

# Blueprint of a Law for Regulating Cryptoassets

Working Paper | January 2022



**This report is  
an independent,  
non-commissioned  
piece of work by  
the Vidhi Centre  
for Legal Policy,  
an independent  
think-tank doing  
legal research to  
help make  
better laws.**

## About the Authors

Shehnaz Ahmed is a Senior Resident Fellow and Lead (Fintech) at the Vidhi Centre for Legal Policy.

Swarna Sengupta is a Research Fellow (Fintech) at the Vidhi Centre for Legal Policy.

## Acknowledgements

The authors are grateful to Vidushi Gupta, Lead, Tax and Pranay Modi, Project Fellow at Vidhi Centre for Legal Policy for their comments and insights on an earlier draft of the report.

The authors would like to thank Aryan Babele, former Research Fellow at Vidhi Centre for Legal Policy for his initial research during his engagement with Vidhi. His preliminary research was useful to scope the chapter on classification of cryptoassets.

The authors are also thankful to Vidhi interns Dhrishaj Suresh and Shikhar Sarangi for their research assistance on specific issues during their engagement with Vidhi.

Errors (if any) rest with the authors.

# Table of Contents

---

<i>I. Setting the Context</i> .....	6
<i>II. Understanding Key Concepts</i> .....	7
<i>III. Classification of Cryptoassets</i> .....	16
<i>IV. Assessing Opportunities &amp; Risks</i> .....	24
<i>V. Global Regulatory Approaches</i> .....	32
<i>VI. Recommendations</i> .....	42

# I. Setting the Context

---

In 2008, a person or group of persons using the pseudonym Satoshi Nakamoto published a paper<sup>1</sup> that outlined the framework for a new cryptocurrency known as Bitcoin (BTC). The paper notes:

*“What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party”.*

Guided by this philosophy, we have witnessed the rise of thousands of cryptoassets (popularly referred to as cryptocurrencies)<sup>2</sup> that primarily seek to facilitate peer to peer payments without the need for centralised intermediaries. Several cryptoassets were originally created to serve as an alternative to payments in fiat currency and to replace the trust in long standing institutions such as central banks and commercial banks with trust in a new fully decentralised system. This intention coupled with the sudden rise of several cryptoassets, the high volatility in their values witnessed by sharp rises and equally sharp falls and the interest of several policymakers in the underlying technology of most cryptoassets such as blockchain and distributed ledger technology (“DLT”) has led to an intense debate on the appropriate policy response to cryptoassets. In recent times, cryptoassets have also emerged as an investment choice for many retail investors. As per the International Monetary Fund (“IMF”), “the total market value of all the cryptoassets surpassed \$2 trillion as of September 2021 reflecting a 10-fold increase since early 2020”.<sup>3</sup> The rise of these cryptoassets has also led to the emergence of new players (like cryptocurrency exchanges, issuers, custodians, miners, etc.) and a new ecosystem. This rapid rise in their use, coupled with high volatility in their values (discussed below), speculative trading, security hacks, risks related to money laundering and terrorist financing calls for an effective regulatory framework for cryptoassets. Such a framework is also necessary to tap into the potential of cryptoassets and its underlying technology to create more efficiencies in payments, investments, capital raising, etc.

Regulators in several countries are still grappling to assess - whether and how to regulate cryptoassets. While most countries seem to move towards the direction of regulating cryptoassets, some countries have prohibited or restricted cryptoasset related activities. One of the biggest impediments in designing a regulatory framework for cryptoassets as noted by several policymakers and researchers is the lack of a common understanding and classification of cryptoassets. Further, as the cryptoasset ecosystem continues to develop, countries remain cautious of either over-regulating or under regulating the sector. Several advanced economies like the United Kingdom (“UK”), European Union (“EU”) and the United States of America (“USA”) initially relied on existing laws to regulate certain types of cryptoassets / tokens. However, all these countries are now in the process of exploring a more comprehensive regulatory framework for cryptoassets. Similarly, it is reported that India is also planning to introduce a new law to regulate cryptoassets. As countries continue to debate and deliberate the appropriate regulatory response to cryptoassets, this Report attempts to present a blueprint of a law to regulate cryptoassets. In doing so, the Report also seeks to provide some clarity on a possible classification framework for cryptoassets that may be relied on by policymakers to identify different types of cryptoassets based on objective criteria and determine appropriate regulations for the same. The blueprint suggested by the Report also draws on best practices adopted globally by different countries and international standard-setting bodies.

Please note that this Report only focuses on the financial regulatory treatment of cryptoassets without commenting or recommending the tax treatment of such cryptoassets/cryptocurrencies. The tax treatment of cryptocurrencies will be dealt with by an upcoming research report by the Vidhi Centre for Legal Policy.

---

<sup>1</sup> Santoshi Nakamoto, ‘Bitcoin: A Peer-to-Peer Electronic Cash System’, (2008), < <https://bitcoin.org/bitcoin.pdf> > accessed 13 January 2022.

<sup>2</sup> For the purposes of this Report, the term “cryptoassets” have been used as an umbrella term subsuming different kinds of cryptoassets and tokens and cryptocurrencies.

<sup>3</sup> Dimitris Drakopoulos and others, ‘Crypto Boom Poses New Challenges to Financial Stability’, (IMF Blog, 1 October 2021) < <https://blogs.imf.org/2021/10/01/crypto-boom-poses-new-challenges-to-financial-stability/> > accessed 14 January 2022.

# II. Understanding Key Concepts

---

## What is a Cryptoasset?

There is no standardized definition of the term cryptoasset. The Financial Stability Board<sup>4</sup> (“FSB”) defines cryptoassets as “a type of private asset that depends primarily on cryptography and distributed ledger or similar technology as part of their perceived or inherent value.”<sup>5</sup> This definition has been relied on by standard-setting bodies like the Bank for International Settlements<sup>6</sup> (“BIS”) and the International Organization of Securities Commissions<sup>7</sup> (“IOSCO”). In the UK, the Financial Conduct Authority (“FCA”) defines “cryptoassets” to mean a “digital representation of value or contractual rights that can be transferred, stored or traded electronically, and which may (though does not necessarily) utilise cryptography, distributed ledger technology or similar technology.” While several definitions of cryptoassets have emerged, cryptoassets broadly consist of three elements.<sup>8</sup> *First*, a set of rules or computer code that specifies how participants can transact. *Second*, a ledger that stores / records the history of transactions. *Third*, a “decentralised network of participants that update, store and read the ledger of transactions” in line with the protocol. While the potential role of such cryptoassets as a medium of exchange or as an investment instrument is recognised, most policymakers agree that such cryptoassets are not legal tender.

One of the most popular cryptoassets is Bitcoin. Bitcoin is envisaged to operate as a peer-to-peer payment solution without the need for known and trusted third parties. Examples of other popular cryptoassets are Ether (ETH), XRP, Bitcoin Cash (BCH), and Litecoin (LTC). Launched in 2015, Ethereum is a decentralised platform run on “smart contracts” (discussed below).<sup>9</sup> It facilitates the creation of decentralised applications on top of it. While Ethereum is not a cryptoasset, it is “Ether” which is the “internal crypto-fuel of Ethereum, and is used to pay transaction fees.”<sup>10</sup> Ether is used to incentivise network nodes or miners to process and validate transactions on Ethereum. While Ethereum was conceived by an individual developer, Ethereum’s development is promoted and supported by the Ethereum Foundation,<sup>11</sup> a Swiss not-for-profit organisation formed by the founders of Ethereum. Similarly, XRP, another popular cryptoasset is the native token for the XRP ledger, a permissionless, decentralised blockchain network.<sup>12</sup> It was developed to facilitate liquidity in cross-border transactions and instantaneous settlement.<sup>13</sup>

---

<sup>4</sup> The FSB is an international body which promotes international financial stability. It works with national financial authorities and international standard-setting bodies to recommend supervisory, regulatory, and financial policies. India is a member of the FSB. See FSB, “About Us”, <<https://www.fsb.org/about/>> accessed 14 January 2022.

<sup>5</sup> FSB, ‘Work Underway, regulatory approaches and potential gaps’, (May 2019) <<https://www.fsb.org/wp-content/uploads/P310519.pdf>> accessed 13 January 2022.

<sup>6</sup> BIS seeks to aid national central banks in their goal of promoting financial and monetary stability through international cooperation. It is owned by 63 central banks including the Reserve Bank of India. BIS, ‘About BIS-Overview’ <<https://www.bis.org/about/index.htm>> accessed 13 January 2022

<sup>7</sup> IOSCO is an international body that promotes best practices and international standards for securities regulation. It seeks to further cooperation amongst securities regulators across the world. IOSCO ‘About IOSCO’ <[https://www.iosco.org/about/?subsection=about\\_iosco](https://www.iosco.org/about/?subsection=about_iosco)> accessed 13 January 2022.

<sup>8</sup> BIS, ‘Cryptocurrencies: Looking Beyond the Hype’ (2018), <<https://www.bis.org/publ/arpdf/ar2018e5.pdf>> accessed 18 January 2022.

<sup>9</sup> Prof. Dr. Robby Houben and Alexander Snyers, ‘Cryptocurrencies and Blockchain; Legal Context and Implications for Financial Crime, Money Laundering and Tax Evasion’, (Study for European Parliament’s Special Committee on Financial Crimes, Tax Evasion and Tax Avoidance, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, June 2018) <<https://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf>> accessed 13 January 2022.

<sup>10</sup> Ethereum, ‘Ethereum Whitepaper’, (2013) <<https://ethereum.org/en/whitepaper/>> accessed 18 January 2022.

<sup>11</sup> Ethereum, ‘About the Ethereum Foundation’, <<https://ethereum.org/en/foundation/>> accessed 18 January 2022.

<sup>12</sup> Ripple, ‘XRP the best digital asset for global payment’, <<https://ripple.com/xrp/>> accessed 14 January 2022.

<sup>13</sup> Ripple, ‘XRP the best digital asset for global payment’, <<https://ripple.com/xrp/>> accessed 14 January 2022.

The market capitalisation<sup>14</sup> of cryptoassets has grown significantly over the course of the last few years. As per a report,<sup>15</sup> in the first two months of 2021, the “global market capitalization of cryptocurrencies more than doubled in value, skyrocketing to over USD 2 trillion by April 2021. Cryptoassets saw significant volatility over the course of the year, with global market cap dropping to just above USD 1 trillion in July, but they crossed the USD 2 trillion line again in August 2021”.<sup>16</sup> In November 2021, it nearly touched USD 3 trillion, showing a massive jump from USD 620 billion in 2017.<sup>17</sup> However, despite the increase in market capitalisation, cryptoassets remain infamous for the high volatility in their values, as is evident from the figures below. For instance, in April 2021, Bitcoin’s value touched USD 65,000 and then also witnessed a drop of 50% later in the year due to events such as the announcement of a ban by China.<sup>18</sup> News reports estimated that China’s new crackdown on cryptocurrency wiped off around USD 400 billion in value from the cryptocurrency market.<sup>19</sup> The volatility related concerns are particularly heightened in case of “meme coins” (such as Dogecoin (DOGE), Shiba Inu (SHIB)) that are created for speculation purposes and whose prices are influenced by social media trends.

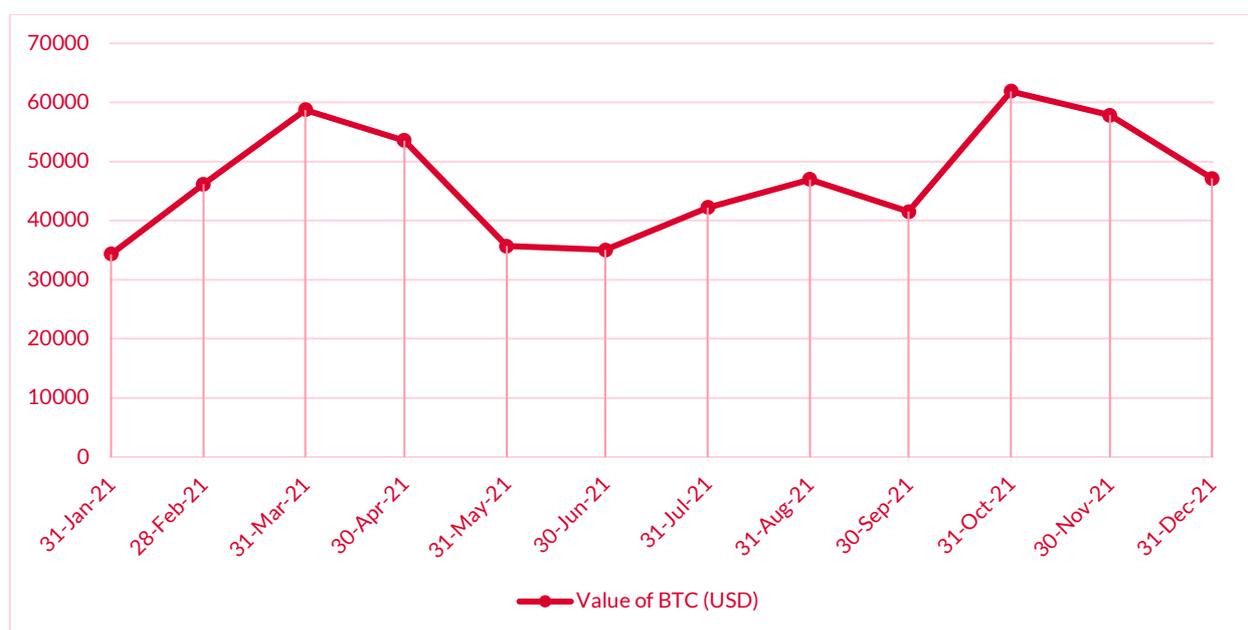


Figure 1: Closing price of 1 BTC as on the last date of each month for the period of January 2021 to December 2021 (Source: CoinDesk<sup>20</sup>)

<sup>14</sup> The market capitalization for cryptocurrency is typically calculated by multiplying the total number of coins that have been mined by the price of a single coin at any given time. See Coinbase, ‘What is Market Cap’, <<https://www.coinbase.com/learn/crypto-basics/what-is-market-cap>> accessed 18 January 2022.

