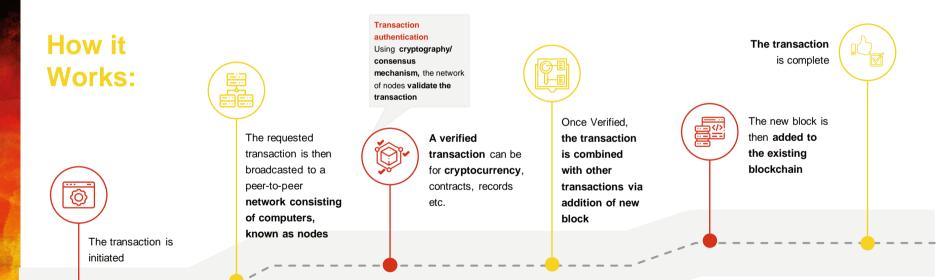




#### **Blockchain**

Blockchain is a <u>shared</u>, <u>decentralised and immutable ledger</u> of all transactions across a <u>peer-to-peer</u> <u>network</u>.



## Cryptocurrency

'A digital or virtual currency secured by cryptography and based on a network that is distributed across a large number of computers'\*

- Investopedia\*







The transaction is initiated

The transaction is bundled into a block. The block is broadcasted to all nodes of a peer-to-peer network

Nodes attempt to **validate**the transactions using
algorithms (Proof of Work /
Proof of Stake))

# HOW CRYPTO TRANSACTIONS

**WORKS?** 







The transaction is verified Once validated, the signed block is **broadcasted** to the other network nodes, which then accepts it. The block is added to the blockchain

Validated transactions are added to the **blockchain network** 

Modified diagram, Primary source: Statista Digital Market Outlook 2022, Digital Economy Compass (2022) Statista

#### Crypto Mining (Proof of Work)

Crypto mining vs. staking?

Mining capability - Depends on **computational power** 

Block reward - First miner receives **block reward** 

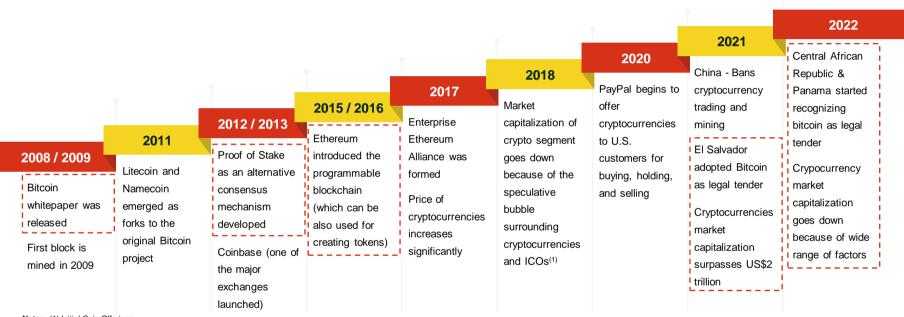
#### Crypto Staking (Proof of Stake)

