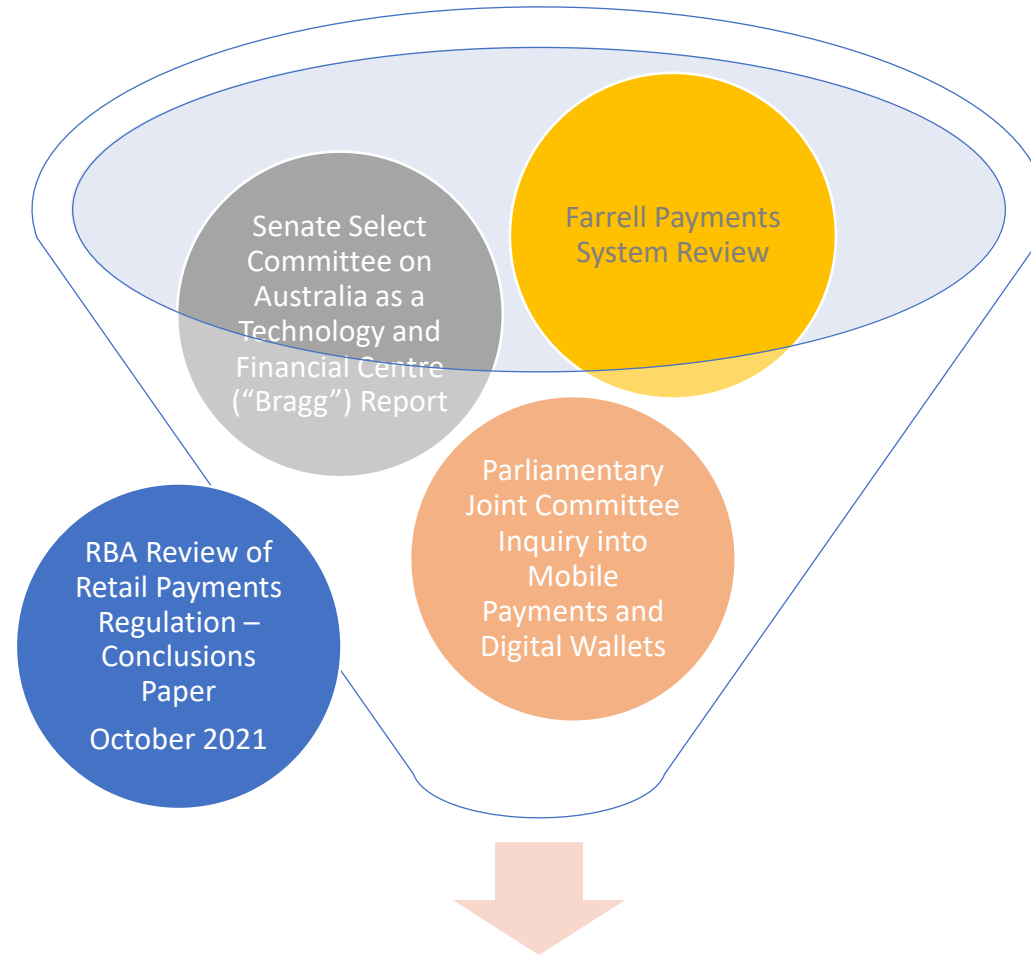Le Miere J

Crime and crypto

- Crypto/dark web aspects as a factor going to objective seriousness?
  - *Director of Public Prosecutions (Cth) v Lou* [2019] VCC 1399 – paedophile material possession & importation – fact of payment in cryptocurrency taken into account in sentencing.
  - *Hassan Ali Allami v Director of Public Prosecutions (Cth)* [2021] VSCA 42 – drug importation offences - Court had regard the use of the dark web and crypto currency in deciding there was no reasonable prospect that the Court would reduce the total effective sentence.
- Cf *R v Collopy* [2017] SASCFC 64 – drug importation and retailing - establishment of a dark web site called "AusVip"
  - 'The two appellants, in effect, were trafficking in a similar way, but using the darknet and bitcoins. Their method of trafficking was more secure and therefore difficult to detect, but the "business" itself was no different to others that come before the courts.' – Lovell J @ [72] – but -
  - I indicate that if this type of enterprise continues to be encountered in South Australia in the future, a heightened need for general deterrence may become apparent and lead to a significant increase in the length of prison sentences in cases of the present kind. – Peek J @ [3], others agreeing
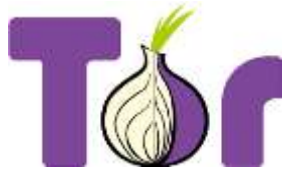
Other topics