<sup>15</sup> BNY Mellon, ‘Digital Assets: From Fringe to Future’, <<https://www.bnymellon.com/content/dam/bnymellon/documents/pdf/insights/digital-assets-from-fringe-to-future.pdf>> accessed 18 January 2022.

<sup>16</sup> BNY Mellon, ‘Digital Assets: From Fringe to Future’, <<https://www.bnymellon.com/content/dam/bnymellon/documents/pdf/insights/digital-assets-from-fringe-to-future.pdf>> accessed 18 January 2022.

<sup>17</sup> Tobias Adrian and others, ‘Crypto Prices Move More in Sync with Stocks, Posing New Risks’, (IMF Blog, 11 January 2022) <<https://blogs.imf.org/2022/01/11/crypto-prices-move-more-in-sync-with-stocks-posing-new-risks/>> accessed 18 January 2022

<sup>18</sup> Damanick Dantes, ‘Volatility Ruled Crypto Markets in 2021, From \$69K Bitcoin to Elon Musk’s ‘Dogecoin to the Moooonn’ (CoinDesk, 1 January 2022), <<https://www.coindesk.com/markets/2021/12/31/volatility-ruled-crypto-markets-in-2021-from-69k-bitcoin-to-elon-musks-dogecoin-to-the-moooonn/>> accessed 18 January 2022.

<sup>19</sup> Arjun Kharpal, ‘China’s Renewed Crypto Crackdown Wipes \$400 Billion off the Market as Bitcoin Slides’, CNBC, (21 June, 2021) <<https://www.cnbc.com/2021/06/22/china-crypto-crackdown-wipes-nearly-300-billion-off-market-btc-slides.html>> accessed 18 January 2022.

<sup>20</sup> CoinDesk, ‘Bitcoin’, <<https://www.coindesk.com/price/bitcoin/>> accessed 18 January 2022.

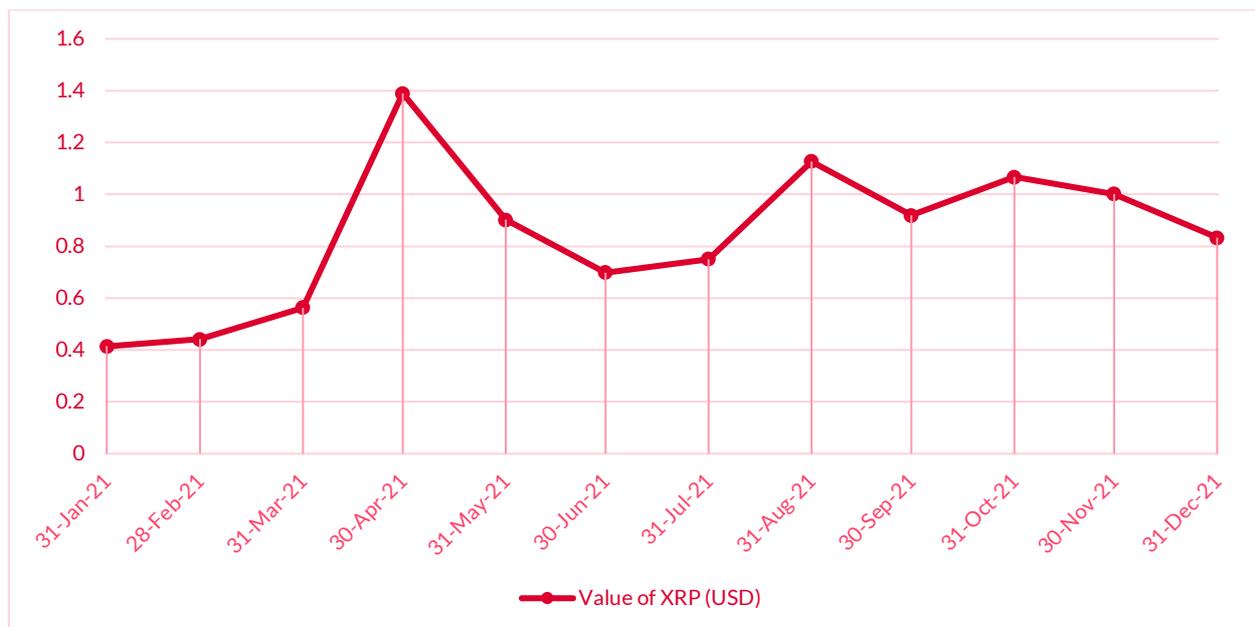


Figure 2: Closing price of 1 XRP on the last date of each month for a period of January 2021 to December 2021 (Source: CoinDesk)<sup>21</sup>

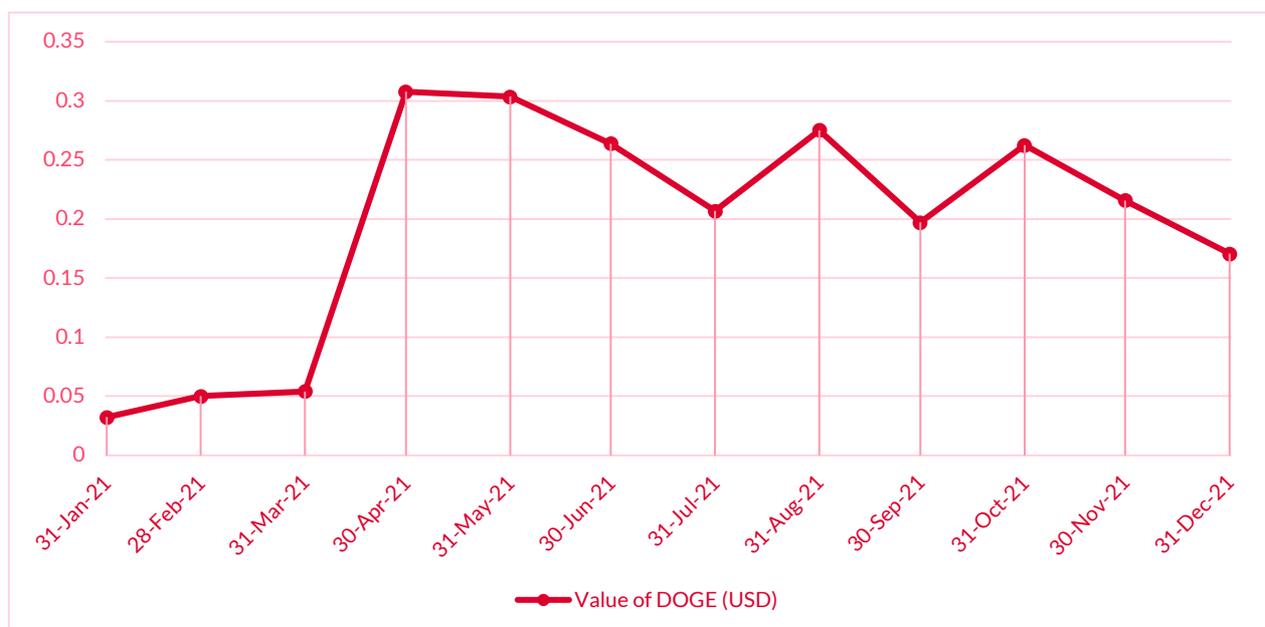


Figure 3: Closing prices of 1 DOGE as on the last date of each month for a period of January 2021 to December 2021 (Source: CoinDesk)<sup>22</sup>

The volatility associated with cryptoassets has given rise to a new type of cryptoasset known as “stablecoins” which are designed to minimise the volatility and maintain a stable value. The FSB defines “stablecoins” as a type of cryptoasset “that aims to maintain a stable value relative to a specified asset, or a pool or basket of assets”.<sup>23</sup> Stablecoins may employ various stabilisation mechanisms, which may be divided into two broad categories:<sup>24</sup>

- **Assets-linked stablecoins:** Their value is linked to assets such as a fiat currency or currencies, commodities, or even other cryptoassets. Different mechanisms may be employed by different stablecoins to maintain

<sup>21</sup> CoinDesk, ‘XRP’, <<https://www.coindesk.com/price/xrp/>> accessed 18 January 2022.

<sup>22</sup> CoinDesk, ‘Dogecoin’, <<https://www.coindesk.com/price/dogecoin/>> accessed 18 January 2022.

<sup>23</sup> FSB, ‘Addressing the Regulatory, Supervisory and Oversight Challenges Raised by “Global Stablecoin” Arrangements; Consultative Documents’ (April 2020) <<https://www.fsb.org/wp-content/uploads/P131020-3.pdf>> accessed 14 January 2022.

<sup>24</sup> FSB, ‘Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Final Report and High-Level Recommendations’ (October 2020) <<https://www.fsb.org/wp-content/uploads/P140420-1.pdf>> accessed 14 January 2022.

their value against a referenced asset, including the use of redemption structures, rights against the issuer, and the maintenance of reserve assets.

- **Algorithm-based stablecoins:** These stablecoins use an algorithm to maintain a stable value by increasing or decreasing the supply of stablecoins in response to changes in demand.

Some existing stablecoins include Tether (USDT), USD Coin (USDC) and Dai (DAI). For instance, launched in 2014, Tether issued by Tether Holdings Ltd., is one of the most popular stablecoins and has the largest market capitalisation for a stablecoin.<sup>25</sup> As per Tether, every Tether token is “1-to-1 pegged to the dollar, so 1 USD₮ Token is always valued by Tether at 1 USD.”<sup>26</sup> Further, as per its website, every Tether token “is always 100% backed by its reserves, which include traditional currency and cash equivalents and, from time to time, may include other assets and receivables from loans made by Tether to third parties, which may include affiliated entities.”<sup>27</sup> However, it was the announcement of a stablecoin under Project Libra by Facebook in 2019 that has led to increased policy attention to stablecoins. This was a unique proposal that was backed by a group of large corporations (including payment giants like Mastercard, Visa) that sought to create a global stablecoin for retail payments, with a potential to emerge as a “monetary alternative with scale”.<sup>28</sup> Pursuant to changes to its design, Libra 2.0 (referred to as Diem)<sup>29</sup> also envisages the creation of a new stablecoin, with both existing and new payment systems. The newly proposed Diem payment system supports two kinds of stablecoins- a single currency stablecoin wherein the proposed stablecoin is backed by a single fiat currency such as the US Dollar or Euro and a multi-currency stablecoin which is backed by a basket of currencies (collectively “Libra stablecoins”). The Diem Association<sup>30</sup> is in-charge of providing a governance framework for the Libra network and the reserves.<sup>31</sup> It also plays a supervisory role over the operations of the Diem payment systems. Such a stablecoin could be used across a huge network of Facebook and its rapidly growing payments offerings across the globe, more specifically WhatsApp Pay and Facebook Pay. This has the potential to have rapid access to millions of Facebook users, thereby paving the way for mass adoption in multiple jurisdictions. This coupled with the network of Facebook and other Diem Association members could achieve substantial volume and accordingly may raise important questions on its impact on other payment solutions and even financial stability. Even with existing stablecoins, it has been noted<sup>32</sup> that while stablecoins are often advertised as being supported or backed by a variety of reserve assets, there is no agreed standard regarding the composition of such reserve assets. Further, it is also pointed out<sup>33</sup> that there is variation in the process of redemption of different stablecoins, including who may present a stablecoin for redemption, if there is a limit on the number of stablecoins that maybe redeemed and the presence of any right against the issuer. Very often, there are concerns regarding the accuracy of such disclosures made by such issuers. For instance, in the USA, as per an order<sup>34</sup> issued by the Commodity Futures Trading Commission (“CFTC”), Tether Holdings Ltd. has entered into a settlement with the CFTC to pay a monetary penalty amounting

---

<sup>25</sup> CoinMarketCap, ‘Top Stablecoin Tokens by Market Capitalization’, <<https://coinmarketcap.com/view/stablecoin/>> accessed 18 January 2022.

