



***Beyond Bitcoin: A new  
year with new challenges  
for cryptocurrencies &  
digital assets***

**1 March 2023**

*The webinar will begin shortly.*

# *Ask a question*



## To ask a question

Click on the **Q&A** button in the bottom toolbar to open the submit question prompt.

Type your question and click send

NOTE: If you wish to ask your question anonymously check the **send anonymously** box shown on the illustration.

# *Today's presenters*



Gavin Brown  
Associate Professor in Financial Technology  
The University of Liverpool.



Dion Seymour  
Crypto and Digital Assets Technical Director  
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## *The Year That Was 2022*

- 2022 was an active year for cryptoassets
- Bitcoin valuation
- “The merge”
- High profile news:
  - Fall in the use of DeFi
  - Sanctions on Tornado Cash
  - FTX fraud
- Governments around the world undertook more determinative action on the regulation of cryptoassets. It is expected that the failures will push for further consideration as to what to do about crypto.

## *The Size Of The Sector*

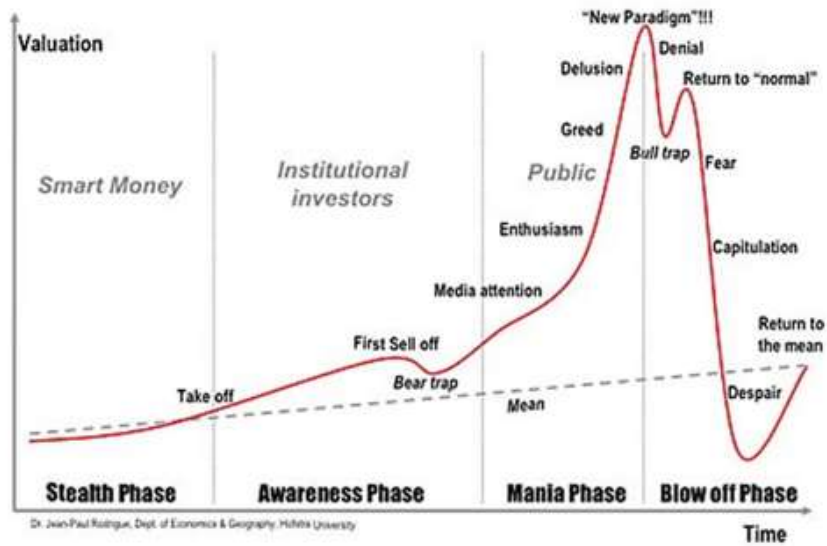
- The “crypto winter”
- Small sector



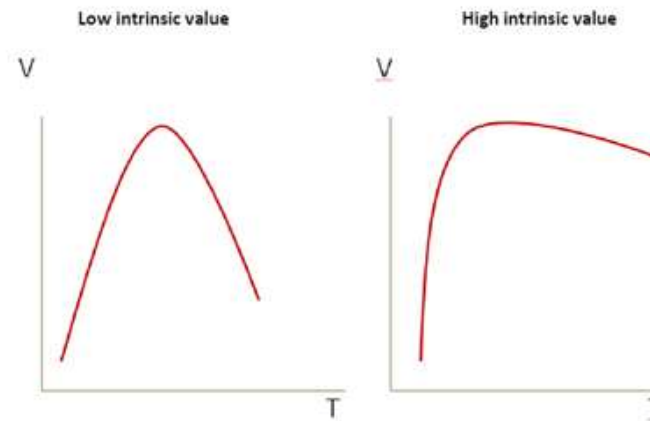
Source: Coinmarketcap.com

# Is Bitcoin a bubble?

## Main Stages in a Bubble



## Hyman Minsky's speculative bubbles



Source: Whittle (2010)