- Employment law
  - *Matter Technology Ltd v Mrakas* [2018] NSWSC 507 - employment law dispute when CEO went ahead with ICO in defiance of Board and asserted IP over the company's project contrary to his employment contract
  - *Griffiths v Power Ledger* [2020] FCCA 2846 - claim of adverse action when ex CTO's job abolished after he complained that share plan was not what had been promised (employment law)

- Family law
  - *Powell & Christensen* [2020] FamCA 944 - cryptocurrency valuation – father's crypto holdings to be valued at purchase price (not lower) due to the lack of credible information on which Court could proceed to value them. In any case, there would be an add-back if they had depreciated since he had purchased them in breach of Orders.
  - *Lescosky and Durante* [2020] FamCAFC 179 - Husband transferred $180K into cryptocurrency in admitted breach of family court orders. Subsequently lost the cryptocurrency wallet and keys in a burglary. Fined $52K ($3K x 18 contraventions). Appeal dismissed; no breach of applicable sentencing principles (codified in the *Family Law Act* 1975)

- "Debanking" and discrimination:
  - *Isignthis Limited v ASX Limited* [2020] FCA 567; 143 ACSR 679
  - *Flynn v Australia and New Zealand Banking Group Limited* [2021] ACAT 50

- *NPP Australia Limited v Ripple Labs, (No 2)* [2020] FCA 1253 – dispute around misuse of A's "PayID" trade mark – restraining orders to prevent use of the mark in Australia without permission.

The Australian Government's plans for reforming the regulation of crypto-assets

Senate Select Committee on Australia as a Technology and Financial Centre ("Bragg") Report

Farrell Payments System Review

RBA Review of Retail Payments Regulation – Conclusions Paper

October 2021

Parliamentary Joint Committee Inquiry into Mobile Payments and Digital Wallets

Australian Government: "Transforming Australia's Payments System" Dec 2021

Key crypto-related changes foreshadowed

by mid-2022

- Determine the changes necessary to **modernise payments system legislation** to accommodate new and emerging payment systems, including consideration of buy now, pay later (BNPL) and **digital wallets**
- Complete consultation on a licensing framework for **Digital Currency Exchanges**
- Finalise consultation on a **custody or depository regime** for businesses that hold crypto assets on behalf of consumers
- CFR advice on **de-banking** causes and policy responses

by end-2022:

- Settle a **functionally based payments regulatory framework** "adopting graduated, risk-based regulatory requirements"
- Board of Taxation report **on taxation of digital transactions and assets**
- Govt **mapping exercise** of existing crypto currencies and tokens
- Examine (**decentralised autonomous organisations) DAOs** and how they can be incorporated into Australia's legal and financial regulatory frameworks
- Treasury and the RBA advice on the feasibility of a **retail CDBC** in Australia.

DAOs

- Put simply, DAOs are organisations governed by artificial intelligence in the form of smart contracts, using blockchain technology, to record transactions with and between their members and third parties. The rules of engagement are encoded in smart contracts. Governance tokens allow holders to vote on the way a platform works.

- DAOs have been around since 2015. One of the most famous DAO projects, called simply "The DAO" launched in 2016 on the Ethereum network and was hacked six weeks later. This hack ultimately resulted in the hard fork of Ethereum from Ethereum Classic. But despite the inauspicious beginnings, DAOs are the infrastructure behind the DeFi movement. The US SEC Release No. 81207 analyzed the application of securities laws to tokens issued by The DAO.