<sup>26</sup> ‘Tether’, <<https://tether.to/>> accessed 18 January 2022.

<sup>27</sup> ‘Tether’, <<https://tether.to/>> accessed 18 January 2022.<https://tether.to/>

<sup>28</sup> Douglas Arner and others, ‘Stablecoins: Risks, Potential and Regulation’, (*BIS Working papers No. 905, Monetary and Economic Department, November 2020*), <<https://www.bis.org/publ/work905.pdf>> accessed 18 January 2022.

<sup>29</sup> Libra Association Members, ‘Whitepaper v2.0’, (April 2020), <[https://wp.diem.com/en-US/wp-content/uploads/sites/23/2020/04/Libra\\_WhitePaperV2\\_April2020.pdf](https://wp.diem.com/en-US/wp-content/uploads/sites/23/2020/04/Libra_WhitePaperV2_April2020.pdf)> accessed 14 January 2022.

<sup>30</sup> Diem, ‘About Us’, <<https://www.diem.com/en-us/about-us/>> accessed 18 January 2022.

<sup>31</sup> The Reserve will maintain high- quality liquid assets. 80% of the Reserves will comprise of short-term (up to three months’ remaining maturity) government securities issued by sovereigns with very low credit risk and is highly-liquid in the securities market. 20% of the Reserves will be cash with overnight sweeps into money market funds which will invest in short-term (up to one year’s remaining maturity) government securities having the same risk and liquidity. See Libra Association Members, ‘Whitepaper v2.0’, (April 2020), <[https://wp.diem.com/en-US/wp-content/uploads/sites/23/2020/04/Libra\\_WhitePaperV2\\_April2020.pdf](https://wp.diem.com/en-US/wp-content/uploads/sites/23/2020/04/Libra_WhitePaperV2_April2020.pdf)> accessed 14 January 2022

<sup>32</sup> President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, ‘Report on Stablecoins’, (November 2021), <[https://home.treasury.gov/system/files/136/StableCoinReport\\_Nov1\\_508.pdf](https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf)> accessed 18 January 2022.

<sup>33</sup> President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, ‘Report on Stablecoins’, (November 2021), <[https://home.treasury.gov/system/files/136/StableCoinReport\\_Nov1\\_508.pdf](https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf)> accessed 18 January 2022.

<sup>34</sup> CFTC, ‘CFTC Orders Tether and Bitfinex to Pay Fines Totaling \$42.5 Million’, (*Press Release Number 8450-21, 15 October 2021*), <<https://www.cftc.gov/PressRoom/PressReleases/8450-21>> accessed 18 January 2021.

to USD 41 million over claims that Tether stablecoin was fully backed by US dollars, which the CFTC found was untrue.<sup>35</sup>

Based on various features, including intended use cases, various terms are often used to refer to different types of cryptoassets. For instance, the term “token” or “protocol tokens” refer to such cryptoassets that are native to the DLT that “birthed them” and is used as “a reward and incentive system for the ‘miners’ who use their computing power for technical maintenance of the DLT such as adding blocks to a blockchain.”<sup>36</sup> For instance, Bitcoin is the native token for the Bitcoin blockchain and Ether is the native token for Ethereum. Similarly, “payment tokens” can be used as a means of exchange for paying for goods and services by a recipient who is willing to accept them. For a detailed discussion on the types of cryptoassets, please refer to Chapter II. As the underlying technology i.e. DLT evolves, it has led to the emergence of new types of tokens. **While the term “cryptocurrencies”, “tokens” and “virtual currencies” and “cryptoassets” are often used interchangeably, unless indicated otherwise, for this Report, the term cryptoassets is broadly used to refer to all such cryptoassets that are a digital representation of value or right and based on cryptography, DLT or similar technology.**

## Understanding the Underlying DLT

DLT is a database or ledger that is distributed across multiple sites, countries, or institutions with no centralized controller.<sup>37</sup> The BIS defines DLT to “refer to processes and related technologies that enable nodes<sup>38</sup> in a network (or arrangement) to securely propose, validate and record state changes (or updates) to a synchronised ledger that is distributed across the network’s node.”<sup>39</sup> The technology enables sharing and updating of records of information in a distributed and decentralised manner. A platform, based on such technologies can be used to record a range of data points relating to ownership of existing financial assets (such as shares), tangible assets (such as real land, real estate) or digital assets (such as cryptoassets like bitcoin). Different DLT platforms maybe designed in a different manner incorporating primarily these features as pointed out by the FCA.<sup>40</sup>

- Data distribution: Participants (meaning computer nodes<sup>41</sup>) can keep a copy of the ledger and are able to read and access the data.
- Decentralisation: Subject to agreed protocols, participants can update the ledger.
- Cryptography: The system will rely on cryptography to identify, authenticate/validate records and participants and facilitate consensus.

---

<sup>35</sup> Since its launch, Tether has represented that the tether token is 100% backed by corresponding fiat assets, including U.S. dollars and euros. However, the Tether order finds that “from at least June 1, 2016 to February 25, 2019, Tether misrepresented to customers and the market that Tether maintained sufficient U.S. dollar reserves to back every USDT in circulation with the “equivalent amount of corresponding fiat currency” held by Tether and “safely deposited” in Tether’s bank accounts. In fact Tether reserves were not “fully-backed” the majority of the time. The order further finds that Tether failed to disclose that it included unsecured receivables and non-fiat assets in its reserves.....As found in the order, Tether held sufficient fiat reserves in its accounts to back USDT tether tokens in circulation for only 27.6% of the days in a 26-month sample time period from 2016 through 2018. The order also finds that, instead of holding all USDT token reserves in U.S. dollars as represented, Tether relied upon unregulated entities and certain third-parties to hold funds comprising the reserves; comingled reserve funds with Bitfinex’s operational and customer funds; and held reserves in non-fiat financial products.”, See CFTC, ‘CTFC Orders Tether and Bitfinex to Pay Fines Totaling \$42.5 Million’, (Press Release Number 8450-21, 15 October 2021), <<https://www.cftc.gov/PressRoom/PressReleases/8450-21> > accessed 18 January 2021.

<sup>36</sup> Leon Perlman, ‘Regulation of the Financial Components of the Crypto-Economy’ (School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series), Pg 6 < [https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf) > accessed 13 January 2022.

<sup>37</sup> Leon Perlman, ‘Regulation of the Financial Components of the Crypto-Economy’ (School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series), Pg 8 < [https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf) > accessed 13 January 2022.

<sup>38</sup> A computer participating in the operation of a DLT arrangement.

<sup>39</sup> Committee on Payments and Market Infrastructures, BIS, ‘Distributed Ledger Technology in Payment Clearing and Settlement – An Analytic Framework’ (February 2017) <<https://www.bis.org/cpmi/publ/d157.pdf> > accessed 13 January 2022.

<sup>40</sup> Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf) > accessed 13 January 2022.

<sup>41</sup> Computer in a network that record and share data across multiple data stores (or ledgers). Basel Committee on Banking Supervision, BIS, ‘Prudential treatment of cryptoasset exposures’, (June 2021) <<https://www.bis.org/bcbcs/publ/d519.pdf> > accessed 13 January 2022.

- Programmability / automation: The platform allows the “computer-coded automation” through smart contracts that can implement terms of an agreement, without the need for manual intervention.

How the aforesaid features are used by developers while designing cryptoassets and associated services may vary and there is no standard form of DLT. For instance, the term “blockchain” that is often used interchangeably with the term “DLT” is a type of DLT and refers to a particular way of structuring data on a DLT platform.<sup>42</sup> The popular cryptocurrency Bitcoin is based on the blockchain technology. Bitcoin uses well-established technologies to verify and add transactions into a “block”. This block or batch of transactions is added to a chain comprising a history of transactions - known as a blockchain. The new block is then “broadcasted” to the network so that nodes can agree on the new blockchain and update their copies of the ledger.<sup>43</sup>

Depending on their design and architecture, DLT systems may be of different types. Based on user access and participation privileges, DLT systems may be public or private and permissioned or permissionless. DLT systems may be categorized as public or private depending on whether the ledgers can be accessed by anyone or only by the participating nodes in the network.<sup>44</sup> Further, based on whether network participants or nodes need permission to make changes to the ledger, DLT systems may be classified as permissioned or permissionless DLT systems.<sup>45</sup> Two prominent examples of completely permissionless blockchains are Bitcoin and Ethereum, where network participants can “join or leave the network at will, without being pre-approved or vetted by any entity.”<sup>46</sup> Such systems often raise legal and policy concerns, relating to the identity of network participants, legal ownership of the ledger and legal liabilities in case of regulation and default. To deal with such concerns, there has been an emergence of permissioned DLT systems, where network participants are selected by “an owner or an administrator of the ledger – who controls network access and sets the rules of the ledger.”<sup>47</sup> In reality, there is no binary categorisation of public and private or permissioned and permissionless DLT systems, and the degree of openness, accessibility and decentralisation will determine the nature of the DLT system that may manifest in different forms.<sup>48</sup> For instance, XRP, has a permissioned ledger, but the data is validated by all participants and hence has been categorised by some as a public, permissioned ledger system.<sup>49</sup> Similarly, it has been pointed out that a private DLT system may be designed either as permissioned or permissionless, based on whether all or selected participants can read the ledger and submit and validate data entries.<sup>50</sup>

<sup>42</sup> Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed 13 January 2022.

<sup>43</sup> Committee on Payments and Market Infrastructures, BIS, ‘Distributed Ledger Technology in Payment Clearing and Settlement – An Analytic Framework’ (February 2017) <<https://www.bis.org/cpmi/publ/d157.pdf>> accessed 13 January 2022.

<sup>44</sup> World Bank Group, ‘Distributed Ledger Technology (DLT) and Blockchain’, (Fintech Note No. 1) <<https://olc.worldbank.org/system/files/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>> accessed 13 January 2022.

<sup>45</sup> World Bank Group, ‘Distributed Ledger Technology (DLT) and Blockchain’, (Fintech Note No. 1) <<https://olc.worldbank.org/system/files/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>> accessed 13 January 2022.

<sup>46</sup> World Bank Group, ‘Distributed Ledger Technology (DLT) and Blockchain’, (Fintech Note No. 1) <<https://olc.worldbank.org/system/files/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>> accessed 13 January 2022.

<sup>47</sup> World Bank Group, ‘Distributed Ledger Technology (DLT) and Blockchain’, (Fintech Note No. 1) <<https://olc.worldbank.org/system/files/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>> accessed 13 January 2022.

<sup>48</sup> World Bank Group, ‘Distributed Ledger Technology and Secured Transactions Frameworks: A Primer’, (Distributed Ledger Technology & Secured Transactions: Legal, Regulatory and Technological Perspectives- Guidance Note Series, May 2020), <<https://documents1.worldbank.org/curated/en/541741588053800973/pdf/Distributed-Ledger-Technology-and-Secured-Transactions-Framework.pdf>> accessed on 13 January 2022; OECD, ‘OECD Blockchain Primer’, <<https://www.oecd.org/finance/OECD-Blockchain-Primer.pdf>> accessed 13 January 2022.

<sup>49</sup> World Bank Group, ‘Distributed Ledger Technology (DLT) and Blockchain’, (Fintech Note No. 1) <<https://olc.worldbank.org/system/files/122140-WP-PUBLIC-Distributed-Ledger-Technology-and-Blockchain-Fintech-Notes.pdf>> accessed 13 January 2022.

<sup>50</sup> World Bank Group, ‘Distributed Ledger Technology and Secured Transactions Frameworks: A Primer’, (Distributed Ledger Technology & Secured Transactions: Legal, Regulatory and Technological Perspectives- Guidance Note Series, May 2020), <<https://documents1.worldbank.org/curated/en/541741588053800973/pdf/Distributed-Ledger-Technology-and-Secured-Transactions-Framework.pdf>> accessed on 13 January 2022; OECD, ‘OECD Blockchain Primer’, <<https://www.oecd.org/finance/OECD-Blockchain-Primer.pdf>> accessed 13 January 2022.

The method used by participants to reach an agreement to validate the accuracy of the distributed ledger is known as the consensus mechanism.<sup>51</sup> The consensus mechanism employed can be diverse with implications on processing speed, scalability, and energy consumption.

