



# BEPS 2.0 时代的数字经济税收

**Future #1: Blockchain and Tokenization (including Crypto)**

**未来#1 - 区块链以税务**

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Caveat: The business models and law in this area is constantly evolving and varies from country to country.

Thank you.

# Agenda 议程

## 1. Fundamental Challenge of Digitalisation to International Tax

数字化对国际税务的根本挑战

## 2. BEPS 1.0

税基侵蚀和利润转移 1.0

## 3. BEPS 2.0 and Beyond (Withholding Tax, Indirect Tax)

税基侵蚀和利润转移 2.0 – 双支柱，预扣税，间接税

## 4. **Future #1: Blockchain and Tokenization (including Crypto)**

**未来#1 - 区块链和税务**

## 5. **Future #2: Artificial Intelligence (including Chat GPT)**

**未来#2 - 人工智能和税务**

# **Legal Classification**

# Categories of Crypto Assets and Regulations (SG)

## Payment Tokens Cryptocurrency

A digital payment token refers to any cryptographically-secured digital representation of value that is used or intended to be used as a medium of exchange.

US Rev. Rul. 2019-24 defines virtual currency as:  
a “digital representation of value that functions as a medium of exchange, a unit of account, and/or a store of value other than a representation of the United States dollar or a foreign currency.”

**Regulated** under the Singapore SFA

## Utility Tokens as commodity

A utility token is a type of token that is used to access a particular product or service within a blockchain-based ecosystem. Unlike security tokens, which represent ownership in a company or asset, utility tokens do not provide any ownership or investment stake in a project  
Largely **unregulated** in Singapore as not recognised as legal tender  
AML and counter-terrorist-financing regulations relevant (e.g., Binance)

## Security Tokens Crypto as a Security

Security tokens are digital assets that represent transferred ownership rights or asset value to a blockchain token.

A security token is created using tokenization, where the investment criteria are selected. The information is entered into the blockchain, which then creates a token.

**Regulated** under the SFA

# Regulation in US

## Is a crypto asset a Security or a Commodity?

**Howey test: sets criteria for qualification as a Security**

1. an investment of money,
2. in a common enterprise,
3. with the expectation of profit and
4. to be derived from the efforts of others

**Securities**

**Regulated by SEC**

**Commodities**

**Regulated by CFTC**

**Cryptocurrency**

FinCEN and state regulators have jurisdiction over money transmission laws and regulations – thus a business such as a crypto exchange will need state money transmitter licences

# Regulation in US

## **Commodities or Securities?**

SEC accused RippleLabs and CEO of conducting a US\$1.3b unregistered securities offering by selling XRP, which Ripple's founders created in 2012. SEC also sued 100+ others, mostly settled

14 Jul 2023 – District Court Ruled: XRP sales on public cryptocurrency exchanges not offers of securities

But US\$728.9m of XRP sales to hedge funds and other sophisticated buyers amounted to unregistered sales of securities.

## **Exchanges Subject to Regulation?**

March - CFTC lawsuit alleging Binance offered illegal commodities trading products to U.S. residents.

31 Jul 2023 – SEC advised Coinbase to stop trading except Bitcoin as they are securities as Coinbase failed failed to register as broker.

# Sample Regulatory Stance (Jul 2023)

## **HK Allows Crypto Sales to Retail**

Hong Kong's Securities and Futures Commission (SFC) allows licensed virtual asset providers to serve retail investors, provided that operators assess understanding of the risks involved.

Proposed that stablecoins, which are crypto pegged to the value of other assets, "should not be admitted for retail trading" until the jurisdiction's planned regulations for the asset class kick in.

Ban crypto "gifts," designed to incentivize retail customers to invest – which likely includes airdrops

## **India Ban**

India's finance minister and Reserve Bank of India (virtual economic assets pose risk to stability to overall financial system) want to regulate the cryptocurrency sector. In 2020, India's Supreme Court struck down the country's central bank's ban on providing services to cryptocurrency traders.

Note: There are tax regulations despite regulatory uncertainty



# Non-Fungible Tokens (NFTs)

- » An NFT is a unique digital certificate, registered in the blockchain, that is used to record ownership of an asset such as an artwork or a collectible. e.g. Jpeg of child's drawing, Original artwork, NFT sneakers by Nike, NFT Gucci handbags, NFT metaverse real estate
- » NFT market generated \$24.7b worth of trading volume in 2022 across blockchain platforms and marketplaces

## Non-fungible Tokens (NFTs) outpaced the regulatory and legal framework

### Regulation

US

No direct state regulatory advice on NFTs; not clear whether they are securities or commodities

*Key to understanding the use and value of any NFT are the intellectual property rights granted, for example, the right to use, copy, display, and modify the content*

*NFTs likely to be target of cybercrime – NFT platforms will need robust controls to guard against such risks*

# **Accounting Classification**

## Accounting – Lack Specific Guidance for Crypto Assets

- As the crypto assets continue to evolve, each asset will need to be assessed **individually** to determine the appropriate accounting and valuation.
- The characteristics relevant in the assessment are:
  - **Economic features and contractual rights; and**
  - **Business model for holding asset**
    - Primary purpose of crypto asset
    - How the crypto asset derives its inherent value

# Crypto Assets – Holder's Accounting

- Wide range of assets with varying features, which continues to evolve...



