Cryptocurrency and financial stability

In order to accurately gauge the effect of cryptocurrencies on the financial sector – and by extension on overall market sentiment – it is first necessary to establish the role of central banks in stabilising the macroeconomy, whilst also discussing the main features of cryptocurrencies, which no longer serve as merely tools of speculation for traders.

Central banks are anti-competitive and often non-governmental institutions that enjoy the status of a legal monopoly over the production and distribution of money and credit in an economy (Segal, 2022), in order to fulfil the government's aims through monetary policy. This includes control over the money supply and interest rates, thus allowing the central bank to exercise a degree of influence over commercial banks by influencing both the prime lending and the BBA mortgage rates that commercial banks charge their customers. Consequently, a central bank, such as the Bank of England, is able to ensure that crucial objectives are effectively met; in particular, this includes a sustainable level of growth, as well as a low and stable level of inflation (at 2% for the UK). (tutor2u, 2021)

Cryptocurrencies are a digital medium of exchange that is encrypted through a distributed public ledger technology (pwc, 2022) – blockchain – which records all transactions occurring between its users on a peer-to-peer network (Kaspersky, 2022). By structuring data in an irreversible chain of mutually-dependent blocks of information – given that each block has a unique timestamp and link to the next – blockchain allows for information distribution, albeit not destruction or alteration (Hayes, 2022). Furthermore, cryptocurrencies have no central issuing authority, and their number is often limited in order to avoid value manipulation; for example, Bitcoin is limited to 21 million units

(Kraterou, Solomons, 2022). This means that anyone is able to fulfil transactions in a transparent, secure and decentralised way through cryptocurrencies, without the need for third-party involvement. However, it is the inability of central banks to exert a direct influence on the supply and value of cryptocurrencies that raises concerns regarding their unpredictable effect on the macroeconomy.

The volatile nature of cryptocurrencies has prompted the Financial Conduct Authority of the UK to describe them as “very high risk, speculative investments”, prompting the general public to effectively disregard them as a viable medium of exchange (Michael, 2022). In fact, it could be suggested that this volatility is partially derived from the fact that the cryptocurrency market is negative-sum, whereby the only way to gain more money in the market is by requisitioning this sum from another user involved in the trade (Economics Explained, 2019). Moreover, unlike company shares, cryptocurrencies cannot be used to leverage finance and fund further potential development – instead, they satisfy the criteria of a gamble, which makes the cryptocurrency market extremely susceptible to change (see figure 1) (Economics Explained, 2019). This feature was clearly demonstrated by the rapid decline in the value of luna to $0, with many investors reporting that they subsequently lost their life savings (Kharpal, Browne, 2022). Disregarding the profoundly negative environmental impact of cryptocurrencies – as well as their popularity among criminals for masking illicit activities – the integration of cryptocurrencies into the financial system could mean that large swings undermine the stability of the entire economy by swiftly changing consumer wealth (and hence their spending patterns through the wealth effect, which states that consumer spending increases if the general value of their assets rises). Moreover, even though only an approximate 0.1% of UK households’ wealth is concentrated in cryptocurrencies (BBC News, 2021), their wider prevalence could result in the movement of funds away from commercial banks, thus causing the cost of credit to rise, whilst the availability – and by extension the overall level of investment in the economy - decreases (The Guardian, 2021).

*Figure SEQ Figure * ARABIC 1: CoinDesk, 2022, "Bitcoin monthly price" [chart] Available at: <https://www.coindesk.com/price/bitcoin/>[Accessed on 05/07/22]*

Consequently, it could be argued that the central banks should instead aim to embrace cryptocurrencies, rather than oppose them, since they could soon be left without the same degree of influence on the financial system relatively soon. Thus, central banks could seek to create their own 'stablecoins', which would possess the multitude of advantages created by cryptocurrencies, whilst also being tied to a fiat currency, such as the US dollar or the British pound, allowing central banks to exert control over them. This would constitute the creation of a Central Bank Digital Currency (CBDC), that is currently being considered by the Bank of England to regulate the impact of cryptocurrencies on the financial market. (Bank of England, 2021). Yet, there is still a number of vulnerabilities associated with crypto-asset markets; these include increasing linkages between crypto-asset markets and the regulated financial system; liquidity mismatches, credit and operational risks with the potential to spill over to short term funding markets; the increasing use of leverage in investment strategies; high concentration risk of trading platforms; and the general opacity of the sector. (FSB, 2022)

Despite this, according to a detailed study conducted by the Financial Policy Committee of the Bank of England, the impact of cryptocurrencies remains quite limited overall, with crypto-assets currently accounting for only 0.4% of global financial assets (FPC, BofE, 2022). On the other hand, the study highlights that the ownership of crypto-assets by UK retail investors has increased to approximately 9% of people in the UK personally buying crypto-assets as of January 2022, from 5% just a few years earlier.