DLT can facilitate greater levels of automation through so-called 'smart contracts'. It is a functionality provided by DLT systems to execute pre-determined commands or terms without further human intervention.<sup>52</sup> Smart contracts developed on DLT systems may have several applications in the financial sector. For instance, it may be relied on for automating the execution of interest and principal payments on certain dates, collection or distribution of funds based on certain events occurring or automatic termination of contracts based on agreed terms.<sup>53</sup>

## Creation and Distribution of Cryptoassets

The Cambridge Centre for Alternative Finance ("CCAF") in its report notes that there are three broad ways to create cryptoassets:<sup>54</sup>

- Pre-mine: All cryptoassets / tokens are created at one go as a one-time event.
- Continuous mining: Nodes popularly referred to as "miners" create new tokens continuously according to agreed protocols of the concerned network.
- Hybrid: A specific portion is pre-mined with the remaining cryptoassets being minted through continuous mining after network or application launch.

Once created, cryptoassets may be distributed to holders in different ways, such as:<sup>55</sup>

- public or private offering of such cryptoassets to potential users through initial coin offering;<sup>56</sup>
- airdrops through which cryptoassets are usually distributed for free to users, primarily to increase and attract new users and to create awareness about the cryptoassets;<sup>57</sup>
- forking, through which a cryptoasset is created due to a change in the rule or protocol of the underlying DLT system that causes the network to split;<sup>58</sup> and

---

<sup>51</sup> Leon Perlman, 'Regulation of the Financial Components of the Crypto-Economy' (School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series), Pg 11 < [https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf) > accessed 13 January 2022.

<sup>52</sup> FCA, 'Discussion Paper on Distributed Ledger Technology', (April 2017), < <https://www.fca.org.uk/publication/discussion/dp17-03.pdf> > accessed 13 January, 2022.

<sup>53</sup> Committee on Payments and Market Infrastructures, BIS, 'Distributed Ledger Technology in Payment Clearing and Settlement – An Analytic Framework' (February 2017) < <https://www.bis.org/cpmi/publ/d157.pdf> > accessed 13 January 2022.

<sup>54</sup> Apoline Blandin and others, 'Global Cryptoasset Regulatory Landscape Study' (Cambridge Centre for Alternative Finance, 2019) < <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> > accessed 13 January 2022.

<sup>55</sup> 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-emerging-tax-policy-issues.htm](http://www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm) > accessed 14 January 2022.; Apoline Blandin and others, 'Global Cryptoasset Regulatory Landscape Study' (Cambridge Centre for Alternative Finance, 2019) < <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> > accessed 13 January, 2022.

<sup>56</sup> Originally, the term "initial coin offering" or "ICO" was primarily used to refer to a public offering of a new cryptoasset organised upon its launch by an identifiable issuer. The issuer pre-mined a number of coins to offer them to the public to cover development costs. The term is now being used by policymakers to refer to the process through which businesses or individuals issue tokens to the public to raise funds for their projects, in exchange for fiat money or other crypto-assets. See Prof. Dr. Robby Houben and Alexander Snyers, 'Crypto-assets – Key developments, regulatory concerns and responses', (Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, 2020) < [https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf) > accessed 13 January 2022.

<sup>57</sup> FCA, 'Guidance on Cryptoassets Feedback and Final Guidance to CP 19/3' (Policy Statement PS19/22, July 2019) < <https://www.fca.org.uk/publication/policy/ps19-22.pdf> > accessed 13 January, 2022.

<sup>58</sup> Apoline Blandin and others, 'Global Cryptoasset Regulatory Landscape Study' (Cambridge Centre for Alternative Finance, 2019) < <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> > accessed 13 January 2022. Examples include Ethereum Classic (2016) and Bitcoin Cash (2017)

- mining which refers to the process of validating and adding transactions to the ledger on the DLT system by undertaking complex mathematical / cryptographical equations. The “miner” i.e. the network participant that is the first to solve such equations may be rewarded through new tokens.<sup>59</sup>

## Key Participants of the Cryptoasset Market

Several players undertake cryptoasset related activities. To identify key participants in the cryptoasset market, it is important to map these participants against such activities. The identification of key players and the services provided by them is critical to design regulations for the cryptoasset sector. For this purpose, the Report relies on the three categories to classify cryptoasset activities proposed by the CCAF<sup>60</sup> and relied on by the BIS.<sup>61</sup>

- **Primary market activities:** These activities primarily relate to the issuance and distribution of cryptoassets in the primary market. This may include activities relating to the issuer and investor onboarding, distribution of assets to market participants, and risk assessment.
- **Secondary market activities:** These activities relate to trading in the secondary market and clearing and settlement of such transactions. This will comprise activities relating to platforms for trading, order matching and safe custody of assets for consumers.
- **Ancillary Activities:** These activities seek to support primary and secondary market activities efficiently. This may include providing infrastructure and technology support services.

Based on a review of the activities set out above, the following are some of the key market participants of the cryptoasset sector.<sup>62</sup> Please note that this is not an exhaustive list. The following list may be a good starting point to consider the regulation of participants in the cryptoasset market.

- **Issuer of Tokens:** This is the legal issuer of a cryptoasset and can include several entities such as developers, designers and companies. For instance, a company may issue a utility token (described below) to raise funds or gain users for a project being developed by the company.
- **Miner:** As discussed above, a miner participates in validating a transaction on a blockchain by solving complex cryptographic puzzles. Miners may be either cryptoasset users, or entities that undertake the business of mining cryptoassets to sell them for fiat currencies or other cryptoassets.
- **Crypto Exchanges and Trading Platforms:** Crypto exchanges enable cryptoasset users to purchase cryptoassets with fiat currency or sell their cryptoassets for fiat currency or other cryptoassets. They offer users a variety of payment options to facilitate such transactions. Trading platforms enable peer-to-peer transactions. They bring together users that are looking to purchase or sell cryptoassets and provide them with a platform on which they can trade with each other directly without the involvement of a centralised exchange.

---

<sup>59</sup> Apart from this competitive process, in certain consensus algorithms miners can also stake their coins to become validators. These validators are then randomly chosen to validate or mine blocks and whoever does so accurately receives the coins. See Analisa R. Bala, ‘Cleaning up Crypto’, (*Finance & Development*, September 2021) < <https://www.imf.org/external/pubs/ft/fandd/2021/09/pdf/how-to-make-cryptocurrencies-cleaner-and-greener.pdf> > accessed 24 January 2022. Please see section on ‘Means of Production’ in Chapter III that highlights the two types of consensus mechanisms.

<sup>60</sup> Jason G. Allen, ‘Legal and Regulatory Considerations for Digital Assets’ (*Cambridge Centre for Alternate Finance*, 2020) < <https://www.jbs.cam.ac.uk/wp-content/uploads/2020/10/2020-ccaf-legal-regulatory-considerations-report.pdf> > accessed 13 January 2022.

<sup>61</sup> Rodrigo Coelho and others, ‘Supervising Cryptoassets for Anti-Money Laundering’, (*Financial Stability Institute, FSI Insights on policy implementation No 31 April 2021*), < <https://www.bis.org/fsi/publ/insights31.pdf> > accessed 13 January 2022.

<sup>62</sup>FCA, ‘Guidance on Cryptoassets Feedback and Final Guidance to CP 19/3’ (*Policy Statement PS19/22*, July 2019) < <https://www.fca.org.uk/publication/policy/ps19-22.pdf> > accessed on 13 January, 2022; Prof. Dr. Robby Houben and Alexander Snyers, ‘Cryptocurrencies and Blockchain; Legal Context and Implications for Financial Crime, Money Laundering and Tax Evasion’, (*Study for European Parliament’s Special Committee on Financial Crimes, Tax Evasion and Tax Avoidance, Policy Department for Economic, Scientific and Quality of Life Policies*, European Parliament, June 2018) < <https://www.europarl.europa.eu/cmsdata/150761/TAX3%20Study%20on%20cryptocurrencies%20and%20blockchain.pdf> > accessed 13 January 2022.

- Wallet providers and custodians: They provide users with custodial services such as wallets for holding, storing and transferring cryptoassets. To put it simply, the wallet stores the user's cryptographic keys, allows the user to spend the cryptoasset, maintains the customer's cryptoasset balance and also provides storage and transaction security. Wallets can be stored both online (hot storage) or offline (cold storage).<sup>63</sup>

In addition to these key players, there are also other players that may provide ancillary services such as web administration, software developers, application developers, third party payment providers facilitating merchant acceptance.<sup>64</sup>

---

<sup>63</sup> Financial Action Task Force, 'Virtual Currencies: Key Definitions and Potential AML/CFT Risks' (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf> > accessed 13 January 2022.

<sup>64</sup> Financial Action Task Force, 'Virtual Currencies: Key Definitions and Potential AML/CFT Risks' (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf> > accessed 13 January 2022.

# III. Classification of Cryptoassets

---

The classification of financial instruments and transactions is critical for financial regulation as such classification determines the body of law and the supervisory powers that will apply to such instrument or transaction. Such a classification is even more critical in countries like India with multiple financial regulators, with each regulator responsible for regulating specific types of financial transactions or instruments. Uncertainty regarding definitions and classifications often creates possibilities for regulatory arbitrage.

Unfortunately, there appears to be no consensus either at the national or at the global level on the classification or taxonomy of cryptoassets and their regulatory treatment. Rapidly evolving technologies, use cases and new business models often pose a challenge to the classification of cryptoassets. This process becomes more complex when cryptoassets may fall into two or more categories depending on their features and the evolution of their intended use over their life cycle.<sup>65</sup> This often creates a hurdle in designing regulations for cryptoassets that is constantly evolving. Against this background, this Report seeks to assess the different types of cryptoassets based on objective criteria. Such a classification is useful to understand the characteristics of different types of cryptoassets, identify risks (if any) emanating from them, which in turn is critical to design risk-based regulations. The classification suggested in this Report takes into account existing literature on this issue, as suggested by various regulators and researchers.

It is important to also point out that this is not an exhaustive classification as the cryptoasset market is still evolving. Therefore, the classification will also have to be dynamic with ongoing assessments of properties, use cases and rights cryptoassets embody.

## Assessing Parameters for Classification

While formulating a framework for classification exploring the markers or the parameters for such classification is of utmost importance. Various factors may influence the categorization with each having varied implications on the design and scope of regulations. In this section, the Report seeks to analyze some key parameters that can be used to classify cryptoassets.

### Nature of Issuer

This parameter is used to verify the nature of the legal issuer of a cryptoasset. The issuer is the person / organisation that has developed the technical specifications of a cryptoasset and sets its features. This in turn helps to assess the legal liabilities. In traditional financial markets, the issuer is always identifiable. The issuer creates a financial instrument through which rights are conferred on the holder and is legally responsible for it. Therefore, traditional financial instruments typically represent a credit or equity claim against the issuer. Some cryptoassets may demonstrate similar characteristics - where the issuer is identifiable and the holder of the cryptoasset may enforce a right against the issuer (security tokens, stablecoins). However, there are also cryptoassets, like Bitcoin, where the issuer is not ascertainable and there are no rights that may be claimed against the issuer. The identification of the issuer and the right against the issuer also distinguishes cryptoassets from digital currencies proposed to be issued by central banks of various countries. Unlike cryptoassets that are issued by the private sector, central bank digital currencies (“CBDCs”) will be issued by a central bank and will be a claim against the central bank. For this reason, digital currencies issued by the central banks are likely to be granted a legal tender status whereas a cryptoasset even if used for payment purposes (such as payment tokens, stablecoins) will perhaps never be treated as a fiat currency and enjoy legal tender status.

---

<sup>65</sup> Rodrigo Coelho and others, ‘Supervising Cryptoassets for Anti-Money Laundering’, (Financial Stability Institute, FSI Insights on policy implementation No 31 April 2021), <<https://www.bis.org/fsi/publ/insights31.pdf>> accessed 13 January 2022.

Factors like whether an issuer is identifiable or non-identifiable, regulated or unregulated and if cryptoassets are enforceable against the issuer are useful to understand the different risks that may emanate from such cryptoassets and to ascertain legal liabilities. This is an important consideration in cases of theft, loss of funds, insolvency, or bankruptcy.