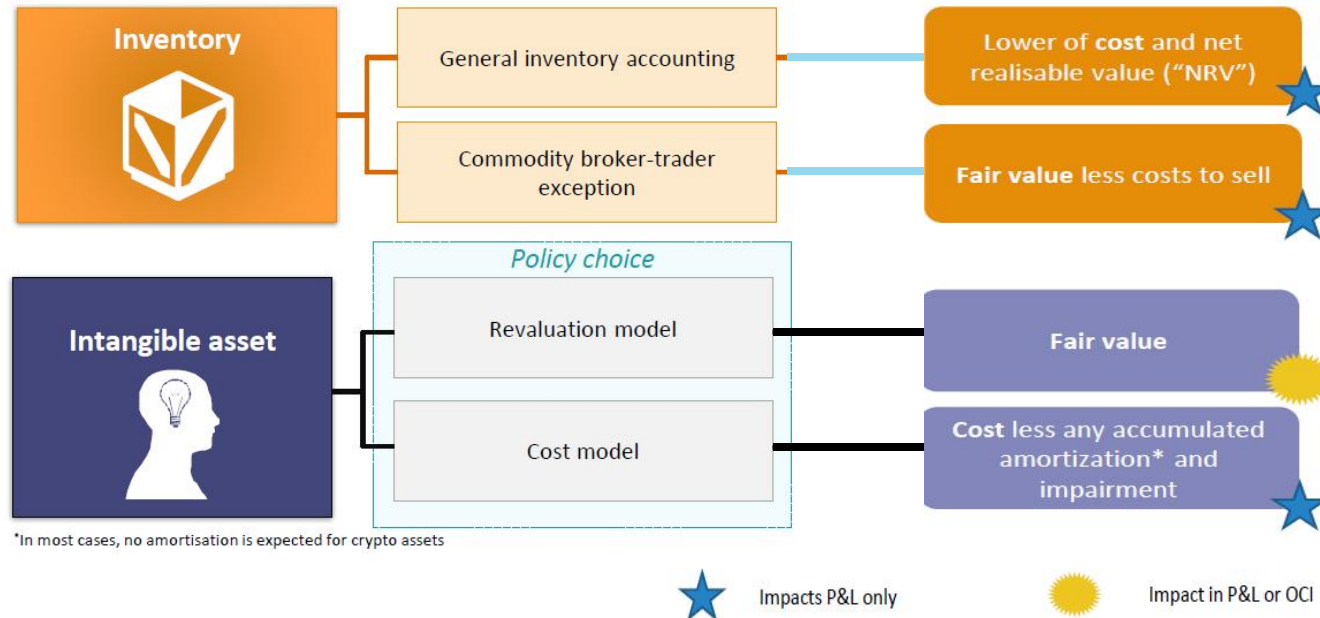
# Crypto Assets – Holder's Accounting

Waterfall of standards to consider:

		Possible* asset class
<b>Cash</b>	<ul style="list-style-type: none"> <li>• Legal tender or issued or backed by any government or state</li> <li>• Not capable of setting prices for goods and services directly; accepted to settle some transactions</li> </ul>	<div data-bbox="1634 419 1875 505"> <b>CBDC</b> (debatable)         </div>
<b>Financial Asset</b>	<ul style="list-style-type: none"> <li>• Potentially yes if:             <ul style="list-style-type: none"> <li>○ Contractual right to cash or other financial assets; or</li> <li>○ Provide any residual interest in assets of an entity</li> </ul> </li> </ul>	<div data-bbox="1634 562 1875 648"> <b>USDC, SAFT</b> </div>
<b>Prepayments</b>	<ul style="list-style-type: none"> <li>• Potentially yes if:             <ul style="list-style-type: none"> <li>○ Contractual right to goods/services</li> </ul> </li> </ul>	<div data-bbox="1634 705 1875 805"> <b>SRM, FTT, Utility tokens</b> (if own use)         </div>
<b>Inventory</b>	<ul style="list-style-type: none"> <li>• Potentially yes if:             <ul style="list-style-type: none"> <li>○ Actively traded and purchased for reselling in near future; or</li> <li>○ Held for sales in ordinary course of business</li> </ul> </li> </ul>	<div data-bbox="1634 848 1875 933"> <b>ETH, BTH, liquid tokens</b> </div>
<b>Intangible Assets</b>	<ul style="list-style-type: none"> <li>• Potentially yes if:             <ul style="list-style-type: none"> <li>○ All other criteria fails, and it is a non-physical resource controlled by entity for future economic benefits, identifiable and can be sold separately,</li> </ul> </li> </ul>	<div data-bbox="1634 991 1875 1076"> <b>NFTs, less liquid tokens</b> </div>

\* Subject to in-depth assessment of economic features and holder rights

# Crypto Assets – Holder's Accounting



- Valuation takes into consideration the following factors:
  - Availability of **active** trading markets;
  - Availability of **reasonably reliable** trading data; or
  - Any other indirect observable objective inputs (i.e. bilateral trades, broker quotes)

# Taxation

# Blockchain: Use Cases in Taxation

## Validation/Authentication Tracing/Auditability

### Examples:

- » **Shenzhen** – first to issue blockchain invoice with support from Tencent. Working with Ping An on single window for management of taxation for all types of taxpayers in the Guangdong-Hong Kong-Macao Greater Bay Area using blockchain, AI and other technologies
- » **Thailand** – tourist VAT refund
- » **South Africa** – customs/payment
- » **Maersk**: flowers from Nigeria to Netherlands – blockchain customs clearance
- » **Henkel**: integrated across trade/customs, VAT and transfer pricing



# Tax Domains Need to Adapt to Crypto-Assets

- » Capital Gains/Wealth Tax
- » Transactions, Sales Tax
- » Income Tax
  - Trading income vs capital gain
  - Services and other Fees
  - Withholding
- » Value Added Tax, Goods & Services Tax
- » Stamp Duty
- » Digital Service Tax

**Depends on mode of investment:** Initial Coin Offering, Direct, via Crypto Funds/staking

# Income Tax Focus is Mainly on Cryptocurrencies

No universal consensus on classification of tokens, a number of countries adopt 3 tier classification following financial regulations

- (1) Payment tokens:** Tokens whose intrinsic features are designed to serve as a general purpose store of value, medium of exchange, and/or unit of account. The value exists on its use as a means of payment or investment for peer-to-peer payments, which utilise a framework of internal protocols instead of a central party to verify and perform the transactions. These tokens are also typically referred to as cryptocurrency or virtual currency, as well as payment tokens or exchange tokens.
- (2) Utility or consumption tokens** Tokens that are inherently consumptive in nature, because their intrinsic features are designed to provide immediate or future access to:  
(1) a platform or technology typically DLT-based; or (2) a particular set of goods, services, or content (e.g., games, music, file storage).
- (3) Security tokens** Tokens whose intrinsic features are designed to serve as or represent financial assets such as “securities” and other financial instruments. These tokens represent debt or equity claims on the issuer or some derivative thereof, generating interest to the holder or promising a share in future earnings of the corporate issuer. Security tokens are also referred to as asset tokens or investment tokens.

Hybrid tokens – exhibit 2 or 3 of the characteristics above

**Tax guidance thus far mainly relating to Payment tokens**

# Taxing Cryptocurrency: Sample Across Countries

	Singapore	US	Swiss	Jersey	Australia	India	UK
<b>Character</b>	Payment Utility Security	Property, not currency	Private wealth	Recognised as separate asset class	Payment Utility Security	TBC	Exchange tokens
<b>Capital gains</b>	Nil	Short and Long-term	No capital gains if not trader or business. Varies by 26 canton	No	Yes	30% on gain	10%-20%
<b>Income Tax</b>	Yes if short term trading	Yes		Yes but friendly to foreign traders	Yes Incl. staking	TBC	If trading
<b>GST</b>	No for DPTs used for payments	No federal VAT		No for mining	No for purchase & sale	TBC	No for crypto-£
<b>Other taxes</b>						1% on transactions	

# Taxing Cryptocurrency: Sample Across Countries

- » **US:** Cryptocurrency is property for US Federal tax, not “currency”. Rules applicable to foreign currencies do not apply. Disposal = disposal of property. Short-term capital gains tax if held for short time, long-term capital gains if longer. Biden: own asset class, not property, not commodity.
- » **Canada:** Cryptocurrency treated like commodity. If gains treated as income, income tax. If gains capital in nature, capital gains
- » **Belgium, Italy:** Treat cryptocurrencies like fiat currencies for tax purposes.
- » **Netherlands:** Wealth rather than capital gains tax. If total assets including crypto exceeds threshold, 31% wealth tax.
- » **Germany:** Cryptocurrency viewed as a private asset and not as property, subject to individual Income Tax rather than a Capital Gains Tax. “Private disposal/sale” tax exempt after 1 year.
- » **UK:** No specific crypto tax. If gains treated as income, income tax. If gains capital in nature, capital gains. Rate (10%, 20%, 30% depends on size of gain). Consider for “money or money’s worth” for transfers may be subject to stamp duty. 2022 guidance for lending and staking activities.