Validation capacity Dependent on the **stake in the network** 

No block reward - Validator earns transaction fees

Modified diagram, source : Digital Economy Compass (2022) Statista

## Timelines of some crypto segment events

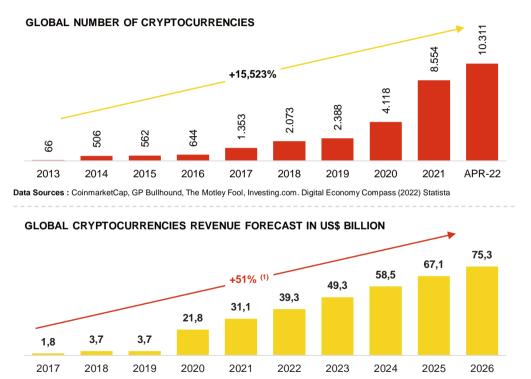


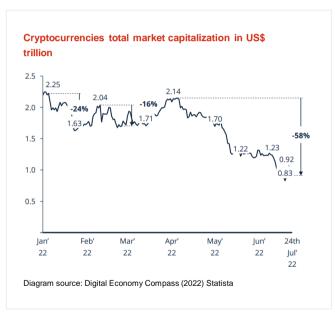
Notes: (1) Initial Coin Offerings

Data Source: Company information, VentureBeat, Business Insider, Enterprise Ethereum Alliance, Salvadoran Legislative Assembly, BBC, Reuters, Euronews, Digital Economy Compass (2022) Statista

Some of the cryptocurrencies:	Bitcoin	Dogecoin	Cardano	Ether
	Polkadot	Ripple	Solana	etc.

## Some statistics around cryptocurrencies





Data Sources: Statista Digital Market Outlook 2022, CoinGecko, BitinfoChar, Digital Economy Compass (2022) Statista

#### Virtual currencies and taxes

- No internationally agreed standard definition of cryptoassets
- No standard taxonomy of the different types of assets that comprise crypto-assets
- For classification purposes, one may consider to look also at the economic purpose, the rights and liabilities associated with the token, and the way the token derives its inherent value
- Broadly crypto-assets can be classified into the following categories: payment tokens, utility tokens, or security tokens. Accounting and tax classification will change depending on the nature of token

#### TYPES OF TOKENS

- Payment tokens: Usable as a means of exchange for goods or services and also as a store of value and unit of measurement. Ex. Bitcoin
- **Security (or Asset and Financial) tokens:** Tradeable assets that are held for investment purposes. Ex. BCAP
- **Utility (or Consumer) tokens:** Facilitate the exchange of or access to specific goods or services (like license to allow the holder access to a particular service). Ex. Storj

#### Virtual currencies for tax purposes – Select country practices

Intangible assets other than goodwill	Financial instrument or asset	Commodity or virtual commodity	Legal tender	Legal payment method
<ul> <li>Australia</li> <li>France</li> <li>Chile</li> <li>Czech Republic</li> <li>Luxembourg</li> <li>Nigeria</li> <li>Spain</li> <li>Sweden</li> <li>Switzerland**</li> <li>The United Kingdom</li> </ul>	<ul> <li>Argentina *</li> <li>Brazil</li> <li>Croatia,</li> <li>Denmark</li> <li>Israel</li> <li>Japan</li> <li>Slovak Republic</li> <li>South Africa</li> </ul>	<ul><li>Austria</li><li>Canada</li><li>China</li><li>Indonesia</li></ul>	<ul><li>El Salvador</li><li>Panama</li><li>Central African Republic</li></ul>	• Japan

Modified diagram and content, Source: OECD (2020), Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues, OECD, Paris. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emergingtax-policy issues.htm

<sup>\*\*</sup> Argentina: For income tax purposes, virtual currencies are mentioned along with some financial instruments or assets even though there is no clear definition of virtual currencies | \*\* Switzerland: Companies trading in virtual currencies account for it as inventories...

#### Virtual currencies and taxes

#### Taxable events - Select country examples

## First event on receipt of new tokens from mining

- Andorra
- Argentina\*
- Austria\*\*
- Cote d'Ivoire
- Colombia
- Croatia
- Estonia
- Finland
- Japan
- Luxembourg\*\*
- New Zealand
- South Africa
- United Kingdom
- United States

#### First event on disposal

- Croatia
- Czech Republic
- Denmark
- Estonia
- France
- Latvia Lithuania
- Poland
- Slovak Republic

## Different approaches for businesses / regular traders & individuals / occasional traders

- Australia
- Canada
- Germany
- Hong Kong (China) Netherlands
- Norway
- Singapore
- Sweden
- Switzerland

Modified diagram and content, Source: OECD (2020), Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues, OECD, Paris. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emergingtax-policy issues.htm