- Wyoming defines a DAO simply as a Wyoming limited liability company ("LLC") whose articles of organization contain a statement that the company is a DAO. Wy. Stat. § 17-31-104(a).

To paraphrase a concept familiar to corporate lawyers, to whom does ASIC turn to ascertain the directing mind and will of a DAO? It is not clear who is accountable if things go wrong, or don't go as intended or anticipated. Nor is it clear how a DAO itself can be held accountable in a court of law.

The policy challenge for traditional forms and methods of regulation is readily apparent. Legal analysis of how DAOs work is at an early stage, with many unanswered questions: what is the nature of a member's interest in a DAO? Is it like a share in a company or a unit in a managed investment fund?

ASIC Chair Joe Longo, 22 Nov 2021

The international dimension

Crypto Regulation World Map

Red: Cryptoassets generally prohibited
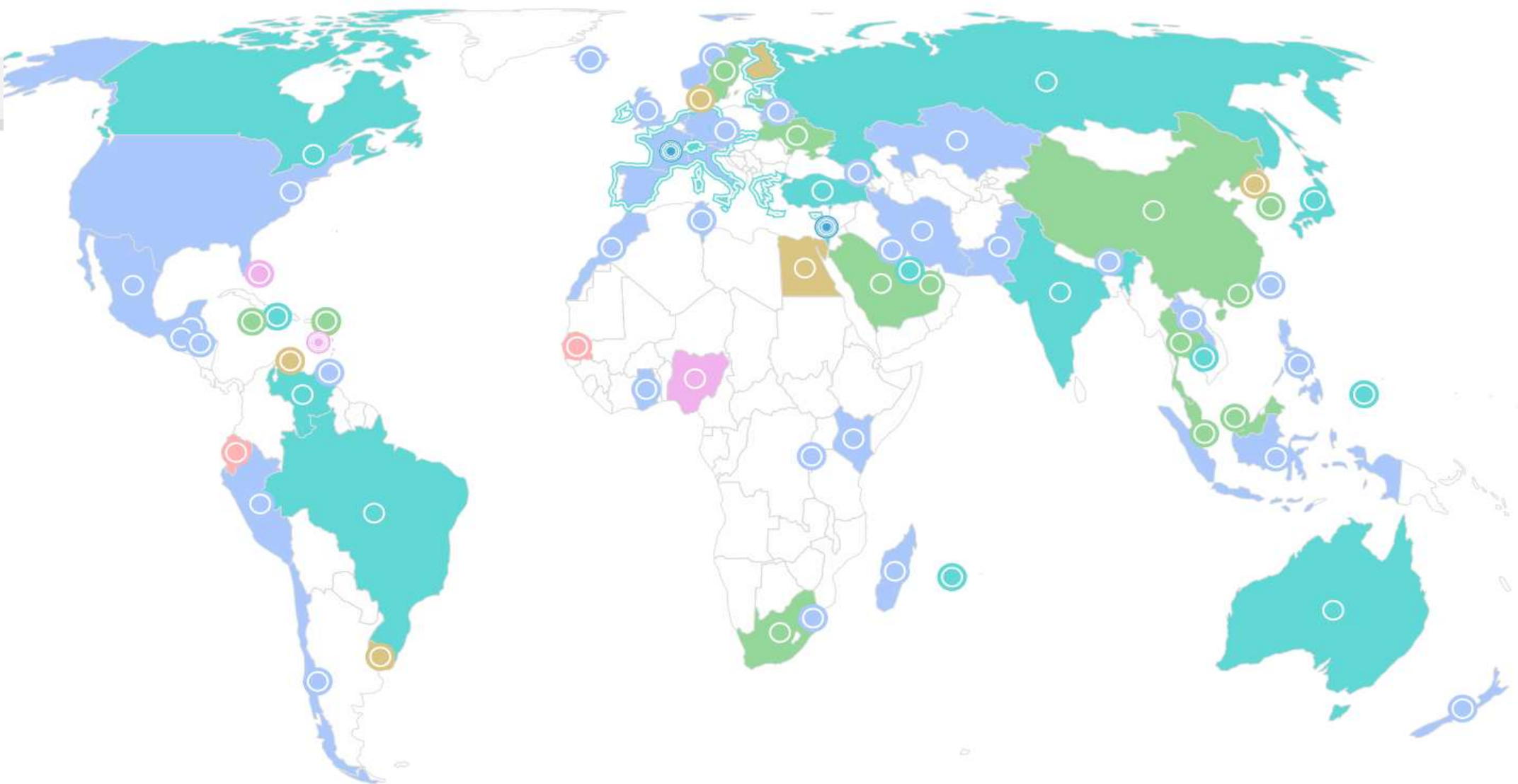**Green:** Cryptoassets are generally allowed
Yellow: Cryptoassets are restricted
White: Regulation pending