## Taxing Cryptocurrency: Sample Across Countries

- » **Portugal:** Buying and selling of cryptocurrencies for fiat not subject to capital gains or VAT for individuals (cf EU position on VAT). Companies subject to capital gains.
- » **Switzerland:** Cryptocurrency not legal tender but private wealth asset akin to stocks and bonds. No capital gains if not self-employer trader or business, not even if you only use derivatives for hedging. Each of 26 cantons has its own legal definition so one canton may tax, another may not.
- » **Norway:** Tax as capital property.
- » **Jersey:** No GST on mining. Taxable presence of offshore manager in Jersey fund not onerous.
- » **Australia:** Sale & purchase exempt from GST. Staking taxable as ordinary income
- » **India:** 30% tax on gains on offset on losses
- » **China:** PBOC ban on crypto-trading
- » **Singapore:** Trading income – taxable, long-term investment – no capital gains. GST – limited exemption for payment tokens used for payment. Derivatives? Unclear. No guidance on staking.

# Cryptocurrency = Cash? Crypto to Cash, Crypto to Crypto, Crypto to Others

**Crypto-currency** – subset of Crypto-Assets. Bitcoin, Eth... Stable-coins: USDC, USDT... Central-bank digital currency (“CBDC”)

**Crypto for Cash** exchange: Q: Is the token = currency?

- » Yes (Swiss, Italy) - “payment tokens” such as bitcoin, Litecoin, and Zcash = similar to FX spot transactions e.g., buy or sell bitcoin for USD. Generally, not taxable event unless business transaction.
- » No - conversion into cash is a taxable exchange.

## **Crypto for Crypto**

- » If Property or commodity – character is one of exchange of 2 assets/property e.g., 1 token for another token.
- » Payment token for non-payment token (e.g., security token)?

## **Crypto for other property, goods or services**

- » Payment token for goods or services – just like paying with fiat currency
- » Non-payment token for goods or services?

## Taxable Events and Valuation

### ✓ Taxable events may include:

- » the sale of cryptocurrency for fiat currency
- » the exchange of one cryptocurrency for another
- » the purchase of a good or service with cryptocurrency
- » the receipt of cryptocurrency via mining, staking, fork, or airdrop
- » the payment or receipt of cryptocurrency as compensation
- » the receipt of cryptocurrency as trade or business income
- » the gifting of cryptocurrency (subject to gift tax)

### ✗ Non-taxable events may include:

- » the purchase of cryptocurrency with fiat currency
- » the donation of cryptocurrency to a charity
- » transferring cryptocurrency between one's own accounts or wallets
- » a soft fork

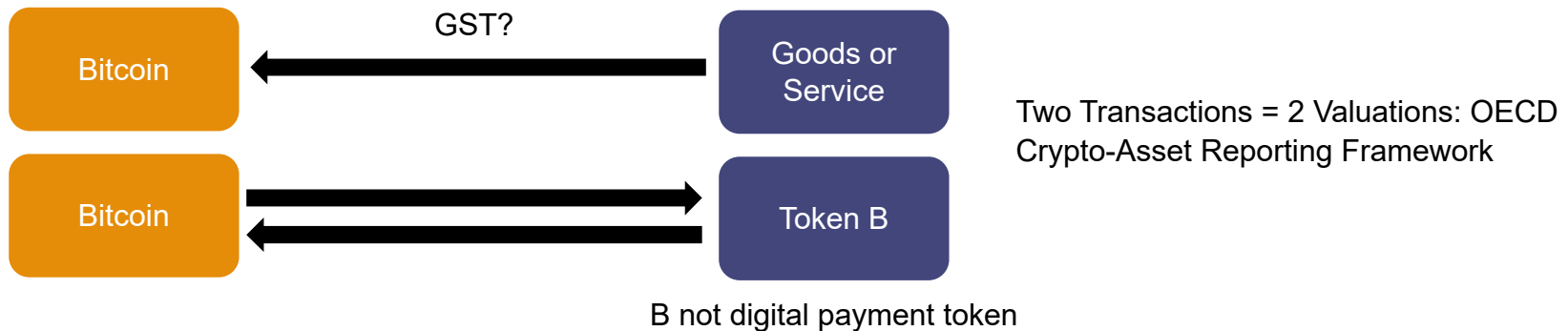
**Valuation:** Accounting vs Tax: Timing? FIFO/LIFO/blended?  
Book vs MTM (illiquid markets?)

# It Depends...

## Hybridity

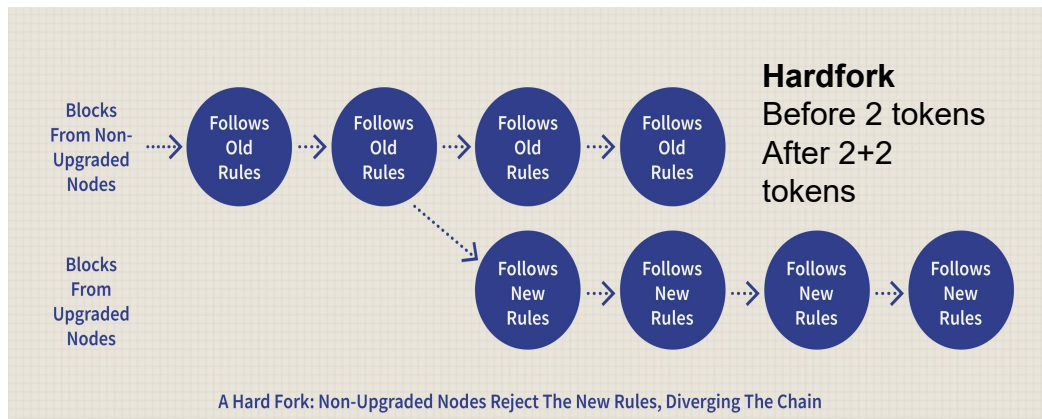
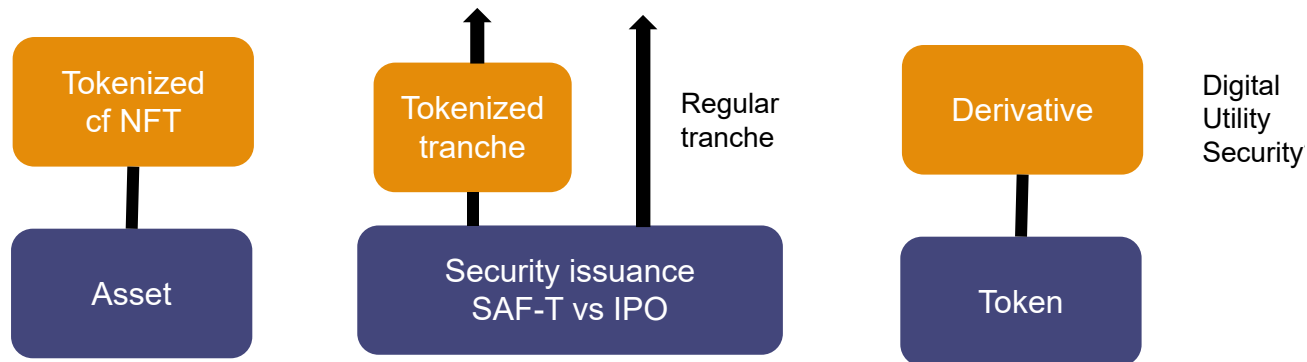