## Momentum from Bitcoin & decentralised ledger technology platforms

#	Currency	Market Cap	Price	Circulating Supply
1	CNY	752,036,843 BTC	326 sats	230,220,000,000,000 CNY
2	USD	440,525,536 BTC	2,109 sats	20,883,848,715,000 USD
3	EUR	349,129,154 BTC	2,489 sats	14,024,781,000,000 EUR
4	JPY	291,069,080 BTC	19 sats	1,515,543,000,000,000 JPY
5	GBP	97,920,980 BTC	2,903 sats	3,373,025,000,000 GBP
6	KRW	85,521,833 BTC	1 sats	4,693,468,000,000,000 KRW
7	INR	56,116,780 BTC	28 sats	194,037,000,000,000 INR
8	CAD	50,134,843 BTC	1,669 sats	3,003,837,000,000 CAD
9	HKD	44,123,803 BTC	271 sats	16,270,817,000,000 HKD
10	TWD	39,698,341 BTC	76 sats	52,031,665,000,000 TWD
11	AUD	38,727,219 BTC	1,541 sats	2,512,000,000,000 AUD
12	BRL	34,722,223 BTC	412 sats	8,426,368,000,000 BRL
13	CHF	26,653,236 BTC	2,302 sats	1,157,827,000,000 CHF
14	BTC	18,802,650 BTC	100,000,000 sats	18,802,650 BTC
15	RUB	17,096,612 BTC	28 sats	59,380,000,000,000 RUB
16	THB	15,105,753 BTC	65 sats	23,109,000,000,000 THB

Bitcoin



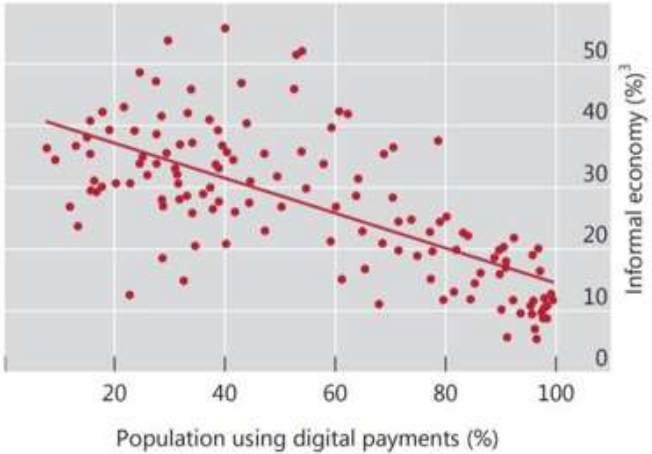
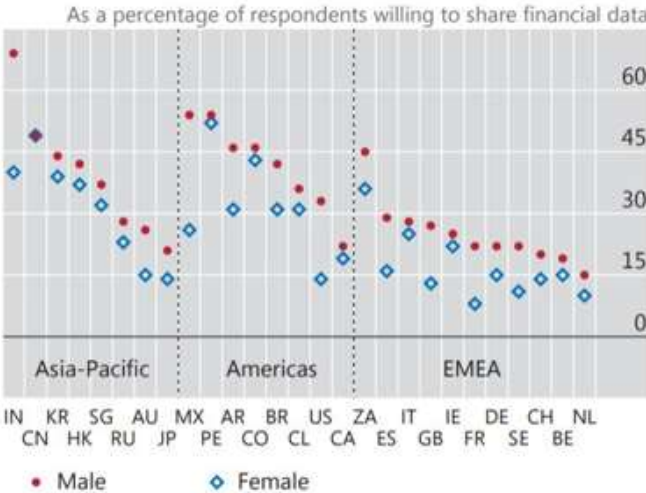
# Money & payments with better memory

## Digital payments create a data trail, bringing both risks and benefits

Graph III.9

Views on data privacy differ across and within societies<sup>1</sup>

The informal economy is smaller where digital payments are more widely used<sup>2</sup>



<sup>1</sup> Based on a survey of 27,000 individuals across 27 countries. The exact question reads: "I would be comfortable with my main bank securely sharing my financial data with other organisations if it meant that I received better offers from other financial intermediaries". For Belgium, the figure covers Belgium and Luxembourg. The dots visualise the percentage of respondents answering the question affirmatively. EMEA = Europe, the Middle East and Africa. <sup>2</sup> Data as of 2017. <sup>3</sup> Estimates of the informal ("shadow") economy based on a multiple indicator-multiple cause approach.