A World of Crypto Regulation at A Glance (elliptic.co)

Central bank digital currencies (CBDCs)

91 Countries / Currency Unions Tracked

Click to filter

Status

- 9 Launched
- 14 Pilot
- 17 Development
- 40 Research
- 7 Inactive
- 2 Canceled

Global standard-setters

Financial Stability Board

- Global stablecoins – October 2020 recommendations and follow-up (most recently Oct 2021)
- DeFi and crypto-assets a continuing focus of attention
- Ongoing vulnerabilties assessment

BIS Innovation Hub

- Multiple projects around Central Bank Digital Currencies and interoperability

Basel Committee for Banking Supervision

- Bank exposures to crypto-assets

IOSCO / CPMI

- Applicability of Principles for Financial Market Infrastructures to global stablecoin arrangements – consultation report Nov 2021
- DeFi Working Group
- Retail distribution and digitalization – Consultation Report Jan 2022

Financial Action Task Force (FATF)

- Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers Oct 2021
- Travel Rule

Regional/national authorities

EU

- Proposed Regulation on transfer of funds and certain crypto-assets, implementing the FATF 'travel rule' recommendation
- Markets in Crypto-Assets Act (MiCA) proposal, also proposed Digital Services Act and Digital Markets Act (and Digital Finance Strategy)

US

- PWGFM, FDIC and OCC joint report on stablecoins recommended Congress act (Nov 2021)
- Ongoing congressional hearings, no consensus as yet
- US Federal Reserve discussion paper on a possible digital currency (Jan 2022).

UK – HM Treasury and Financial Conduct Authority

- Proposals to proposal to bring qualifying crypto-assets within the scope of the Financial Promotion Order as controlled investment
- FCA proposed Rules on financial promotions and crypto-assets

Monetary Authority of Singapore

- The Monetary Authority of Singapore (MAS) guidelines giving effect to MAS' expectations that service providers should not promote digital payment token services to the general public in Singapore.

HK Govt

- Legislative Proposals to implement VASP regime in AML/CFT Regulation

Contact

Laurence F. White
Barrister

Owen Dixon Chambers West

Phone: +61 3 9225 6038
Clerk: Svenson Barristers | +61 3 9225 7333

www.vicbar.com.au/profile/8372

Liability limited by a scheme approved under professional standards legislation.

This presentation does not constitute legal advice.

No representation is made as to the accuracy of material cited or reproduced.

Annex – reference material

Select bibliography

- Auer, R, C Monnet and H S Shin (2021): "Permissioned distributed ledgers and the governance of money", *BIS Working Papers*, no 924.

- Aramonte, Sirio, Huang, Wenqian and Schrimpf, Andreas (Dec 2021), "DeFi risks and the decentralisation illusion", *BIS Quarterly Review*

- Beniiche, Abdeljalil (2020), "A Study of Blockchain Oracles"

- Buterin, Vitalik, (2013) "Ethereum White Paper: A Next Generation Smart Contract & Decentralized Application Platform"

- BCBS (Jun 2021), Consultative Document: Prudential treatment of cryptoasset exposures

- Carter, Nick (2022), "Decentralized Finance: The Future of Crypto and Open Finance?" in Jeng, Linda (ed.), *Open Banking*. OUP.