## One or Two Transactions?





# It Depends...

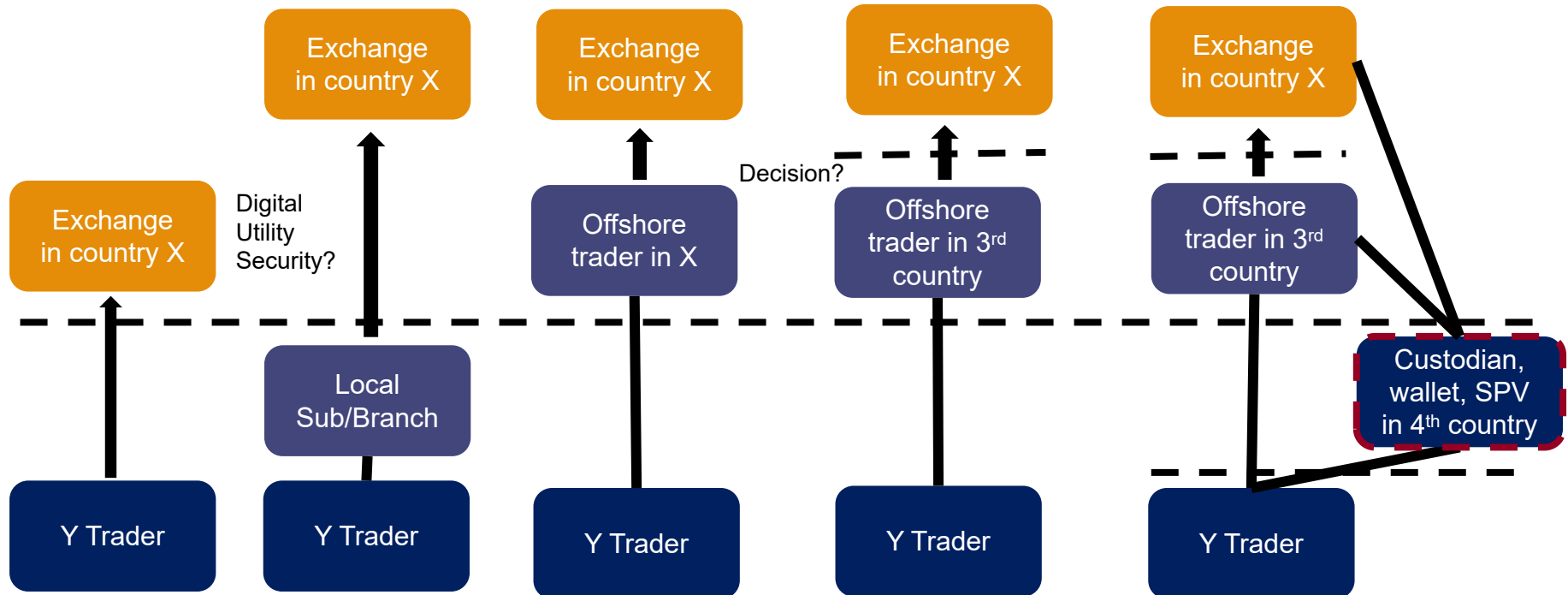


## Mining vs Staking Income



# Cross-Border Adds to Complication

De-centralised with (i) multiple jurisdictions involved (ii) multiple fee components



# Topical Issue – Recognition of Losses

Losses may result from

1. Failed issuance - tokens will become worthless.
2. Cryptocurrencies lose value or become worthless.
3. Lost private keys, thus unable to access their wallets.
4. Victim of hacking and currency owners may lose some or all of their cryptocurrency.

Q: Whether entitled to claim deductions for such unfortunate occurrences?

**US:** if a cryptocurrency or token loses value, an investor may recognise a capital loss upon the sale or exchange of such cryptocurrency or token at a loss. In addition, if a person's cryptocurrency or tokens are stolen through a hacking or otherwise, the victim may claim a loss for theft in the year the theft was discovered.

However, unlike deductions for theft, the loss of a private key is likely not deductible, because the holder may find it and so there is no closed transaction. It may be possible to claim a deductible loss if the taxpayer abandons his or her private key, but proving abandonment generally requires a clear intent to abandon the property and an overt act of abandonment, such as writing to the custodian of the private key (e.g., the exchange or wallet provider) that the taxpayer intends to abandon the private key.

Holders of cryptocurrency may not be able to claim a deduction for worthlessness. For U.S. tax purposes, holders may be able to claim a loss for securities that are capital assets and that become worthless during the taxable year. For this purpose, security means stock, rights to acquire stock, or a debt instrument with interest coupons or that is in registered form, so this deduction is may only be possible for securities tokens.

# Taxation – Recognition of Losses

**UK:** Where cryptocurrency is subject to capital gains tax and becomes negligible in value (typically 5% of its original value), a negligible value claim may be made to crystallise the loss without physically disposing of the asset. However, for tax purposes, the asset is treated as being disposed of and required for the negligible value.

The loss of a private key would not usually be seen as a disposal but where the loss is irretrievable or there is no alternative method of accessing the wallet then a negligible value claim may be eligible.

**France:** A capital loss upon the sale or exchange of such cryptocurrency may be, under certain conditions, tax deductible. Latent losses on cryptocurrency may also give rise to a tax-deductible provision for depreciation. For individuals, capital losses realised during a tax year can only be offset against gross capital gains of the same nature realised in the same tax year.

**Belgium:** Capital losses are recognised only to the extent that the cryptocurrency are allocated to the exercise of a professional activity in Belgium.