# Tesla and the rise of cryptocurrency as a treasury asset (Q1 2021)...

## THE CONVERSATION

Academic rigour, journalistic flair

### Bitcoin: why a wave of huge companies like Tesla rushing to invest could derail the stock market



<https://theconversation.com/bitcoin-why-a-wave-of-huge-companies-like-tesla-rushing-to-invest-could-derail-the-stock-market-154986>

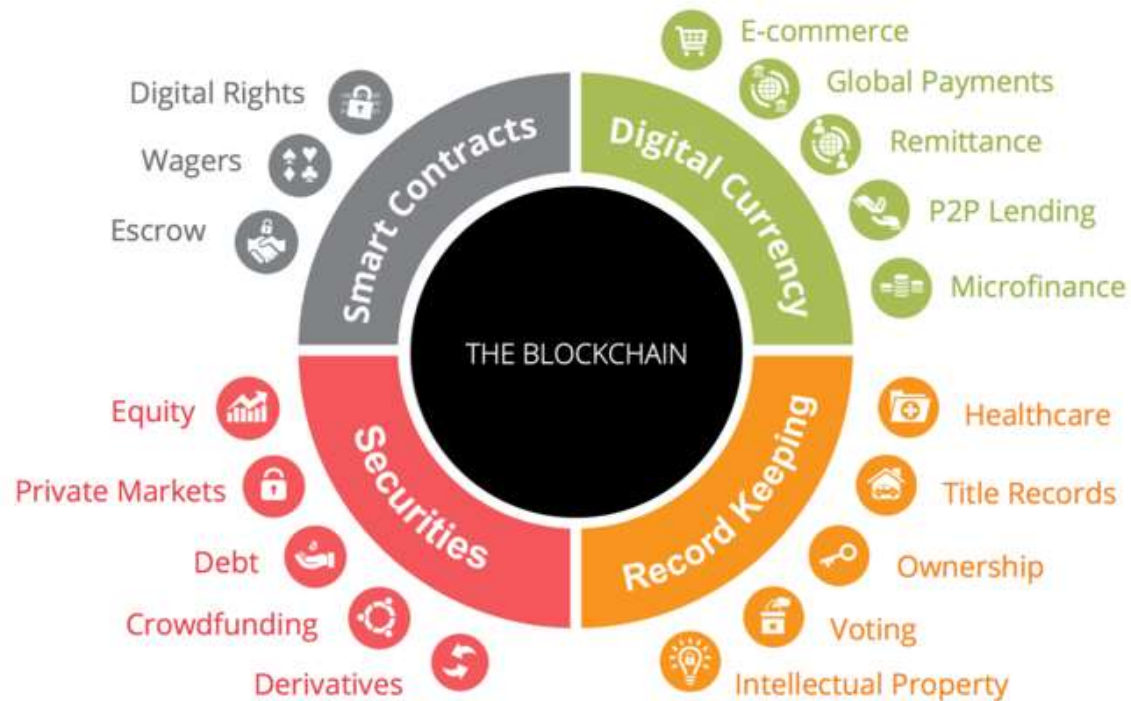
### Bitcoin Treasuries

Company Name	Symbol	Market Cap	% BTC	Purchases/Plings	Bitcoin Price USD	Bitcoin Value	BTC/Share
MicroStrategy Inc	MSTR	\$7,458,211,224	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$4,933,214,227	66,531 BTC
Tesla Inc	TSLA	\$717,894,894,542	0.1%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$2,682,126,418	48,000 BTC
Galaxy Digital Holdings	GALX	\$1,891,899,300	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$4,044,326,754	16,462 BTC
Square Inc	SQ	\$187,816,146,418	0.4%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$413,206,879	8,627 BTC
Marathon Digital Group	MARA	\$1,187,894,818	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$247,741,298	4,813 BTC
Hub 1 Mining Corp	HBM	\$1,321,995,998	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$185,848,724	3,612 BTC
Wolfsberg Digital LTD	WOL	\$244,995,998	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$61,790,893	1,239 BTC
Real Blockchain, Inc	RCB	\$1,528,795,118	1.7%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$91,400,475	1,175 BTC
Coin Cellular Inc	CC	\$1,019,915,015	0.7%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$36,407,701	513 BTC
Argo Blockchain PLC	ARGO	\$1,181,821,300	0.2%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$20,730,877	269 BTC
BCOG Digital Assets Inc	BCOG	\$244,910,800	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$15,403,700	300 BTC
Cipherpunk Holdings Inc	CPH	\$80,894,320	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Advanced Bitcoin Technol	ABT	\$80,894,320	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Bitfarms Limited	BITF	\$228,448,807	0.2%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$12,888,258	358 BTC
Digital	DIGI	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Digital Technology Inc	DTI	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Fortress Blockchain	FTBS	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Live Blockchain	LIVE	\$1,888,878,118	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$7,206,788	140 BTC
Mode Global Holdings	MDGL	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Nextera Digital Assets Co	NDA	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
FRMO Corp	FRMO	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
MOOD Financing	MOOD	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