## Native and Non-Native Tokens

The terms cryptoassets, tokens and cryptocurrencies are often used interchangeably. Originally, the term “coins” or “cryptocurrencies” was used to denote payment-related cryptoassets that is “native” to the blockchain on which it operates.<sup>66</sup> For example, Bitcoin blockchain has Bitcoin, Ethereum has Ether and Ripple has its XRP Ledger and XRP, a coin. Such coins are often referred to as native assets or native tokens as they are native to the underlying protocol and “derive their value in and of themselves and are defined by their existence on the blockchain”.<sup>67</sup> While Ether is a native token/coin of Ethereum, many developers working on smart contracts and decentralized applications use existing blockchains like Ethereum to build their projects. In this way, Ethereum also facilitates the creation of non-native digital tokens.<sup>68</sup> Unlike Bitcoins and Ether which are native tokens, non-native tokens do not have their own blockchain. Instead, such tokens rely on existing blockchains (such as Ethereum) and their native cryptocurrencies (such as Ether) as a medium of exchange.<sup>69</sup>

## Functional Use Cases

Generally, classifications of cryptoassets by regulators and researchers are based on the underlying financial service functionality of the cryptoasset.<sup>70</sup> The UK categorizes cryptoassets into three broad groups<sup>71</sup> - e-money tokens;<sup>72</sup> security tokens; and unregulated tokens, that consists of utility tokens and payment tokens. For regulation, the proposal on Markets in Crypto-Assets (“MiCA”)<sup>73</sup> in the EU refers to three sub-categories of cryptoassets - utility tokens, asset referenced tokens<sup>74</sup> and e-money tokens.<sup>75</sup> Based on a review of such use cases identified in existing literature, cryptoassets may be broadly classified under three broad categories based on their functional use cases.

### (a) Payment / Exchange Cryptoassets<sup>76</sup>

---

<sup>66</sup> Yuliya Guseva, ‘A Conceptual Framework for Digital Asset Securities: Tokens and Coins as Debt and Equity’, (2020), Vol. 80, Maryland Law Review, <[https://static1.squarespace.com/static/5e62b76d502f345aab67e7e0/t/5fff4ab0095b930ce6044cca/1610566321553/6\\_Guseva\\_Final.pdf](https://static1.squarespace.com/static/5e62b76d502f345aab67e7e0/t/5fff4ab0095b930ce6044cca/1610566321553/6_Guseva_Final.pdf)> accessed on 13 January 2022.

<sup>67</sup> OECD (2020), The Tokenisation of Assets and Potential Implications for Financial Markets, OECD Blockchain Policy Series, <[www.oecd.org/finance/The-Tokenisation-of-Assets-and-Potential-Implications-for-Financial-Markets.htm](http://www.oecd.org/finance/The-Tokenisation-of-Assets-and-Potential-Implications-for-Financial-Markets.htm)> accessed 13 January 2022.

<sup>68</sup> Yuliya Guseva, ‘A Conceptual Framework for Digital Asset Securities: Tokens and Coins as Debt and Equity’, (2020), Vol. 80, Maryland Law Review, 166, 176 <[https://static1.squarespace.com/static/5e62b76d502f345aab67e7e0/t/5fff4ab0095b930ce6044cca/1610566321553/6\\_Guseva\\_Final.pdf](https://static1.squarespace.com/static/5e62b76d502f345aab67e7e0/t/5fff4ab0095b930ce6044cca/1610566321553/6_Guseva_Final.pdf)> accessed 13 January 2022.

<sup>69</sup> Farheen Shaikh, ‘What is a Crypto Token?’, (Coinswitch Kuber, 14 April 2021) <<https://coinswitch.co/blog/crypto-token/>> accessed 13 January 2022.

<sup>70</sup> Rodrigo Coelho and others, ‘Supervising Cryptoassets for Anti-Money Laundering’, (Financial Stability Institute, FSI Insights on policy implementation No 31 April 2021), <<https://www.bis.org/fsi/publ/insights31.pdf>> accessed 13 January 2022.

<sup>71</sup> Her Majesty’s Treasury, ‘UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence’, (January 2021), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/950206/HM\\_Treasury\\_Cryptoasset\\_and\\_Stablecoin\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf)> accessed 13 January 2022.

<sup>72</sup> They are tokens that meet the definition of electronic money in the Electronic Money Regulations 2011 (EMRs) – “broadly, digital payment instruments that store value, can be redeemed at par value, at any time and offer holders a direct claim on the issuer.”

<sup>73</sup> Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>> accessed 14 January 2022.

<sup>74</sup> These cryptoassets purports “to maintain a stable value by referring to the value of several fiat currencies that are legal tender, one or several commodities or one or several crypto-assets, or a combination of such assets.” See Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>> accessed 14 January 2022.

<sup>75</sup> This cryptoasset is used as a means of exchange and that purports to maintain a stable value by referring to the value of a fiat currency that is legal tender. See Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>> accessed 14 January 2022.

<sup>76</sup> Her Majesty’s Treasury, ‘UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence’, (January 2021), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/950206/HM\\_Treasury\\_Cryptoasset\\_and\\_Stablecoin\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf)> accessed 13 January 2022.; Prof. Dr. Houben, R., Snijers, A., Crypto-assets – Key developments, regulatory

These cryptoassets are issued by private entities and are primarily intended to be used as a means of payment without the involvement of traditional financial intermediaries. They are different from existing fiat currency in as much as such instruments are neither issued nor backed by the central bank. They usually grant no right to the holder and cannot be enforced against the issuer. For instance, popular cryptocurrencies like Bitcoin, and Litecoin are examples of payment tokens. As discussed above, they are volatile and are accordingly not widely accepted as a means of exchange outside the crypto and digital communities barring a few exceptions, and they are not typically used as a unit of account or a store of value. The acquisition of such cryptoassets by most retail consumers has so far been for “speculation”<sup>77</sup> rather than exchange. They also differ from security tokens discussed below, as they do not grant financial rights to holders. Instead, these tokens derive their value from the willingness of others to accept them as a form of payment.

To deal with the volatility of cryptoassets, a new type of asset/currency-backed cryptoassets popularly referred to as stablecoins has emerged. As discussed above, the value of such cryptoasset is pegged to or backed by, fiat currency, other cryptoassets or other forms of assets. They can also be algorithmically stabilised for exchange on a decentralised network.

#### (b) Security / Investment Tokens

Such cryptoassets provide holders with rights similar or akin to traditional instruments like shares, debentures, or units in collective investment schemes. For instance, the FCA notes that tokens that confer on holders’ rights similar to shareholders such as voting rights, access to a dividend of company profits or the distribution of capital upon liquidation, are likely to be security tokens.<sup>78</sup> Typically such tokens are used to raise capital.<sup>79</sup> Such security tokens that are akin to securities are being considered to be regulated under the securities laws in many countries like EU, UK and USA. For instance, company A issues tokens that grant holders with a share of the company’s profits payable annually and also voting rights. The tokens can be easily transferred and change of ownership can be recorded and the same can also be listed on cryptoasset exchanges. This token resembles features of traditional security. Needless to say, the treatment of such a token will vary depending on the specific definition of shares and securities adopted in a particular country.

#### (c) Utility tokens

These tokens grant holders access to a specific application, product or service often provided through a newly developed infrastructure.<sup>80</sup> The holders typically contribute funds to a project for some reward, like access to a product or service. The FCA notes that in some cases such utility tokens may have features similar to rewards-based crowdfunding or prepaid vouchers. Like security / investment tokens, utility tokens are also typically issued to raise capital / financial resources to fund the development of an issuer’s application, product, or service. However, unlike investment tokens, their main purpose is not to generate future cash flows for investors, but to grant access to the issuer’s application, product or service, and at the

---

concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 14 January 2022 ; Roei Sarel, *Property Rights in Cryptocurrencies: A Law and Economics Perspective*, 22 N.C. J.L. & Tech., 389 (2021), <<https://scholarship.law.unc.edu/ncjolt/vol22/iss3/3>>, accessed 13 January 2022.

---

<sup>77</sup> FCA, Guidance on Cryptoassets, (Consultation Paper CP 19/3, <January 2019>), <[fca.org.uk/publication/consultation/cp19-03.pdf](https://www.fca.org.uk/publication/consultation/cp19-03.pdf)> accessed 13 January 2022.

---

<sup>78</sup> FCA, Guidance on Cryptoassets, (Consultation Paper CP 19/3, <January 2019>), <[fca.org.uk/publication/consultation/cp19-03.pdf](https://www.fca.org.uk/publication/consultation/cp19-03.pdf)> accessed 13 January 2022.

---

<sup>79</sup> Prof. Dr. Houben, R., Snyers, A., Crypto-assets – Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 13 January 2022.

---

<sup>80</sup> Prof. Dr. Houben, R., Snyers, A., Crypto-assets – Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 13 January 2022.

same time create a user base.<sup>81</sup> Once issued, like investment tokens, utility tokens can also be traded in secondary markets i.e. cryptoasset exchanges or for other cryptoassets.

While theoretically, it may be possible to delineate different categories of cryptoassets as discussed above, in practice, it is often challenging as a cryptoasset may also exhibit hybrid features. In the USA, on May 3, 2021, blockchain-based trading platform operator INX Ltd. announced it had completed its initial public offering (“IPO”) of digital tokens, raising approximately USD 85 million in the IPO from over 7,200 institutional and retail investors. The INX IPO is the first US Securities Exchange and Commission (“SEC”) registered offering of digital tokens.<sup>82</sup> As per its filing with SEC, INX Ltd. was offering INX Tokens<sup>83</sup> which appears to have both security and utility features.<sup>84</sup>

- Security features: The token granted the holder a right to receive an annual pro-rata distribution of 40% of INX’s cumulative adjusted net operating cash flow, and a right to a liquidation preference equal to the rateable portion of a cash fund equal to 75% of the net proceeds from the IPO over USD 25 million, triggered upon a failure to launch cryptocurrency trading or a liquidation event. However, the token differed from a traditional share since it does not provide holders with voting rights and its filing with the SEC clarifies that token holders are not shareholders. For instance, no token holder will have the right to vote or participate in the general meeting of shareholders. Further, token holders will not enjoy the same rights as that shareholders. Directors of INX will have no fiduciary obligations to act in the interests of token holders.
- Utility features: The token granted holders a discount of at least 10% on transaction fees on the INX securities trading platform when INX tokens are used to pay fees, and a passive tiered trading fee discount program on the INX digital trading platform based upon the number of INX tokens held in customers’ private wallets.

The aforesaid example indicates that at times it may be challenging to compartmentalise all types of cryptoassets into specific categories discussed above. For legal analysis such a classification has limitations as cryptoassets are fluid and may resemble more than one functional type of token. Further, there is no consensus on the terminology and definition of token classification. For some tokens, the classification is easy. For instance, payment tokens like Bitcoin, Litecoin, Zcash, etc. were designed to be used for payment purposes and accordingly their classification as payment token is easy. Similarly, tokens like Golem and Filecoin which facilitates access to a specific service - such as computing power (Golem) and data storage (Filecoin), are typically classified as utility tokens.<sup>85</sup> However, categorisation becomes murkier as one moves away from such tokens that have been designed for a specific purpose as it becomes challenging to determine boundaries between different categories. For instance, it has been pointed out that in certain instances, cryptoassets may exhibit features of more than one category discussed above commonly referred to as “hybrid token” that may raise regulatory challenges if laws seek to make a strict demarcation between different tokens discussed above.<sup>86</sup> For instance, one writer points out that:

---

<sup>81</sup> Prof. Dr. Houben, R., Snyers, A., Crypto-assets – Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 13 January 2022.

<sup>82</sup> SEC, ‘INX Estimates Over \$125 Million Raised For The Launch Of Its Digital & Security Assets Trading Platforms’ (Press Release, 3 May 2021), <[https://www.sec.gov/Archives/edgar/data/0001725882/000121390021024126/ea140230ex99-1\\_inxlimited.htm](https://www.sec.gov/Archives/edgar/data/0001725882/000121390021024126/ea140230ex99-1_inxlimited.htm)> accessed on 14 January 2022.

<sup>83</sup> SEC, ‘INX Digital Asset Listing and Trading;’ <[https://www.sec.gov/Archives/edgar/data/1725882/000121390020023202/ea125858-424b1\\_inxlimited.htm](https://www.sec.gov/Archives/edgar/data/1725882/000121390020023202/ea125858-424b1_inxlimited.htm)> accessed 13 January 2022.

<sup>84</sup> Alon Kapen, ‘First Ever SEC Registered Digital Token IPO May Bring Clarity to Blockchain Asset Industry’, (JDSUPRA, 14 June 2021) <<https://www.jdsupra.com/legalnews/first-ever-sec-registered-digital-token-7084681/>> accessed 14 January 2022.

<sup>85</sup> Roe Sarel, *Property Rights in Cryptocurrencies: A Law and Economics Perspective*, 22 N.C. J.L. & Tech., 389, 406 (2021). <<https://scholarship.law.unc.edu/ncjolt/vol22/iss3/3>>, accessed 13 January 2022; Prof. Dr. Houben, R., Snyers, A., Crypto-assets – Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 13 January 2022.