# Proof of Work vs Proof of Stake

2 main types of consensus mechanisms i.e. ways to validate transactions in a blockchain by using either

1. **Proof of work (“POW”)** - Each validating node in the network, has to use computing power to try to be the first one to solve a mathematical problem. It is a race between the validating nodes to “mine” the next block (i.e., validate the transaction and generate the code to add it to prior blocks). The winner is rewarded with a newly minted cryptoasset and the block’s associated transaction fees.
2. **Proof of stake (“POS”)** consensus mechanism: requires people to put or stake their reputation and capital at risk to help validate transactions. To become a validator under POS, one must stake a balance of the cryptoasset. Validators are then selected by the protocol to attest to the validity of the transactions in the block (called “forging” or “minting”). The selected validator receives additional tokens (known as “staking rewards”). The protocol imposes rules (known as “slashing rules”) that cause a validator to forfeit its stake if it validates a fraudulent transaction or engages in other behaviour that is detrimental to the protocol.

Fair market value of the cryptoassets received by the successful miner is includible in gross income. If the miner’s mining activity constitutes a trade or business, the mining rewards are subject to self employment tax. In addition, the miner may deduct fees and expenses (for example, electricity or home office) incurred in connection with the mining business, and claim depreciation or amortisation deductions with respect to computer equipment and software.

No guidance on staking but rewards represent an accession to wealth similar to mining rewards. But staking can be done via intermediaries and so is passive investment activity like fixed deposits, whereas mining is more like the provision of a service. So nature of the income may be dividend or other return on investment rather than compensation. If so, it may not be employment income.

# Initial Coin Offerings (ICOs)

- » If the token is tokenized security...
  - › Rights associated with token – debt or equity?
  - › Problem of hybrid tokens similar to those for hybrid securities
  - › GST/VAT – financial services?
- » If the token is a utility token...
  - › Prepayment for goods or services – treatment of vouchers?
- » If the token is a payment token...
  - › Similar to exchanging one currency for another?
  - › Remember that no cryptocurrencies currently satisfy definition of money, even if they are used as money
- » SG: Taxability of the ICO proceeds in the hands of the token issuer depends on the rights and functions of the tokens issued to the investors (e.g. payment, utility or security tokens)

# Contracts for the Pre-sale of Tokens

## Simple Agreement for Future Tokens (“SAFTs”)

To raise funds, selling preferred stock to initial investors may result in no return for the investors because blockchain networks and smart contracts are generally expected to be open source -- decentralised and autonomous from their creators. As a result, investment in blockchain technology often involves “pre-sales,” or early sales of tokens prior to their development.

SAFTs are used to pre-sell tokens before they are issued (or even ready to issue).

## SAFT Characteristics

- » Holder, in exchange for a price paid in fiat or cryptocurrency, has the right to receive a certain number of tokens, which are usually priced at a discount from the anticipated token offering price.
- » No dividend or voting rights or any right to receive interest.
- » If the token offering does not go forward, the SAFT provides that the holder may receive its purchase price back to the extent the company has assets remaining.
- » Intended tax effect (no IRS ruling yet): If tokens issued is regarded as pre-paid goods or services or property, not issuance of equity, then SAFTs provide a potential means to defer that income recognition until the token is issued. The intended tax treatment of SAFTs under U.S. tax law is as a prepaid forward contract. Essentially the transaction is held “open” and a taxable event occurs (and gain recognized) only when the contract is no longer executory and the property (in this case the token) is delivered. A Simple Agreement for Future Tokens or Equity (“SAFT-E”) entitles the holder to receive tokens in the event of a token issuance or of stock in the event of an equity issuance (or both). This is essentially a combination of the SAFT and the SAFE – it contains elements of equity and a forward sale of tokens.

# Smart Contracts

## Smart Contracts – No clear Tax treatment

Codify complex financial arrangements, previously only achieved between private parties. Secured debt obligations, which are based on contracts that are hundreds of pages long and customised for sophisticated financial parties are achieved with a few lines of code in the blockchain world.

### Examples

The MakerDAO contract allows counterparties to contribute ether to the contract, and receive DAI. This DAI is a U.S. dollar stablecoin that can then be used to transact. Upon returning the DAI, the ether is returned to the owner. Pledging the ether, much like mortgaging a house, should not generally result in a tax event. However, this is an oversimplification of the MakerDAO contract. The actual mechanics of the contract are extremely complex and the tax treatment is far from clear.

Yangon Stock Exchange is a stock exchange in Myanmar operating on the blockchain using smart contracts for settlement execution.

The Depository Trust & Clearing Corporation (“DTCC”) successfully traded credit default swaps on the blockchain using smart contracts created by Markit to carry out the economic terms for a security.

- » Share & Charge is a blockchain-based product that allows users to share charging stations for electric vehicles across a decentralised platform.
- » Populous facilitates invoice financing on the blockchain, making it easy for anyone to buy and sell outstanding invoices on the blockchain using smart contracts.



# AirDrops

An airdrop is a distribution of a cryptoasset, usually for free, to numerous wallet addresses. Airdrops are primarily implemented as a way of gaining attention and new followers, resulting in a larger user base and a wider disbursement of coins. Aim: to increase the network of the cryptoasset project.

Generally 2 types of airdrops:

1. wallet addresses are selected at random and cryptoasset will be deposited in the recipient's wallet.
2. involves marketing strategy whereby the recipient signs up to receive the airdrop via a bulletin board or social media, for example.

## Tax Treatment

**UK HMRC:** Income tax will not always apply to airdropped cryptoassets received in a personal capacity.

Income tax may not apply if they are received:

- » Without doing anything in return (for example, not related to any service or other conditions); or
- » Not as part of a trade or business involving cryptoassets or mining.

Airdrops that are provided in return for, or in expectation of, a service are subject to income tax either as miscellaneous income, or receipts of an existing trade.

The disposal of a cryptoasset received through an airdrop may result in a chargeable gain for capital gains tax, even if it is not chargeable to income tax when it is received. Where changes in value are brought into account as part of a computation of trade profits, income tax will take priority over capital gains tax.

# Forks

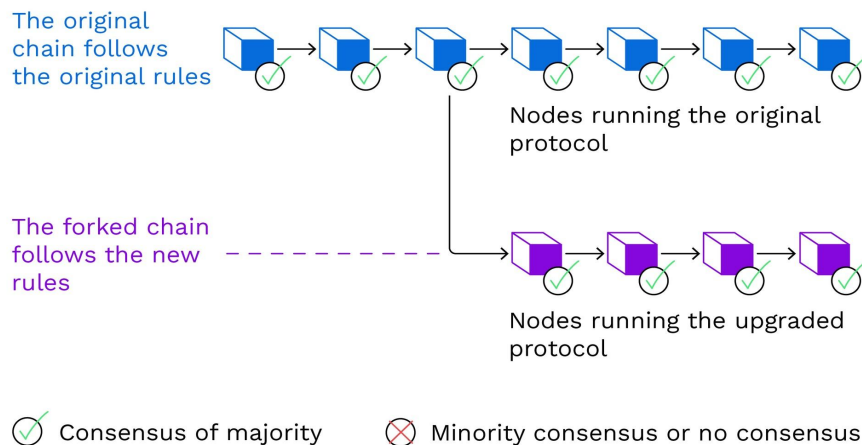
## Hard Forks

A hard fork is the splitting of a digital asset's blockchain in a backward incompatible way, resulting in two distinct digital assets. Hence, also referred to as a “chain split.” The code and data are replicated from the original digital asset to create a new one, adding backward incompatible changes. Once the hard fork occurs, the two digital assets are non-fungible with each other but share the pre-fork transaction and ledger history.