BTGOK K.K.	BTGOK	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Block one	BLK1	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
The Texas Foundation	TXF	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Stone Ridge Holdings Co	SRH	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Grayscale Bitcoin Trust	GBTC	\$3,111,263,840	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$33,415,285.91	849,130 BTC
CoinShares / iBT Private	CS	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Ruffer Investment Company	RIFR	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
3IG The Bitcoin Fund	3IG	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
ETC Group Bitcoin ETF	ETC	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Bitwise 10 Crypto Index Fd	BITW	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Purpose Bitcoin ETF	PBTC	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Grayscale Digital Large Co	DIGL	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
21Shares AG	21S	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
BlockchainTree Bitcoin	BTCT	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Bitpond Bitcoin Trust	BITP	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Q Global Bitcoin Fund	QBTC	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Bitcoin Group SE	BITG	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Laombiq Bitcoin Tracker U	LBTC	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC
Openx Bitcoin Trust	OBTC	\$88,881,186	100%	2020: 1,220; 2021: 1,220	\$2,171,000.00	\$10,210,752	262 BTC

## Wider applications across other industries

# Blockchain Potential Applications & Disruption

The blockchain is radically changing the future of transaction based industries



E.g. the underlying Bitcoin blockchain is public

<https://bitinfocharts.com/top-100-richest-bitcoin-addresses.html>



**Bitcoin distribution**

Balance	Addresses	% Addresses (Total)	Coins	\$USD	% Coins (Total)
0 - 0.001	11102060	48.58% (100%)	2,242 BTC	7,966,686 USD	0.01% (100%)
0.001 - 0.01	5159261	22.58% (51.42%)	20,876 BTC	74,195,301 USD	0.12% (99.99%)
0.01 - 0.1	4026112	17.62% (28.84%)	131,568 BTC	467,604,498 USD	0.75% (99.87%)
0.1 - 1	1851814	8.1% (11.22%)	584,086 BTC	2,075,889,448 USD	3.34% (99.12%)
1 - 10	561744	2.46% (3.12%)	1,481,324 BTC	5,264,749,958 USD	8.47% (95.78%)
10 - 100	133625	0.58% (0.66%)	4,392,890 BTC	15,612,697,756 USD	25.11% (87.31%)
100 - 1,000	14712	0.06% (0.07%)	3,704,782 BTC	13,167,104,792 USD	21.18% (62.2%)
1,000 - 10,000	1739	0.01% (0.01%)	4,437,039 BTC	15,769,608,113 USD	25.36% (41.02%)
10,000 - 100,000	93	0% (0%)	2,147,207 BTC	7,631,352,601 USD	12.27% (15.66%)
100,000 - 1,000,000	5	0% (0%)	593,081 BTC	2,107,858,828 USD	3.39% (3.39%)