<sup>86</sup> Prof. Dr. Houben, R., Snyers, A., Crypto-assets – Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020, <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 13 January 2022

“Ether (“ETH”), which provides access to the Ethereum blockchain, is an example. As Ether is directly linked to a specific service and does not provide financial rights, it is unsurprising that some scholars have classified it as a utility token. Others instead classify Ether as a security token, and even still, some scholars classify Ether as a currency token, because one of its uses is to pay for so-called “gas charges” that are charged when using the Ethereum blockchain. Such a conclusion may also arise due to the recent movements in the crypto-world, which has given rise to so-called Decentralized Finance (“DeFi”) projects. These projects may require users to deposit Ether as collateral and in return grant the users another token. Depositing Ether brings it closer to a currency—it is utilized as an acceptable form of payment, rather than used directly to get access to its originally linked service.”<sup>87</sup>

Similarly, it has been pointed out that Crypterium is a hybrid token. It is used to pay transaction fees when using the issuers’ services (banking solutions), gives the right to discounts for future services and gives a right to revenues.<sup>88</sup> Such a hybrid token will raise important regulatory questions. For instance, in case a token exhibits a feature of a payment token as well as a security token, the question before policymakers will be whether law relating to payment tokens or securities tokens, or both will apply and in which manner. Does the answer depend on which feature is dominant? This is also perhaps a reason why traditional laws governing financial products and services in India may not be well equipped to regulate such hybrid tokens.

## Rights of the Holder

This parameter is useful to identify the rights that are conferred on the holders of a cryptoasset and whether such rights can be unilaterally modified by the issuer and how are they enforced. Such rights may include the right to profit, right to vote, right to access a platform or application. This will also be important to assess if the holder has the right to the delivery of an underlying asset or the right to a granted interest. In some cases, holders may not enjoy any rights. A study of the rights will be instrumental to assess if such cryptoassets may fall in the categories defined above or if it resembles a traditional financial instrument already regulated under existing laws. This may require an examination of whether the cryptoasset is the asset itself (created solely on the DLT system) or if it is evidence of a legal right to an underlying asset (through tokenization<sup>89</sup> of an existing financial asset). While in the case of the latter, one may argue that existing regulatory principles governing the asset should govern the cryptoasset itself, however, there is no clarity regarding the interplay between the regulations that will apply to the cryptoasset and the law which applies to the asset itself.

## Relationship with Fiat Currency

With the evolution of cryptoassets, their relationship with fiat currency has also evolved. Some cryptoassets are designed for use in a particular virtual domain and under the rules governing its use and cannot be exchanged for fiat currency. For instance, this may include cryptoassets limited for multiplayer online games such as World of Warcraft Gold. They are typically referred to as non-convertible cryptoassets.<sup>90</sup> Some cryptoassets can be exchanged for fiat currency. For instance, Bitcoin, Tether, etc. They are referred to as convertible cryptoassets.<sup>91</sup> In some cases, the cryptoassets are freely interchangeable with fiat currency. In other cases, some cryptoassets may be purchased with cryptoassets, but may not be sold in other currencies and has “unidirectional flow”.<sup>92</sup> For instance, “Nintendo Points”, which can be purchased online by a credit card but which cannot subsequently be converted back into fiat currency.<sup>93</sup> Further, some cryptoassets such as stablecoins may be pegged to fiat currencies or a basket of currencies.

---

<sup>87</sup> Roe Sarel, *Property Rights in Cryptocurrencies: A Law and Economics Perspective*, 22 N.C. J.L. & Tech., 389, 406 (2021). <<https://scholarship.law.unc.edu/ncjolt/vol22/iss3/3>>, accessed 13 January 2022

<sup>88</sup> Thijs Maas, ‘Initial Coin Offerings: When Are Tokens Securities in the EU and US?’ (2019), SSRN Electronic Journal, <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3337514](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3337514)> accessed on 14 January 2022;

<sup>89</sup> Broadly, this may involve the digital representation of real (physical) assets on distributed ledgers, or the issuance of traditional asset classes in tokenised form. OECD (2021), *Regulatory Approaches to the Tokenisation of Assets*, OECD Blockchain Policy Series, <[www.oecd.org/finance/Regulatory-Approaches-to-the-Tokenisation-of-Assets.htm](http://www.oecd.org/finance/Regulatory-Approaches-to-the-Tokenisation-of-Assets.htm)> accessed >14 January 2022.

<sup>90</sup> Financial Action Task Force, ‘Virtual Currencies: Key Definitions and Potential AML/CFT Risks’ (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>> accessed on 13 January 2022.

<sup>91</sup> Financial Action Task Force, ‘Virtual Currencies: Key Definitions and Potential AML/CFT Risks’ (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>> accessed 13 January 2022.

<sup>92</sup> Aleksandra Bal, ‘Taxation, Virtual Currency and Blockchain – Series on International Taxation’, (Wolters Kluwer 2018).

<sup>93</sup> Aleksandra Bal, ‘Taxation, Virtual Currency and Blockchain – Series on International Taxation’, (Wolters Kluwer 2018).

The relationship of cryptoassets with fiat currency will be important from an anti-money laundering and prevention of terrorist financing perspective. The Financial Action Task Force (“FATF”)<sup>94</sup> has noted that “convertible” cryptoassets are potentially vulnerable to money laundering and terrorist financing abuse for many reasons, including greater anonymity provided by such cryptoassets than other non-cash payment methods and their global reach.<sup>95</sup> Such concerns are further heightened in cases of so-called “privacy coins”. Contrary to popular belief, Bitcoins and many existing cryptocurrencies do not provide full anonymity. Bitcoin is *pseudonymous*. Therefore, transactions in Bitcoin are typically linked to the wallet address as opposed to the name of the holder. The transactional records of Bitcoin are stored on a public blockchain. While a holder’s name may not be directly connected to a Bitcoin transaction, the public network enables people to see everyone’s public address and accordingly it “doesn’t take much to pair an identity to a public key.”<sup>96</sup> Therefore, regulators are often able to “track cryptoasset transactions by using metadata stored on the relevant blockchain and applying pattern analysis.”<sup>97</sup> However, this becomes an issue in case of “privacy coins” such as Zcash, Monero, etc. Such privacy coins are designed in a manner to make it more difficult to track on-chain transactions.<sup>98</sup> It can hide information about its users, including information about identity, size of cryptocurrency transactions, or the amount of cryptocurrency a person holds. This creates a challenge for anti-money laundering (“AML”) and combating the financing of terrorism (“CFT”) obligations and taxation compliances. While it is not clear if such coins can achieve full anonymity, such coins may require particular attention from regulators.

## Means of Production

Currently, most cryptoassets exist on DLT that enables recording and sharing of information across multiple ledgers. The data in such ledgers is collectively maintained and controlled by a distributed network of computer servers known as nodes. While any node may propose the addition of new information, there is a need for an agreement or consensus between the nodes to validate the legitimacy of such information. Two commonly used consensus mechanisms are: proof of work (“PoW”) and proof of stake (“PoS”). PoW is typically used for public, permissionless blockchains such as Bitcoins and Ethereum. Here, miners “compete to solve cryptographic / mathematical puzzles to earn the right to add a block of validated transactions and a reward for an amount of the native currency of the underlying DLT.”<sup>99</sup> PoW involves massive energy consumption. However, it is believed that PoS is designed to be an energy-efficient consensus mechanism built using an “algorithm that is based upon the ownership of native crypto-currency in relation to others in the system along with some weighting mechanism such as how long the currency has been held by the stakeholder. This may also include a deposit of currency which, collectively, consists of the ‘stake’ in the system”.<sup>100</sup>

The means of production of a cryptoasset and the consensus mechanism helps to identify parties and the governance mechanism of the cryptoasset. It has been pointed out that miners or transaction processors may be

---

<sup>94</sup> The FATF is an international watchdog and standard-setting body for countering global money laundering and terrorist financing. It formulates recommendations and standards to prevent illegal activities, organized crime, corruption and terrorism. India is a member of FATF. See FATF, ‘Who we are?’, < <https://www.fatf-gafi.org/about/> > accessed 14 January 2022.

<sup>95</sup> FATF, ‘Virtual Currencies: Key Definitions and Potential AML/CFT Risks’ (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf> > accessed 13 January 2022.

<sup>96</sup> Hailey Lenon, ‘Uncertainty to Profit on Right to Privacy’ (Forbes, 10 November 2021) <<https://www.forbes.com/sites/haileylennon/2021/11/10/crypto-investors-defy-regulatory-uncertainty-to-profit-on-right-to-privacy/?sh=b6b99e665a31> > accessed 14 January 2022.

<sup>97</sup> Apoline Blandin and others, ‘Global Cryptoasset Regulatory Landscape Study’ (Cambridge Centre for Alternative Finance, 2019) < <https://www.ibs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> > accessed 13 January, 2022.

<sup>98</sup> Apoline Blandin and others, ‘Global Cryptoasset Regulatory Landscape Study’ (Cambridge Centre for Alternative Finance, 2019) < <https://www.ibs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> > accessed 13 January, 2022.

<sup>99</sup> Leon Perlman, ‘Regulation of the Financial Components of the Crypto-Economy’ (School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series), Pg 5 < [https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf) > accessed 13 January 2022.

<sup>100</sup> Leon Perlman, ‘Regulation of the Financial Components of the Crypto-Economy’ (School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series), Pg 55 < [https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf) > accessed 13 January 2022.

incentivised by fees or other rewards, in respect of which relevant questions might arise under the traditional financial market regulatory framework.<sup>101</sup>

### **Manner of Transfer / Trading**

Cryptoassets can be traded on secondary markets once they are created and distributed in different ways. A report by CCAF<sup>102</sup> refers to two such mechanisms. *First*, it may happen on-chain through the underlying DLT system that has an “integrated value transfer mechanism” that allows for direct transfer of funds from one user to another and the exchange of one cryptoasset for another as long as both cryptoassets reside on the same network. *Second*, the transfer may happen off-chain through marketplaces and exchange services that maintain their own database systems. Mechanisms used to effect transfer/trade of cryptoassets will have a corresponding consequence on the identification of market participants, issues relating to AML and Know-Your-Customer (“KYC”), authorisation requirements and requirements relating to marketing and disclosure.

### **Stabilization Mechanism**

As discussed earlier, to deal with the volatility of traditional cryptoassets, some issuers have designed cryptoassets that seek to maintain a stable value. This stability in value is sought to be achieved by pegging such cryptoassets ( popularly referred to as stablecoins) against currencies, assets, or through an algorithm.<sup>103</sup> This Report already has discussed such asset-linked stablecoins and algorithm-based stablecoins.

A distinction between cryptoassets backed by an asset or currency and other cryptoassets is important since the former due to its relatively stable value is likely to be viewed as a more attractive source of investment or payment. If widely adopted whether in a particular country or across the globe, such stablecoins may become systemically important or compete with existing fiat currency and payment solutions and thereby raise questions on the financial stability implications of such stablecoins. Accordingly, in countries like UK and EU, the regulatory approach seems to be more focused on the regulation of such cryptoassets. The regulation of such cryptoassets may require specific regulatory consideration especially on issues relating to the qualification of the issuer, the stabilisation mechanism, process of redemption, the maintenance of adequate reserves and implications of such stablecoins on the overall financial system.

## **Key Questions to Identify the Nature of a Cryptoasset**

The aforesaid discussion indicates that it may be challenging to compartmentalise all cryptoassets into one single category. Various use cases and design features indicate that each cryptoasset may be structured differently, with each design raising legal and regulatory issues discussed above. Against this background, this sub-section seeks to present some key questions / issues that must be considered by policymakers to assess key features of cryptoassets that will be relevant to inform legal and policy frameworks for cryptoassets.

---

<sup>101</sup>Financial Markets Law Committee, ‘Taxonomical Approaches to Cryptoassets- Response to European Commission Consultation- Part I’ (March 2020) <[http://fmlc.org/wp-content/uploads/2020/03/FMLC\\_UP\\_11706611\\_v\\_1\\_Part-I-Response-to-EC-Consultation-on-regulating-cryptoassets-taxonomy.pdf](http://fmlc.org/wp-content/uploads/2020/03/FMLC_UP_11706611_v_1_Part-I-Response-to-EC-Consultation-on-regulating-cryptoassets-taxonomy.pdf) > accessed 14 January 2022.

<sup>102</sup> Apoline Blandin and others, ‘Global Cryptoasset Regulatory Landscape Study’ (Cambridge Centre for Alternative Finance, 2019) <<https://www.ibs.cam.ac.uk/wp-content/uploads/2020/08/2019-04-ccaf-global-cryptoasset-regulatory-landscape-study.pdf> >accessed 13 January, 2022.

<sup>103</sup> FSB, ‘Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Final Report and High-Level Recommendations’ (October 2020) <<https://www.fsb.org/wp-content/uploads/P131020-3.pdf> > accessed 14 January 2022.