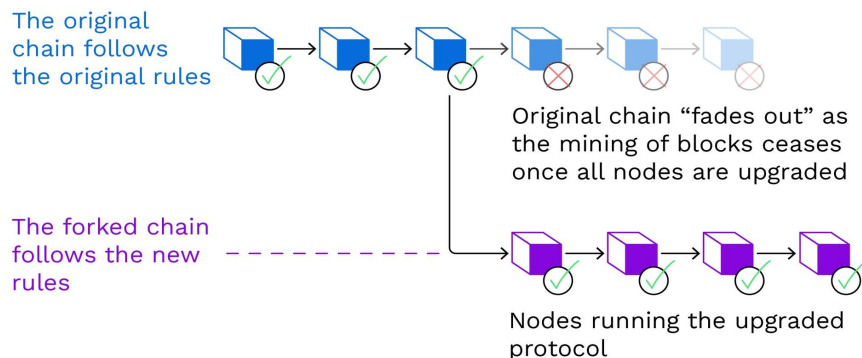
## Soft Forks

A soft fork can be viewed as a backward-compatible software update for a digital asset blockchain. Soft forks can refine the governance rules and functions of a digital asset blockchain but, unlike hard forks, are compatible with the previous blockchain. This means that a soft fork does not result in a split of the blockchain into two digital assets.

### What is a hard fork?



### What is a soft fork?



# Hard Forks

Hard forks occur for two key reasons:

1. When competing visions of a digital asset's future development fail to reach agreement or Contentious Hard Forks;
2. Unforeseen bugs or intentional fixes to system-critical issues or Non-Contentious Hard Forks.

e.g. Ethereum/ethereum classic contentious hard fork in July 2016 to return ether that was stolen during the DAO hack

**Q:** Does holder of a cryptocurrency that experiences a hard fork realise income? How much and when?

**US:** Revenue Ruling 2019-24,325 which provides guidance on the tax treatment of hard forks. The ruling concludes first that a taxpayer does not have gross income as a result of a hard fork of a cryptocurrency the taxpayer owns if the taxpayer does not receive units of a new cryptocurrency. Thus, if the taxpayer holds its cryptocurrency in a third party wallet that does not support the forked currency, the taxpayer would not have income. Similarly, a taxpayer should not have income as a result of a noncontentious hard fork, because it does not result in the taxpayer receiving units of a new cryptocurrency.

However, a taxpayer does have ordinary income as a result of an airdrop of a new cryptocurrency following a hard fork if the taxpayer receives units of new cryptocurrency. Such income arises once the taxpayer has dominion and control over the forked currency, which the IRS concludes is at the time it is recorded on the distributed ledger, because the taxpayer immediately has the ability to dispose of forked cryptocurrency. However, as discussed above, the ability to dispose of the forked cryptocurrency is not automatic, and market discovery can take a little while. Thus, the price at the time the fork is recorded on the ledger may be much different than it ends up being after market discovery.

# Indirect Tax

## Challenges

- » Crypto asset transactions are pseudonymous, meaning users operate through private keys and do not provide their contact details during the transaction. Hard to determine user locations as businesses do not collect and store geolocation markers usually collected for VAT purposes (e.g., IP address, billing address, bank details, etc.).
- » Q: what is character of transaction for appropriate VAT treatment? Transfer of goods, service, or an intangible, parties to the transaction, and the consideration involved (crypto-crypto)

ECJ: buying and selling Bitcoin is exempt from VAT. Services of a Bitcoin exchange in exchanging Bitcoin for a traditional currency is exempt from VAT on the basis of the 'currency' exemption (Skatteverket v David Hedqvist Case C-264/14). Singapore, Ireland, UK: Cryptocurrency used for payment exempt or not a supply

Cf: Indonesia imposes tax and VAT on crypto income and purchases at 0.1%, Costa Rica – all crypto transactions taxable

# Indirect Tax

## **Mining an economic activity for VAT purpose?**

- » Ireland: no
- » Netherlands, EU VAT committee: yes (validation, verification, and mining were regarded as being inseparably intertwined and indispensable to bitcoin trading).  
Q: Contribution of a hash rate (i.e., computing power) to a mining pool in exchange for token a barter supply?
- » Canada: mining out of VAT scope

## **NFTs (legal right to token/token as asset or underlying use & enjoyment?)**

- » Depends on bundle of rights conveyed: Tokens which give access to underlying intangibles, membership interests (fans get access), economically akin to shares in a company or actually convey ownership of a physical or digital asset
- » Little guidance. Spain ruling (2022): sale of NFTs granting the right to digital pictures is a digital service for VAT purposes.

# Other Taxes

## 1. Stamp Duty

If the cryptoasset is treated as a property or security, a stamp tax could be applicable. Stamp duty is a tax that is levied on documents, with the potential to also apply to smart contracts. Smart contracts may include land registries (e.g. Estonia) or mortgages.

**U.K:** If exchange tokens are consideration in “money or money’s worth” for transfers, the stamp duty or stamp duty reserve tax could be applicable on a case-by-case basis depending on the characteristics of the token.

Purchases of “stock or marketable securities” and/or “chargeable securities” would be subject to a stamp duty reserve tax if there is consideration in “money or money’s worth.”

**Switzerland:** Companies that are incorporated in Switzerland are subject to the securities issuance stamp tax.

**2. Wealth Tax** – Switzerland has net wealth tax on the gross global assets (including rights with a cash value but excluding real estate and permanent establishments abroad) of taxpayers within that cantonal region. Cryptoassets treated like foreign currency.

**3. Estate and Gift Tax** – US where crypto assets are treated as property. Potential complications of ascribing ownership of crypto assets to individuals or identifying situs of crypto assets.

**4. Charitable Donation** – Issues of whether deductible (IRS- Yes) and value at the time of donation.

# Still Evolving...

	<b>Regulatory framework</b>	<b>Legal tender/illegal</b>	<b>Classification for tax purposes</b>	<b>Tax implications</b>
U.S.	No centralized framework	Not legal tender	Property (capital asset)	Taxed as capital gains; rate varies from 10–37%
Canada	Regulated under securities law	Not legal tender	Commodity/security	Transfer of crypto attracts capital gains tax
U.K.	No specific regulatory framework	Not legal tender	Property (classified as "tokens" in taskforce report)	Taxed as capital gains
Japan	No specific regulatory framework	Legal tender	Defined as "crypto asset" (under Payment Services Act)	Gains categorized under "miscellaneous income"; rate varies from 5–45%
Australia	No, but government planning to establish one soon	Not legal tender	Asset	Taxed under capital gains/income tax, depending upon circumstances
Singapore	Not at present, but currently in progress	Not legal tender	Capital asset	No tax, as there is no capital gains tax in the state
South Korea	No specific regulatory framework	Not legal tender; however, exchanges are monitored	Undefined	No tax; crypto not considered to be a currency or a financial asset
China	Yes	Not legal tender; even exchange/trading is banned	"property"	Treated as property transfer income
India	No; but regulations are expected soon	Not legal tender	Capital asset	Gain arising on transfer attracts capital gains tax
EU	Yes, see "Markets in Crypto-Assets Regulation"	Legal tender (subject to country specific stance)	Regulation is inclusive of 27 definitions of crypto assets, each with a distinctive characteristic	Varies from country to country

# US Senate Finance consultation to address uncertainties Jul 2023

## **Marking-to-Market for Traders and Dealers (IRC Section 475)**

Should traders of digital assets be permitted to mark to market? Why?