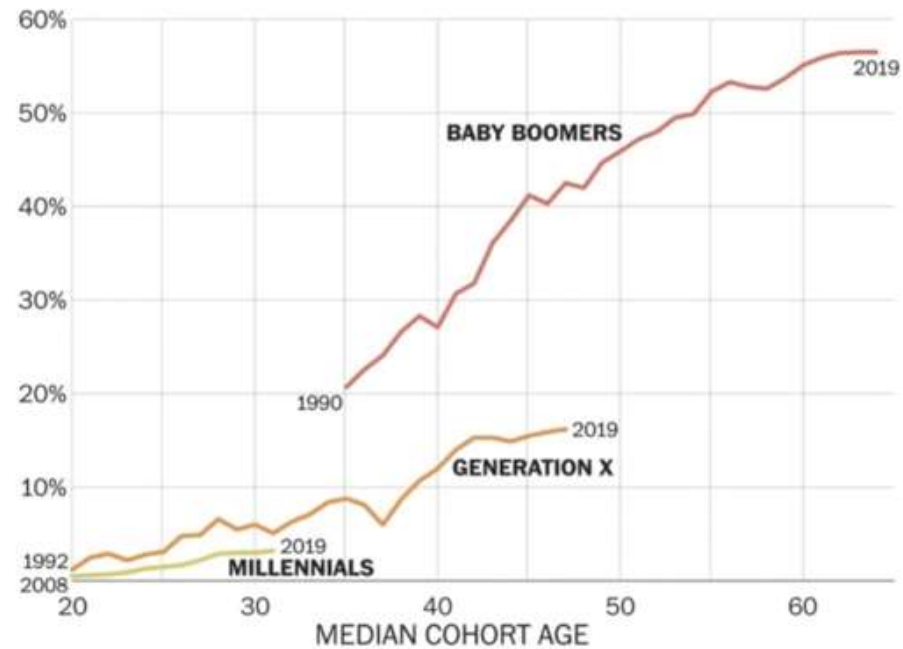
**Addresses richer than**

1 USD	100 USD	1,000 USD	10,000 USD	100,000 USD	1,000,000 USD	10,000,000 USD
14,641,604	4,315,352	1,465,641	327,243	81,877	6,108	569

# Why are the younger generation turning to Bitcoin?

## Intergenerational wealth

Share of national wealth owned by each generation, by median cohort age



Source: Federal Reserve Distributional Accounts  
Chart adapted from Gray Kimbrough

THE WASHINGTON POST

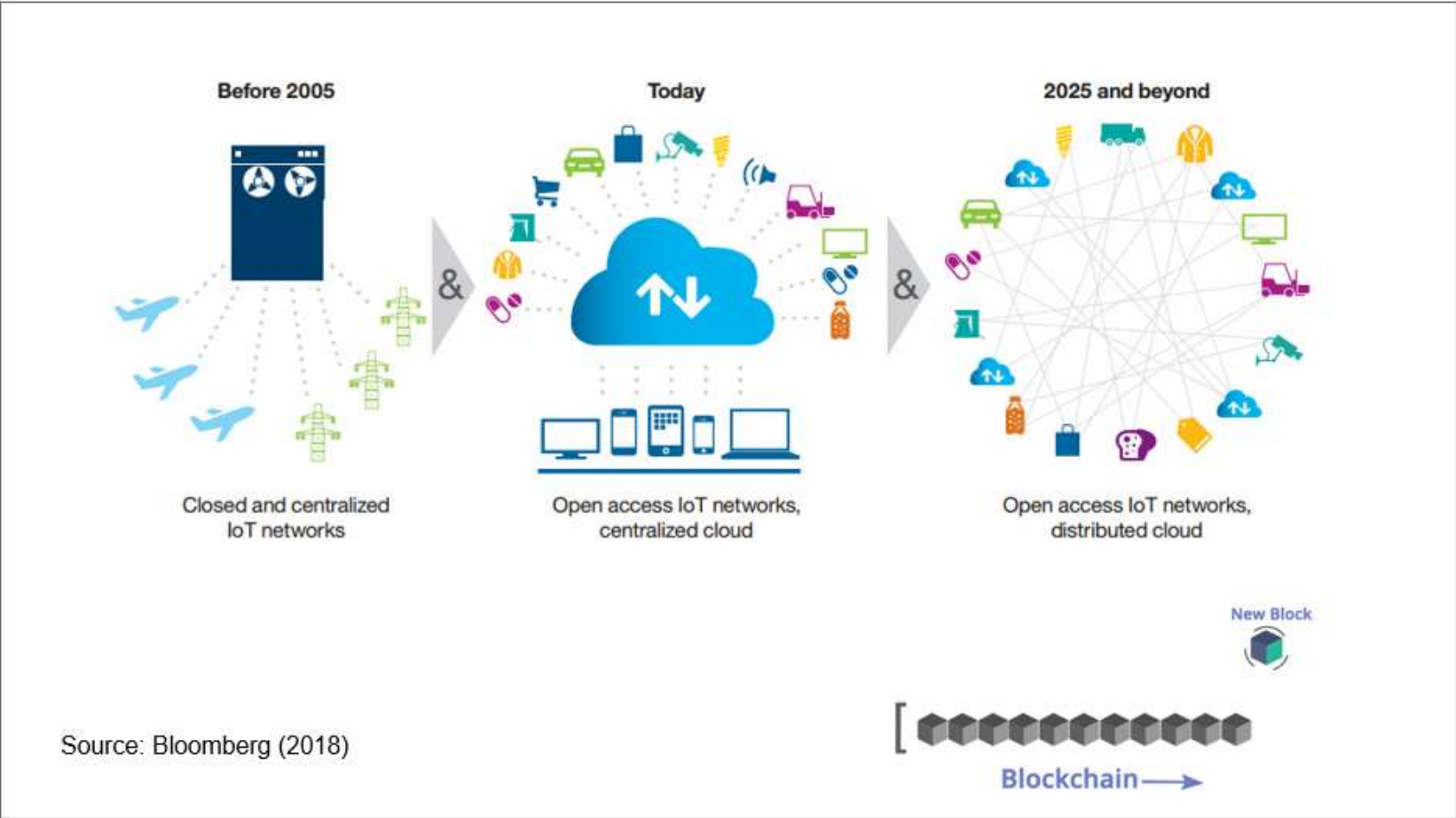
Too small to pose a risk but crypto assets may rewrite the rule book