<sup>\*\*</sup> Argentina: Treatment depends on case-by-case | \*\* Switzerland: Mining income is taxed

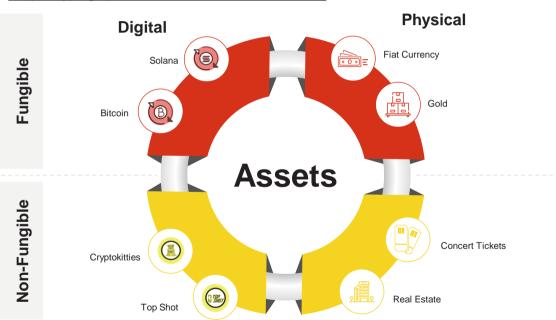
### Virtual currencies and taxes

Select country laws on cr	ypto taxes
Japan	Crypto gains are considered miscellaneous income. Tax rates on crypto gains vary - rates can be high up to 55%.
South Korea	Virtual assets are categorized under other income for income tax purposes. Gains will be taxed at a rate of 20%.
New Zealand	Cryptocurrency are treated as property for income tax purposes. Tax treatment depends on the characteristic and use.
Australia	Cryptocurrency are subject to capital gain tax in Australia in the range from 19 to 45%.
Austria	Crypto holdings will be counted as income from capital assets and are taxed at the special rate of 27.5%.
France	Cryptos are taxed similar to movable property. Occasional traders are charged a flat tax of 30% while miners and professional traders are taxed 45%.
Ireland	Ordinary tax rules apply - profits and losses from cryptocurrency transactions are taxable as normal income.
Lithuania	Cryptos are considered <b>property and 15% tax rate is applied on the gains</b> . Income from mining activities is only considered as income upon the sale of the cryptos after mining.
Netherlands	Taxes on capital gains are not imposed, but a deemed interest on the value of all assets minus all liabilities is imposed. The deemed interest is taxable against a flat rate of 31% (in 2021, 30% in 2020).

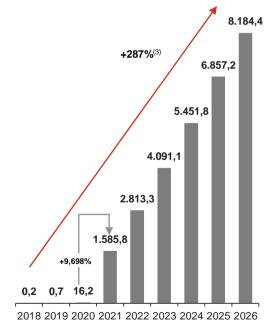
Indirect taxes: Different countries may have different VAT regime for cryptocurrency taxation. However, where not specified taxability should be tested under existing rules. The European Court of Justice (ECJ) in the case of Hedqvist (Skatteverket vs David Hedqvist Case C-264/14) held that virtual currencies can be compared with fiat currencies in that their sole purpose was to provide a means of exchange and ruled that transactions including the exchange of fiat currency for virtual currencies and vice versa, performed for consideration, are transactions exempt from VAT within the meaning of Article 135(1)(e) of the EU VAT Directive

## Non-fungible tokens (NFTs) – An introduction

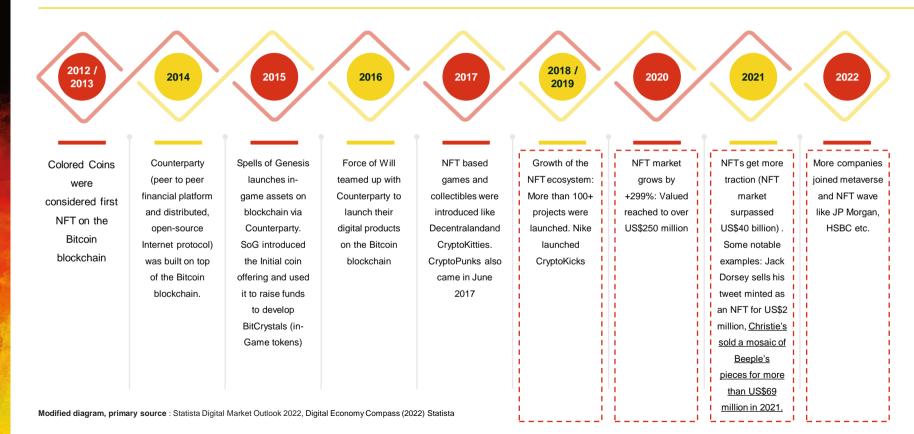
- NFTs are digital files having a unique identity that is verified on a blockchain (i.e., it is a unique cryptographic asset that exists on a blockchain)