Consequently, it can be concluded that although the market capitalisation and influence of cryptocurrencies on the financial system is steadily increasing, their volatility and unstable nature continues to serve as a significant obstacle on the path towards wider adoption by central banks in order to stabilise the macroeconomy. For now, although cryptocurrencies are no longer a solely speculative opportunity, they are still far from being fully embraced by our economic system.

Bibliography:

1) Troy Segal, Investopedia, 2022, “Central bank” [online] Available at: <https://www.investopedia.com/terms/c/centralbank.asp> [Accessed on 01/10/22]

2) tutor2u, 2021, “Macroeconomic Objectives and Macro Stability” [online], Available at: <https://www.tutor2u.net/economics/reference/macroeconomic-objectives-and-macro-stability#:~:text=Objectives%20of%20UK%20Macroeconomic%20Policy,the%20environmental%20impact%20of%20growth.> [Accessed on 01/10/22]

3) pwc, 2022, “Making sense of bitcoin, cryptocurrency and blockchain” [online], Available at: <https://www.pwc.com/us/en/industries/financial-services/fintech/bitcoin-blockchain-cryptocurrency.html> [Accessed on 01/10/22]

4) Kaspersky, 2022, “What is cryptocurrency and how does it work?” [online], Available at: <https://www.kaspersky.com/resource-center/definitions/what-is-cryptocurrency> [Accessed on 01/10/22]

5) Hayes, Investopedia, 2022, “What is a blockchain?” [online], Available at: <https://www.investopedia.com/terms/b/blockchain.asp> [Accessed on 01/10/22]

6) Kraterou, Solomons, The Sun, 2022, “BURIED TREASURE? How many bitcoins are there and how many are left to mine?” [online], Available at: <https://www.thesun.co.uk/tech/15507987/how-many-bitcoins-left-mine/> [Accessed on 01/10/22]

7) A Michael, The Forbes, 2022, “What is Cryptocurrency?” [online], Available at: <https://www.forbes.com/uk/advisor/investing/cryptocurrency/what-is-cryptocurrency/> [Accessed on 01/10/22]

8) Economics Explained, 2019, “The Economics of Bitcoin” [video online], Available at: <https://www.youtube.com/watch?v=KEgOmklwjfQ> [Accessed on 01/10/22]

9) Kharpal, Browne, CNBC, 2022, “Cryptocurrency luna crashes to $0 as UST falls further from dollar peg” [online], Available at: <https://www.cnbc.com/2022/05/13/cryptocurrency-luna-crashes-to-0-as-ust-falls-from-peg-bitcoin-rises.html#:~:text=Luna%20plunged%20to%20%240%20Friday,value%20in%20a%20single%20day.> [Accessed on 01/10/22]

10) BBC news, 2021, “Bank of England warns on crypto-currency risks” [online], Available at: <https://www.bbc.co.uk/news/business-59636958> [Accessed on 01/10/22]

11) Financial Accountant, The Guardian, 2021, “Digital currencies pose threat to economy, warns Bank of England” [online], Available at: <https://www.financialaccountant.co.uk/news/digital-currencies-pose-threat-to-economy-warns-bank-of-england> [Accessed on 01/10/22]

12) Bank of England, 2021, “CBDC Taskforce terms of reference” [online] Available at: <https://www.bankofengland.co.uk/research/digital-currencies/cbdc-taskforce-terms-of-reference> [Accessed on 01/10/22]

13) FSB, 2022, “FSB warns of emerging risks from crypto-assets to global financial stability” [online], Available at: <https://www.fsb.org/2022/02/fsb-warns-of-emerging-risks-from-crypto-assets-to-global-financial-stability> [Accessed on 01/10/22]

14) FPC, BofE, 2022, “Financial Stability in Focus: Cryptoassets and decentralised finance” [online], Available

at:<https://www.bankofengland.co.uk/financial-stability-in-focus/2022/march-2022>
[Accessed on 01/10/22]