**“The FSB’s initial assessment is that crypto-assets do not pose risks to global financial stability at this time...this initial assessment could change if crypto-assets were to become significantly more widely used or interconnected with the core of the regulated financial system.”**

**- Mark Carney, Chair, Financial Stability Board**

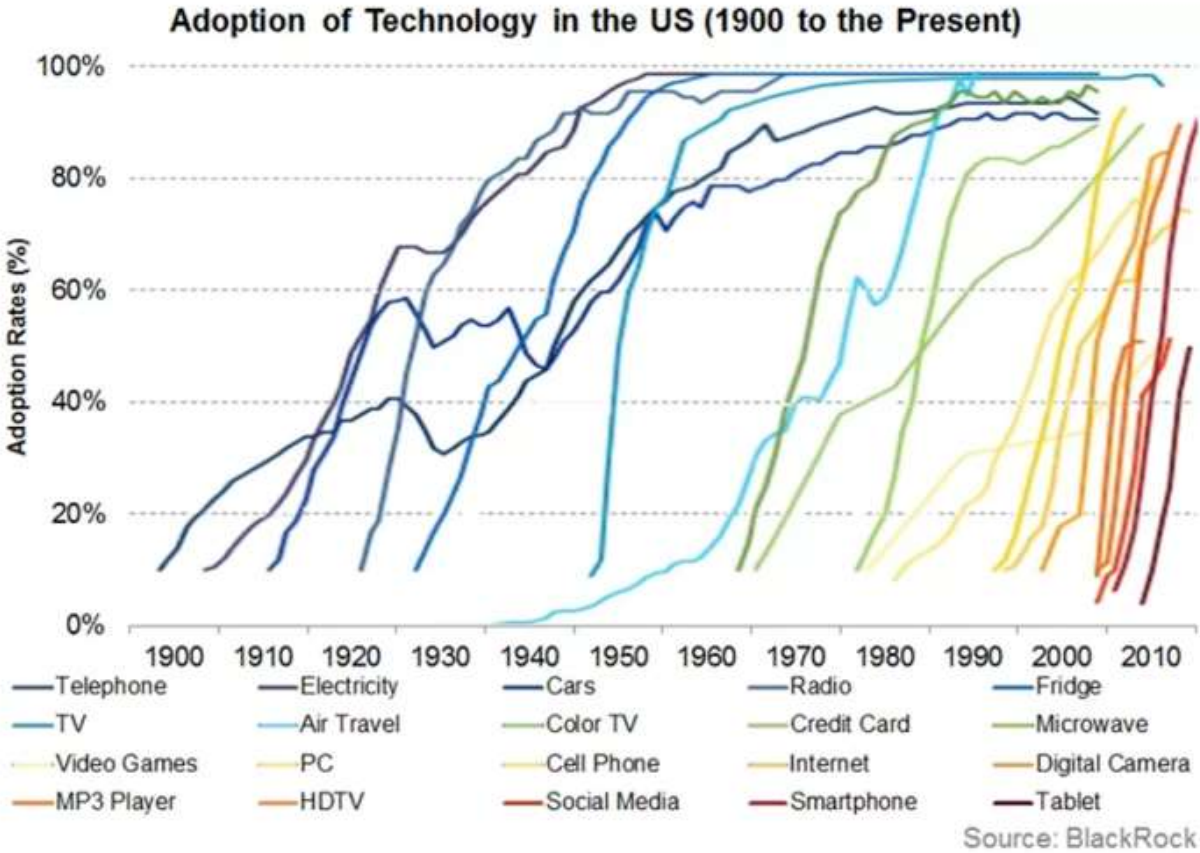


# Blockchain – the platform technology



Source: Bloomberg (2018)

**If cryptocurrencies & tokens are so good where is the mass adoption?**



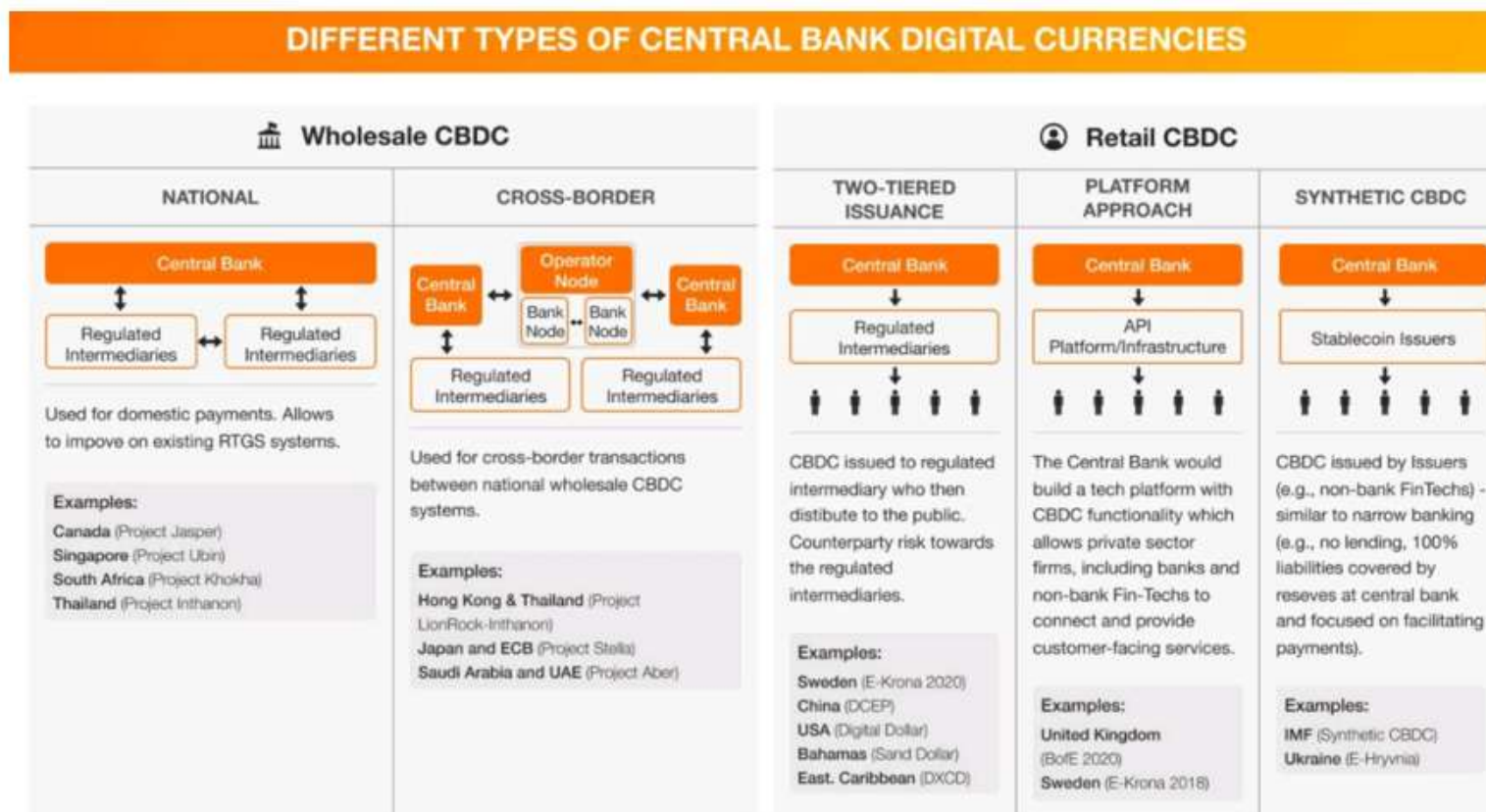
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## *UK Activity*