NFT revenue forecast in US\$ million



## Timeline of events in NFTs space



#### NFTs and tax considerations

From tax side, there could be implications from both direct and indirect tax side depending on the laws of the country. Someof the applicable taxes could be:

**Direct taxes** 

Capital gain | Withholding taxes | Gift taxes Indirect taxes

Sales taxes / Value added taxes / Goods and services taxes

Custom issues when the underlying product moves from one country to another

#### Some relevant point to consider for tax

- Items being sold or transferred? Tangible or intangible property? It could be regarded as tangible property where NFT gives right to the purchaser to get the underlying physical products too
- Single product / service or bundled goods/ services
- Sale of IP or a limited license of right to use IP? For ex. It needs to be checked whether it is outright sale of copyright which gives the purchaser the complete right over exploitation of IP or purchaser has limited right of exploitation of IP
- Place of supply? Can the country of customer / buyer be identified? Country of customer can be identified on various metrics that are applied for digital goods / services like billing address on invoice, customer IP address, contract terms and conditions
- Local laws of the country
- Is there law in place in country under which NFTs can be taxed? Whether laws for crypto would apply to NFT's too?
- Determination of tax characterization of item/s being sold

#### NFTs and tax considerations

#### Some Indirect tax implications

	Some guidance of tax authority on cryptocurrency	Some guidance of tax authority on NFTs?	NFTs fall within the definition of ESS / Remote services?
NZ	Yes	Yes	Yes
Australia	Yes	No	Yes
Germany	Yes	No	Unclear, Potentially ESS
Ireland	Yes	No	Unclear, Potentially ESS
Netherlands	Yes	No	Unclear, Potentially ESS
Middle East	No	No	Unclear, Potentially ESS
Singapore	Yes	No	Unclear, potentially ESS / Remote services
South Africa	Limited	No	Unclear, potentially ESS
UK	Yes	No	Unclear, potentially ESS
US	Limited	No	Unclear, potentially digital goods

Source: Non Fungible Tokens: Significant and Emerging VAT Issues (PWC); available at <a href="https://www.pwc.co.uk/services/tax/indirect-taxes/non-fungible-tokens-significant-and-emerging-vat-issues.html">https://www.pwc.co.uk/services/tax/indirect-taxes/non-fungible-tokens-significant-and-emerging-vat-issues.html</a>

VAT implication on non-fungible tokens may not be the same as that of cryptocurrency. In Spain ruling V0482-22, of March 10, 2022, issued by the Spanish General Directorate of Taxes (Dirección General de Tributos), Transfer of NFTs was regarded as 'supply of services'. Per the ruling, VAT was accorded similar treatment as that of 'electronically supplied goods | In India, NFTs are included in the definition of Virtual digital asset

## **Virtual Digital Assets – Other considerations**

Some policy issues

Valuation of cryptocurrencies for determining the cost basis for tax purposes

The practice for determination of cost basis varies amongst countries. For ex. –

- specific identification of units (ex. U.S.)
- deemed chronological order (ex. -Finland)
- basis pooling (ex. U.K.)

Cost basis in cases of gift / inheritance

Should the prevailing rates of the VDA at one of the exchanges when the gift was received be taken as cost of acquisition?

Withholding tax
issues where
applicable in case of
payments to nonresidents

Some steps that can be taken by policy makers

Simplified compliance mechanism

Clear guidance on taxable transactions and other matters

Time to time review of the policy in light of the emerging variants of tokens and used cases