Should dealers of digital assets be permitted or required to mark to market? Why?

Should the answer depend on the type of digital asset? How should digital assets be determined to be actively traded (under IRC Section 475(e)(2)(A))?

## **Trading Safe Harbor (IRC Section 864(b)(2))**

When should the policies behind the trading safe harbor (of encouraging foreign investment in U.S. investment assets) apply to digital assets? If those policies should apply to (at least some) digital assets, should digital assets fall under IRC Section 864(b)(2)(A) (trading safe harbor for securities), IRC Section 864(b)(2)(B) (trading safe harbor for commodities), or should the answer depend on the regulatory status of the specific digital asset? Why?

Another possibility is that a new, separate trading safe harbor could apply to digital assets. In that case, should the additional limitation on commodities eligible for the trading safe harbor apply? Why?

To the extent that the additional limitation on commodities for the trading safe harbor applies, how should the terms “an organized commodity exchange” and “transactions of a kind customarily consummated” (in IRC Section 864(b)(2)(B)(iii)) be interpreted in the context of different kinds of digital asset exchanges?



# US Senate Finance consultation to address uncertainties Jul 2023

## **Treatment of Loans of Digital Assets (IRC Section 1058)**

Please describe the different types of digital asset loans.

If IRC Section 1058 expressly applied to digital assets, would companies allowing customers to lend digital assets institute a standard loan agreement to comply with the requirements of that section? What challenges would compliance present?

Should IRC Section 1058 include all digital assets or only a subset of digital assets? Why?

If a digital asset is lent to a third party and the digital asset incurs a hard fork, protocol change, or air drop during the term of the loan, is it more appropriate for there to be a recognition of income for the borrower upon such transaction or subsequently by the lender when the asset is returned? Please explain.

Are there any other transactions similar to a hard fork, protocol change, or air drop that may occur during the term of a loan? If so, please explain whether it is more appropriate for the borrower or the lender to recognize income upon such transaction.

# US Senate Finance consultation to address uncertainties Jul 2023

## **Wash Sales (IRC Section 1091)**

In what situations do taxpayers take the position that economic substance (IRC Section 7701(o)) applies to wash sales with regards to digital assets?

Are there existing best practices for reporting transactions in digital assets that are economically equivalent to wash sales?

Should IRC Section 1091 apply to digital assets? Why or why not?

Should IRC Section 1091 apply to other assets beyond digital assets? If so, what assets and why or why not?

## **Constructive Sales (IRC Section 1259)**

In what situations do taxpayers take the position that economic substance (IRC Section 7701(o)) applies to constructive sales with regards to digital assets?

Are there existing best practices for reporting transactions in digital assets that are economically equivalent to constructive sales?

Should IRC Section 1259 apply to digital assets? Why?

Should IRC Section 1259 apply to other assets beyond digital assets? If so, what assets and why?

# US Senate Finance consultation to address uncertainties Jul 2023

## **Timing and Source of Income Earned from Staking and Mining**

Please describe the various types of rewards provided for mining and staking.

How should returns and rewards received for validating (mining, staking, etc) be treated for tax purposes? Why? Should different validation mechanisms be treated differently? Why?

Should the character and timing of income from mining and staking be the same? Why or why not?

What factors should be most important when determining when an individual is participating in mining in the trade or business of mining?

What factors should be most important when determining when an individual is participating in staking in the trade or business of staking?

Please describe examples of the arrangements for those participating in staking pool protocols.

Please describe the appropriate treatment for the various types of income and rewards individuals staking for others or in a pool receive.

What is the proper source of staking rewards? Why?

Please provide feedback on the Biden Administration's proposal to impose an excise tax on mining.

# US Senate Finance consultation to address uncertainties Jul 2023

## **Nonfunctional Currency (IRC Section 988(e))**

Should a de minimis nonrecognition rule like the rule in IRC Section 988(e) apply to digital assets? Why? What threshold is appropriate and why?

Are there existing best practices that would prevent taxpayers from avoiding tax obligations if a nonrecognition rule were to apply? What reporting regime would help taxpayers comply?

FATCA and FBAR Reporting (IRC Sections 6038D, 1471-1474, 6050I, and 31 U.S.C. Section 5311 et seq.)

When do taxpayers report digital assets or digital asset transactions on FATCA forms (e.g. Form 8938), FBAR FinCEN Form 114, and/or Form 8300? If taxpayers report some categories and not others, please explain and identify which categories of digital assets are reported and not reported with respect to each of these forms.

Should FATCA, FBAR, and/or 8300 reporting requirements be clarified to eliminate ambiguity about whether they apply to all, and/or some categories of, digital assets? Why?

Given the policies behind FBAR and FATCA, should digital assets be more integrated into those reporting regimes? Are there barriers to doing so? What are they?

How do stakeholders consider wallet custody when determining compliance requirements with FATCA, FBAR, and Form 8300? Please provide examples of wallet custody arrangements and identify which types of arrangements FATCA, FBAR, and/or Form 8300 reporting requirements should or should not apply to.

# US Senate Finance consultation to address uncertainties Jul 2023

## **Valuation and Substantiation (IRC Section 170)**

Digital assets do not currently qualify for the IRC Section 170(f)(11) exception for assets that have a readily available valuation on an exchange. Should the substantiation rules be modified to account for digital assets? If so, in what ways and for which types of digital assets? More specifically, would something different need to be done for those publicly traded digital assets?

What are the characteristics of an exchange and the digital asset for which this exemption would appropriately apply and why?

## Transparency – Crypto Asset Reporting Framework & DAC 8

New tax transparency framework for the reporting and automatic exchange of information in respect of crypto-assets and expand the scope of the Common Reporting Standard (CRS) to cover digital assets and plug gap in CRS (crypto-assets go unreported as they are owned by non-financial institution individuals through cold-wallets or via crypto-asset exchanges that do not have the CRS reporting obligations).