- Global hub
- HM Treasury
  - Future Financial Services Regulatory Regime for Cryptoassets
- Bank of England
  - Digital Pound
  - What is a CBDC
- HMRC
  - DeFi consultation



## A potential route forward? – Central Bank Digital Currencies (CBDC). 3 models by The BoE



Source: [Arslanian \(2022\)](#)

CBDC's are delayed but not forgotten during COVID-19

**THE d-GBP  
INITIATIVE**

Conceived and authored by:  
Jeremy Wilson, Victoria Thompson,  
Lee Schneider and Jannah Patchay



## *2023: The year of regulation?*

- Governments and regulators
- UK consultations from:
  - HMT
  - Bank of England
- Elsewhere
  - Markets in Crypto Assets (MiCA - EU)
  - Infrastructure Bill (US)
  - Securities and Exchange Commission (SEC – US)
  - Crypto Asset Reporting Framework (CARF - OECD)

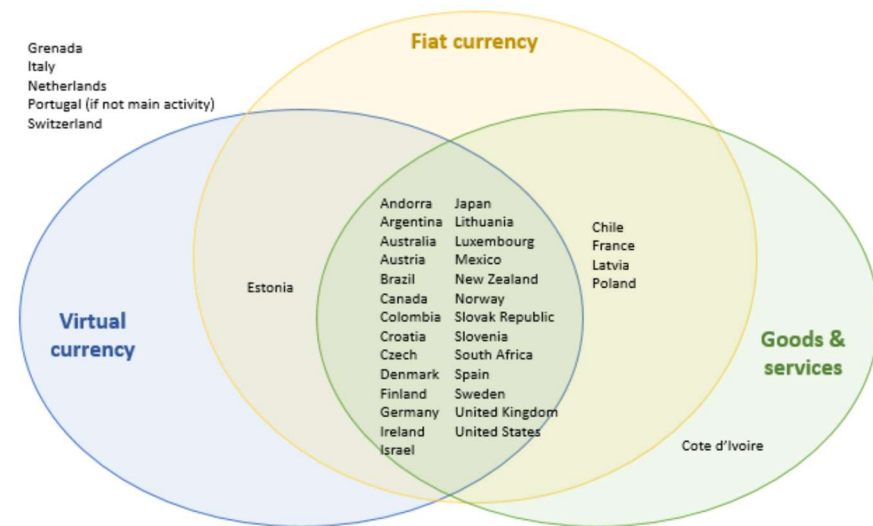
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## *US Activity*

- FTX
- Securities and Exchange Commission (SEC)
  - Kraken and staking
  - Binance and stablecoins

## Tax – International Approaches

- There are some differences between international approaches
  - Most have similar views as the UK
- Some are different – for example:
  - Portugal
  - Switzerland
- Cryptoasset Reporting Framework (CARF)



Source: *Taxing Virtual Currencies: An Overview of Tax Treatments and Emerging Tax Policy Issues*. OECD 2020.



*Any questions?*

# *Thank you for attending*

Please take the time to fill out our short survey:

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