- Chopra, Samir and White, Laurence (2009), Artificial agents and the contracting problem: A solution via an agency analysis

- Fox, David and Green, Sarah (eds) (2019), *Cryptocurrencies in Public and Private Law* (OUP)

- Financial Stability Board (FSB) (Oct 2021), Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements: Progress Report on the implementation of the FSB High-Level Recommendations

- FSB (Oct 2020), Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements: Final Report and High-Level Recommendations

- FSB (May 2019), Crypto-assets: Work underway, regulatory approaches and potential gaps

- Jeng, Linda ed (2022), *Open Banking*, Oxford University Press

- President's Working Group on Financial Markets, Federal Deposit Insurance Commission and Office of the Comptroller of the Currency (Nov 2021), *Report on Stablecoins*

- The Law Society (2022) Blockchain: legal and regulatory guidance (second edition) (UK)

- The LawTech Delivery Panel UK Jurisdiction Taskforce (2019) Legal statement on cryptoassets and smart contracts (UK)

Some terminology

- **Digital asset:** a digital representation of value which can be used for payment or investment purposes or to access a good or service. This does not include digital representations of fiat currencies. (Financial Stability Board, 2020)

- **Crypto-assets**: private digital assets that depend primarily on cryptography and distributed ledger or similar technology. (FSB 2020)

- **Stablecoins:** crypto-asset that aims to maintain a stable value relative to a specified asset, or a pool or basket of assets. (FSB 2020)

- **Cryptography:** the conversion of data into private code using encryption algorithms, typically for transmission over a public network (FSB 2019).

- **Digital token:** any digital representation of an interest, which may be of value, a right to receive a benefit or perform specified functions or may not have a specified purpose or use (FSB 2019).

- **Non-fungible token (NFT):** cryptographic assets on a blockchain with unique identification codes and metadata that distinguish them from each other. Unlike cryptocurrencies, they cannot be traded or exchanged at equivalency.

- **Tokenisation:** the practice of issuing digital tokens (FSB 2019).

Sources: FSB 2019; FSB 2020; Investopedia

Some examples of crypto-assets

Cryptocurrencies

Decentralized Finance (DeFi) tokens

Non-fungible tokens (NFT)

ATO information on tax treatment of crypto

- General information at <u>Tax treatment of cryptocurrencies | Australian Taxation Office (ato.gov.au)</u>
- More information on tax treatment of bitcoin and cryptocurrencies like bitcoin can be found in the Taxation Determinations below:
- <u>TD 2014/25</u> *Income tax: is bitcoin a 'foreign currency' for the purposes of Division 775 of the Income Tax Assessment Act 1997 (ITAA 1997)?*
- <u>TD 2014/26</u> *Income tax: is bitcoin a CGT asset for the purposes of subsection 108-5(1) of the Income Tax Assessment Act 1997 (ITAA 1997)?*
- <u>TD 2014/27</u> *Income tax: is bitcoin trading stock for the purposes of subsection 70-10(1) of the Income Tax Assessment Act 1997 (ITAA 1997)?*
- <u>TD 2014/28</u> *Fringe benefits tax: is the provision of bitcoin by an employer to an employee in respect of their employment a property fringe benefit for the purposes of subsection 136(1) of the Fringe Benefits Tax Assessment Act 1986?*

Other related terms

- **Nodes:** typically participants (entities including individuals) in distributed ledger networks that record and share data across multiple data stores (or ledgers).

- **Operators:** typically a single administrative authority in charge of managing a cryptoasset arrangement, performing functions that may include issuing (putting into circulation) a centralised cryptoasset, establishing the rules for its use; maintaining a central payment ledger; and redeeming (withdraw from circulation) the cryptoasset.

- **Redeemers**: entities responsible for exchanging the cryptoasset for the traditional asset. It does not necessarily need to be the same as the entity responsible for organising the issuance of the cryptoasset.

- **Validators:** an entity that commits transactions blocks to the distributed ledger network.