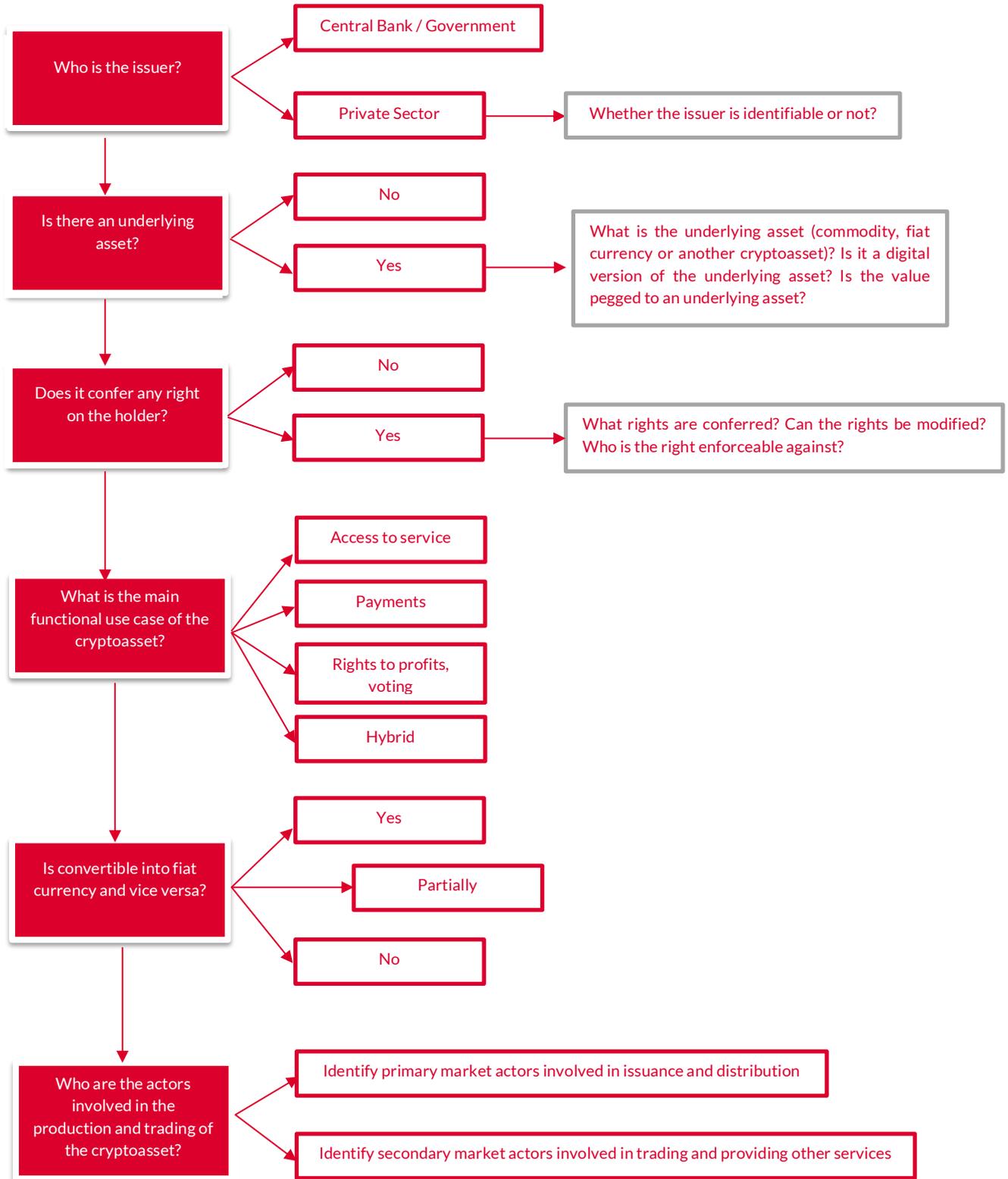


Figure 4: Key Questions to Identify the Nature of a Cryptoasset

# IV. Assessing Opportunities & Risks

As discussed above, investments in and usage of cryptoassets have increased exponentially in recent years, prompting regulators to take notice and determine appropriate policy responses. Before any policy or regulatory action, it is important to understand both the risks and opportunities that cryptoassets present. This is important to design a regulatory framework for cryptoassets that can promote responsible innovation while mitigating attendant risks.

## Exploring Opportunities

### Leveraging the Potential of DLT and Blockchain Technologies

While many policymakers remain wary of cryptoassets, there is a keen interest to explore use cases of the underlying technology of cryptoassets - i.e., DLT and blockchain. This Report already discusses some of the features of DLT and blockchain based systems, that can enable storing and providing access to data / transactions by several participants, without the need for a centralized or single authority responsible for doing the same. Therefore, DLT presents unique opportunities for sectors / markets where multiple participants need to share data and/or processes safely, especially where participants may still be reliant on paper-based records. The ability of DLT systems to remove the need for certain intermediaries, to increase the speed of reconciliation and reduce costs has led to its popularity as an important area of research for many regulators and the industry.<sup>104</sup> For instance, in Singapore, the Monetary Authority of Singapore (“MAS”) has identified potential blockchain use cases in trade finance, cross border payments, digital identity, clearing and settlement and reinsurance.<sup>105</sup> Similarly, in the UK, the FCA notes several use cases of DLT in the financial sector.<sup>106</sup> The FCA notes that the shared data model enabled by DLT may reduce reliance on manual reporting between financial institutions, or for regulatory reporting. For example, regulators could be granted access rights to consult or retrieve data stored on DLT ledgers, giving them access to relevant supervisory information on a real-time basis.<sup>107</sup> It further notes that DLT may be used in trade finance to increase the speed of settlement. Smart contracts could replace letters of credit and create a record of ownership at each stage. Similarly, in Hong Kong, in 2017, seven major banks decided to “commercialise” a Hong Kong Monetary Authority (“HKMA”) led DLT based trade finance proof-of-concept into a production system called the Hong Kong Trade Finance Platform.<sup>108</sup> Amongst other things, the system seeks to

---

<sup>104</sup>FCA, ‘Discussion Paper on distributed ledger technology’ (April 2017) <<https://www.fca.org.uk/publication/discussion/dp17-03.pdf> > accessed 14 January 2022.

<sup>105</sup>MAS, ‘Blockchain/Distributed Ledger Technology’ <<https://www.mas.gov.sg/development/fintech/technologies---blockchain-and-dlt> > accessed 14 January 2022.

<sup>106</sup>Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf) > accessed 13 January 2022.

<sup>107</sup> In 2017, FCA worked with R3 consortium and two major to develop a prototype application for regulatory reporting of mortgage transaction data using the Corda DLT platform. FCA was able to receive real-time mortgage transaction reports from the two banks through this test. See Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf) > accessed 13 January 2022.

<sup>108</sup> Hong Kong Interbank Clearing Limited, ‘eTradeConnect’, [https://www.hkicl.com.hk/eng/our\\_services/etradeconnect.php](https://www.hkicl.com.hk/eng/our_services/etradeconnect.php) accessed 18 January 2022; KPMG, ‘Key Blockchain Trends Impacting Hong Kong’s Logistic Industry’, (2018), <<https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2018/05/key-blockchain-trends-impacting-hk-logistics-industry.pdf> > accessed 18 January 2022.

digitise paper-based documents and automate the trade finance process to reduce errors and risks of fraud.<sup>109</sup> Further, Singapore and Canada are also exploring use cases of DLT in cross border payments.<sup>110</sup>

In India, the National Strategy on Blockchain released by the Ministry of Electronics and Information Technology (“MeitY”) seeks to create a roadmap for blockchain adoption in various sectors. The report amongst other things notes the potential of such technologies in the banking and finance sector. The list of potential applications for blockchain includes government crypto wallet platform for selling, buying and trading, payment security mechanism, customs and trade finance, insurance underwriting and claims, and micro-financing, financing small businesses or individuals.<sup>111</sup> However, the specifics of such use cases are not outlined in the paper. The financial sector has also been proactive in identifying potential use cases of blockchain solutions. In India, banks have adopted blockchain technology in their operations. For example, Indian Banks’ Blockchain Infrastructure Company Pvt. Ltd. has been formed by fifteen banks including ICICI Bank, Axis Bank, State Bank of India, Indian Bank etc. to process letters of credit using blockchain.<sup>112</sup> State Bank of India has further developed a blockchain-enabled platform for payment-related compliance queries.<sup>113</sup>

As regulators remain cautious about cryptoassets but continue to be open to experimenting with their underlying technology, an important issue that has been a subject of debate is whether innovations in blockchain and DLT are intrinsically linked to cryptoassets. On one side of the debate are blockchain enthusiasts and crypto skeptics, who argue that blockchain innovations can happen without cryptoassets. It is argued that cryptoasset is just another use case of blockchain and while cryptoassets cannot exist without blockchain, blockchain can exist without cryptoasset.<sup>114</sup> Newspaper reports also indicate that Reserve Bank of India (“RBI”) officials have also expressed a similar sentiment that blockchain can be developed and utilised even without cryptoassets.<sup>115</sup> On the other hand, opponents of this perspective argue that blockchain and cryptoassets are inextricably linked. As per this group, cryptoassets form the basic incentive mechanism on which blockchains function.<sup>116</sup> Without such economic incentives (in the form of tokens) to miners who compete to record or add blocks to a chain, blockchain innovations may be stifled. As regulators and the industry continue to experiment with the use and scalability of blockchain solutions, more clarity on this issue may be expected.

## Support Small Businesses to Raise Capital

One of the arguments for cryptoassets is that it provides a new avenue for new and emerging businesses to raise capital. In this regard, Initial Coin Offerings (“ICOs”) have emerged as a popular tool. It has been noted that such ICOs subject to appropriate regulation can present a range of opportunities.<sup>117</sup> For instance, such offering of

---

<sup>109</sup>HKMA, ‘Trade Finance’ <<https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/fintech/research-and-applications/trade-finance/>> accessed 14 January 2022.

<sup>110</sup>Bank of Canada and MAS, ‘Jasper-Ubin Design Paper- Enabling Cross-Border High Value Transfer Using Distributed Ledger Technologies’ (2019) <<https://www.mas.gov.sg/-/media/Jasper-Ubin-Design-Paper.pdf>> accessed 14 January 2022.

<sup>111</sup>MeitY, ‘National Strategy on Blockchain; Towards Enabling Trusted Digital Platforms’, (December 2021), <[https://www.meity.gov.in/writereaddata/files/National\\_BCT\\_Strategy.pdf](https://www.meity.gov.in/writereaddata/files/National_BCT_Strategy.pdf)> accessed 17 January 2022.

<sup>112</sup>Joel Rebello, ‘15 Banks to Start New Trade Finance System Using Blockchain Tech’ *The Economic Times*, (India, 15 June 2021) <<https://economictimes.indiatimes.com/industry/banking/finance/banking/15-banks-to-start-new-trade-finance-system-using-blockchain-tech/articleshow/83545043.cms>> accessed 14 January 2022.

<sup>113</sup>‘How Indian Banks are Leveraging Blockchain Technology’, *The Economic Times BFSI*, (India, 2 December 2021) <<https://bfsi.economictimes.indiatimes.com/news/banking/how-indian-banks-are-leveraging-blockchain-technology/88027231>> accessed 14 January 2022.

<sup>114</sup>Apoorva Mittal, ‘Blockchain Doesn’t Need Cryptocurrency: Mckinsey Digital’s Asia Head’ *The Economic Times*, (Mumbai, 2 March 2021) <<https://economictimes.indiatimes.com/tech/tech-bytes/blockchain-doesnt-need-cryptocurrency-mckinsey-digitals-asia-head/articleshow/81293177.cms>> accessed 14 January 2022.

<sup>115</sup>‘Bitcoin Debate: RBI Says Blockchain Can Exist Without Currency, Crypto World Divided’, *CNBC TV18*, (India, 18 November 2022) <<https://www.cnbctv18.com/cryptocurrency/bitcoin-debate-rbi-says-blockchain-can-exist-without-currency-crypto-world-divided-11506222.htm>> accessed 14 January 2022.

<sup>116</sup>Nishith M. Desai and others, ‘Building a Successful Blockchain Ecosystem for India- Regulatory Approaches to Crypto-Assets’, (Nishith Desai Associates, December 2018) <[https://www.nishithdesai.com/fileadmin/user\\_upload/pdfs/Research\\_Papers/Building-a-Successful-Blockchain-Ecosystem-for-India.pdf](https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research_Papers/Building-a-Successful-Blockchain-Ecosystem-for-India.pdf)> accessed 14 January 2022.; Martin Tillier, ‘Is a Blockchain Without Bitcoin Possible or Practical?’, (*Nasdaq*, 3 June 2015) <<https://www.nasdaq.com/articles/blockchain-without-bitcoin-possible-or-practical-2015-06-03>> accessed 14 January 2022.; Arvind Narayanan and Jeremy Clark, ‘Bitcoin’s Academic Pedigree’, (*ACM Queue* August 2017) <<https://queue.acm.org/detail.cfm?id=3136559>> accessed 14 January 2022.