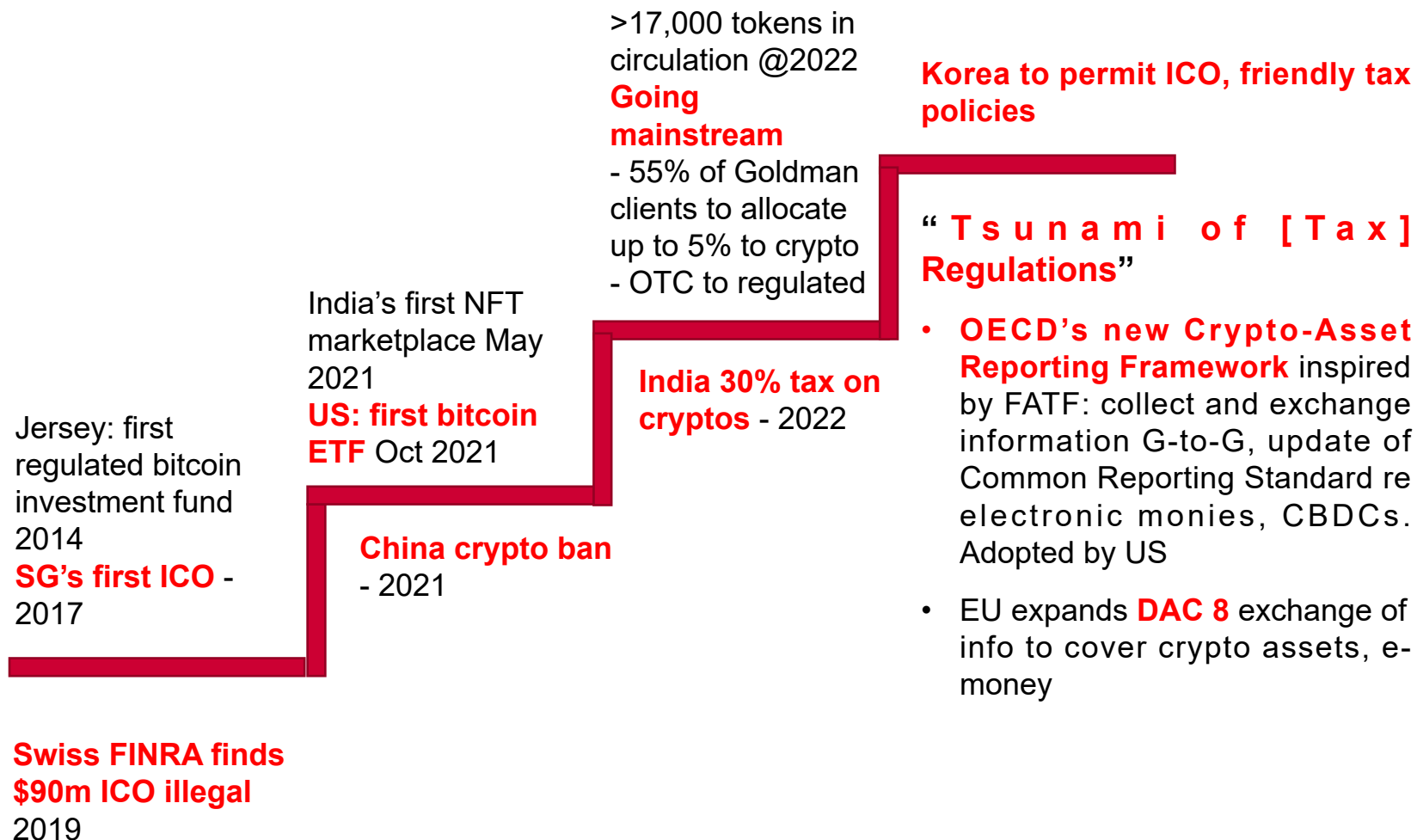
- » **Reportable Crypto-Assets:** use of cryptographically secured distributed ledger technology or similar technology and targets the assets that can be held and transferred in a decentralised manner, without the intervention of traditional financial intermediaries which includes stablecoins, NFTs of Central Bank Digital Currencies, Specified Electronic Money Products are within the CRS rather than the CARF.
- » **Entities** required to report: intermediaries (eg, crypto-assets exchanges, brokers and dealers in crypto-assets, wallet providers)
- » **Reportable transactions:** (i) crypto-assets to fiat exchange; (ii) crypto to crypto; (iii) crypto-assets in consideration of goods or services (iv) transfers of crypto-assets (even with no knowledge of consideration paid or received)

## Transparency – Crypto Asset Reporting Framework (DAC 8)

- » **What to Report:** gross sale proceeds (net of transaction fees) together with the fair market value of the transactions; and to enhance the usability of the data. Reporting intermediaries required to categorise the transactions into different transfer types (e.g. airdrops, loans) where applicable.
- » **Due diligence:** Intermediaries required to carry out due diligence procedures on their customers, building upon current CRS due diligence rules.
- » **CRS updated:** Widen “financial asset” to capture digital financial products (e-money products, digital fiat currency issued by a central bank, digital representations of a single fiat currency).
  - › Depositary entities expanded to include digital financial products providers.
  - › Derivatives expanded to derivative contracts referencing crypto-assets
  - › Investment entities to include those investing in crypto-assets
  - › Expansion of reporting requirements and due diligence procedures

**Future:** Bilateral or multilateral competent authorities for exchange of CARF information

# Trends





# Future: Metaverse

## » Gaming

- › *Axie Infinity*: players buy, train and breed Pokemon-like creatures that are themselves Ethereum NFTs
- › Players can sell the creatures for a unique cryptocurrency. \$30 m worth of Ether transfers a day in 2021.
- › Full time job for players in Philippines, Brazil, Venezuela



## » Virtual Land

## » Metaverse shops (Taobao Metaverse Mall)

## » Metaverse Concerts



## Example of Metaverse challenge

German Federal Tax Court (May22) rental of virtual land in Second Life was irrelevant for tax purposes on the basis that the activity took place in a virtual environment and the value of the virtual land was limited to a specific virtual space. But court held a taxable transaction took place when virtual currencies earned from renting the virtual land were exchanged for US dollars. But, since the exchange took place over the taxpayer's currency exchange platform, which is established in the US, the court decided the transaction was not subject to German tax.

Place of Supply or consumption unclear

Depending on when the exchange of “real world” currency is made for “virtual assets and or currencies” the transaction could qualify as a multi-purpose voucher, a single purpose voucher, or simply an infusion of in-game cash in an e-wallet. This classification may trigger different place and time of supply rules for the transaction. But metaverse does not recognize current real-life borders, meaning users can be in any given jurisdiction while accessing the metaverse.

## Takeaways

### Fast Evolving; Rules Not Internationally Co-ordinated

- Do not assume tax will follow (i) Regulatory classification; (ii) Accounting, whereas changes in the latter will impact tax treatment
- Uncertainty: Token by token, transaction by transaction assessment
- Compliance risks not just tax, increasing linkage between tax and regulatory transparency/disclosure
- When there is no guidance, analogise with similar conventional or traditional product or transaction