<sup>117</sup>Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed 13 January 2022.

cryptoassets can play a role in promoting innovation by providing access to capital to support new and innovative early-stage business models. This is particularly critical for many small businesses which may be considered high-risk by traditional investors but may have huge potential. Such alternative sources for capital raising may also incentivise improvements in traditional capital raising processes by promoting competition. By directly linking cryptoasset issuers with investors, cryptoasset offerings may remove the need for several intermediaries, thereby making the capital raising process more streamlined, faster, and more efficient. This may be particularly relevant in case of small issuances. Cryptoasset offerings through ICOs may also be useful for businesses to build a new investor and customer base. For instance, many small businesses may look to create a base of early adopters of the product or service being developed by it and the same may be achieved through the issuance of utility tokens. Such utility tokens present funding opportunities for early-stage companies by streamlining the capital-raising process, without diluting the ownership capital of the owner. It also connects the business with a wide customer base.<sup>118</sup> However, as discussed later in Chapter V, regulators are trying to regulate such issuances to ensure that there are adequate protections incorporated in the process to protect the market and investors.

## Use Case for Investment Purposes

Subject to effective regulations, it is argued that cryptoasset may present investment opportunities for investors.<sup>119</sup> Existing assets can be tokenised<sup>120</sup> and the right to such assets can be represented on DLT system. Such tokenisation process can make “liquid tangible assets (such as real estate) that would otherwise be illiquid or to facilitate the protection and monetisation of immaterial rights (such as intellectual property and software)”.<sup>121</sup>

## Innovative Solutions for Payments

The original use case of cryptoassets was to serve as an alternative to fiat currency and act as a medium of exchange. When used as a means of exchange, it is argued that cryptoassets could allow for more efficient and cheaper transactions due to the involvement of fewer intermediaries.<sup>122</sup> However, this use case remains subject to several regulatory concerns. The UK Taskforce on Cryptoassets notes<sup>123</sup> there is limited evidence regarding this use case. It goes on to note that most of the potential benefits argued are largely due to the use of DLT, rather than cryptoassets specifically.

Given that stablecoins addresses, one of the primary risks associated with other cryptoassets i.e., volatility, the role of stablecoins in facilitating more efficient payments is being explored. The UK HM Treasury in their consultation paper for stablecoins has recognised this trend stating that “*cryptoassets, such as stablecoins, which seek to stabilise their value, could be used as widespread means of payment, and potentially deliver improvements in cross-*

---

<sup>118</sup> Commission Staff Working Document, Impact Assessment, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets and amending Directive (EU) 2019/1937 (2020) <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2020:0380:FIN:EN:PDE>> accessed 14 January 2022.

<sup>119</sup> Commission Staff Working Document, Impact Assessment, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets and amending Directive (EU) 2019/1937 (2020) <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2020:0380:FIN:EN:PDE>> accessed 14 January 2022.

<sup>120</sup> “Tokenisation of assets involves the process of digital representation of real (physical) assets on distributed ledgers, or the issuance of traditional asset classes in tokenised form. In the first case, the economic value and rights derived from pre-existing real assets is linked or embedded by convention to DLT-based tokens, acting as a store of value. Tokens issued exist on the chain (‘digital twin’), while the real assets on the back of which the tokens are issued continue to exist in the “off-chain” world. In the second case, asset tokenisation involves the creation of a trading instrument through a blockchain and the issuance of tokens that are ‘native’\* to the Blockchain, built directly on-chain and living exclusively on the distributed ledger.” See OECD (2021), Regulatory Approaches to the Tokenisation of Assets, OECD Blockchain Policy Series, <[www.oecd.org/finance/Regulatory-Approaches-to-the-Tokenisation-of-Assets.htm](http://www.oecd.org/finance/Regulatory-Approaches-to-the-Tokenisation-of-Assets.htm)> accessed 14 January 2022.

<sup>121</sup> Commission Staff Working Document, Impact Assessment, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets and amending Directive (EU) 2019/1937 (2020) <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2020:0380:FIN:EN:PDE>> accessed 14 January 2022.

Commission Staff Working Document, Impact Assessment, Accompanying the document Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets and amending Directive (EU) 2019/1937 (2020) <<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2020:0380:FIN:EN:PDE>> accessed 14 January 2022.; Dennis Beau, ‘The role of cryptoassets in the payment system’ (Official Monetary and Financial Institutions Forum, 15 October 2019) <<https://www.bis.org/review/r191015b.htm>> accessed 14 January 2022.

<sup>123</sup> Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed 13 January 2022.

border transactions.”<sup>124</sup> Stakeholders have stated that this preference for stablecoins are due to its “lower-cost, safe, real-time” nature which can give tough competition to traditional payment platforms.<sup>125</sup> They are more in line with present consumer demands since they offer a digitised and universal payment method.<sup>126</sup> Further, it can help in financial inclusion by bridging the gap between the banked and the unbanked as all one needs is access to the internet to transfer funds with no role of any central financial institution or financial intermediaries.<sup>127</sup> Although there may be other digital payment service providers offering instantaneous service, what stablecoins offer is payment solutions which are conducted over peer-to-peer networks and are cheaper without the exorbitant expenses of remittance fees, wire costs, transaction costs and other banking charges.<sup>128</sup> However, stablecoins also raise significant concerns for systemic risks, especially if they become widely adopted with a potential to reach and use across several jurisdictions. Accordingly, such stablecoins must be subject to stringent supervision.

## Managing Risks

### Risks of Financial Crime

Due to their pseudonymous nature with a global reach through digital means, regulators are concerned that cryptoassets may facilitate money laundering, financing of terrorism and tax evasion.<sup>129</sup> While similar risks also come with many other digital financial instruments / services, the unique features of cryptoassets and the potential ability of some cryptoassets (such as privacy coins) to mask the identity of users and transactions heightens such concerns for regulators. Traceability of such cryptoassets used for illegal transactions will be challenging for regulators.<sup>130</sup> Further, the cross-border nature of such transactions and the varied regulatory frameworks across countries deepens the complications relating to identifying and tracing actors of such cryptoasset transactions.<sup>131</sup> The RBI in its recent Financial Stability Report has pointed out that “*according to the Financial Action Task Force (FATF), the virtual asset ecosystem has seen the rise of Anonymity-Enhanced Cryptocurrencies (AECs), mixers and tumblers, decentralised platforms and exchanges, privacy wallets, and other types of products and services that enable or allow for reduced transparency and increased obfuscation of financial flows. New illicit financing typologies continue to emerge, including the increasing use of virtual-to-virtual layering schemes that attempt to further muddy transactions in a comparatively easy, cheap and anonymous manner.*”<sup>132</sup>

There have been documented cases of such risks. For instance, Bitcoin was used in the dark web marketplace Silk Road.<sup>133</sup> Silk Road facilitated the trade of illegal drugs and goods which had a network of over 100,000 buyers and

<sup>124</sup>Cryptoassets Taskforce, ‘Final Report’, (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed 13 January 2022.

<sup>125</sup> Christian Catalini and Jai Massari, ‘Stablecoins and the Future of Money’ (*Harvard Business Review*, August 2021) <<https://hbr.org/2021/08/stablecoins-and-the-future-of-money>> accessed 14 January 2022.

<sup>126</sup> Dennis Beau, ‘Stablecoins- a Good or a Bad Solution to Improve our Payment Systems?’ (Stablecoin Conference, 15 January 2020) <<https://www.bis.org/review/r200115c.htm>> accessed 14 January 2022.

<sup>127</sup> Christian Catalini and Jai Massari, ‘Stablecoins and the Future of Money’ (*Harvard Business Review*, August 2021) <<https://hbr.org/2021/08/stablecoins-and-the-future-of-money>> accessed 14 January 2022.

<sup>128</sup> Libra Association, ‘White Paper v2.0’, (April 2020) <<https://www.diem.com/en-us/white-paper/#introduction>; <https://www.bis.org/review/r200115c.htm>> accessed 14 January 2022.

<sup>129</sup> Dong He and others, ‘Virtual Currencies and Beyond: Initial Considerations’ (*International Monetary Fund Staff Discussion Note*, January 2016) <<https://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf>> accessed 14 January 2022. ; Prof. Dr. Houben, R., Snyers, A., Crypto-assets - Key developments, regulatory concerns and responses, Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg, 2020 <[https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL\\_STU\(2020\)648779\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2020/648779/IPOL_STU(2020)648779_EN.pdf)> accessed 14 January 2022.

<sup>130</sup> IMF, ‘The Crypto ecosystem and the Financial Stability Challenges’, (October 2021) < <https://www.imf.org/-/media/Files/Publications/GFSR/2021/October/English/ch2.ashx>> accessed 14 January 2022.

<sup>131</sup> Dong He and others, ‘Virtual Currencies and Beyond: Initial Considerations’ (*International Monetary Fund Staff Discussion Note*, January 2016) <<https://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf>> accessed 14 January 2022.

<sup>132</sup>RBI, ‘Financial Stability Report’, (Issue No. 24, December 2021), <[https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/FSRDEC2021\\_FULL2D99E6548CD0478CA90EE717F2B85D45.PDF](https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/FSRDEC2021_FULL2D99E6548CD0478CA90EE717F2B85D45.PDF)> accessed 4 January 2022.

<sup>133</sup>David Adler, ‘Silk Road: The Dark Side of Cryptocurrency’, (*Fordham Journal of Corporate and Financial Law*, 21 February, 2018) < <https://news.law.fordham.edu/jcfl/2018/02/21/silk-road-the-dark-side-of-cryptocurrency/>> accessed 14 January 2022.

vendors<sup>134</sup> It was also a channel to launder money from illicit proceeds. Bitcoin was the primary currency that was used by the participants to conduct such transactions.<sup>135</sup> Cryptoassets are also seen as a major threat to national security since they can be used to fund terrorist organisations, illicit drug rackets and facilitate arms trafficking.<sup>136</sup> For instance, the US Department of Justice while dismantling cyber campaigns of terrorist organisations such as al-Qassam Brigades, Hamas's military wing, al-Qaeda, and Islamic State of Iraq and the Levant, reported that these organizations had solicited and received donations in cryptocurrencies from across the globe.<sup>137</sup>

## Risk to Consumers and Investors

Currently, due to a regulatory void, there is a host of unregulated players in the market with whom customers and investors interact. Since they are unregulated entities, there is neither any control nor any accountability mechanism. In this situation, customers might be vulnerable to scams and cybercrimes such as hacking and theft, leading to losses but without any recourse. The nature of cryptoassets such as the characteristic of the irreversibility of transactions further adds to the problem. Consumers are also exposed to technological risks. If the system is poorly designed, then there is a high likelihood of disruption or "network congestions" especially when there is a high volume of transactions happening across the network.<sup>138</sup> These failures can mean a massive loss for investors. Risks to customers/investors are also heightened owing to the limited information that is available across the board, which may lead to customers making dangerous investment decisions. They may invest in wrong tokens or assets which are not appropriate for their needs or invest in risky assets which have poor value because they do not have the necessary pricing and risks information.<sup>139</sup> For example, the recent squid game token scam has led to the loss of almost USD 3.38 million.<sup>140</sup> This game was a rug pull scheme wherein tokens were misleadingly promoted as being part of the Netflix show Squid Game and thereafter trading activity was stopped on such tokens enabling the creators to misappropriate all the sales money.<sup>141</sup> Promotion and advertising of cryptoassets by popular public figures, such as social media influencers and film actors without any check on the content of such advertising can also lead to investors relying on wrong information.<sup>142</sup> This risk is heightened especially for young investors who are susceptible to such celebrity promotions and who end up investing in high-risk cryptoassets. For instance, in the UK, the FCA is contemplating imposing disclaimer requirements on advertisements relating to cryptoassets and exercising the same oversight on them as is imposed on promotional activities relating to other financial instruments.<sup>143</sup>

## Risks to Market Integrity

Lack of information regarding the market, the market players, participants as well as the products pose a significant risk to the overall market integrity of cryptoassets which has the potential for market manipulation and

---

<sup>134</sup> Report of the Attorney General's Cyber Digital Task Force, 'Cryptocurrency; Enforcement Framework', (U.S. Department of Justice, October 2020), <<https://www.justice.gov/archives/ag/page/file/1326061/download>> accessed 14 January 2022..

<sup>135</sup> Report of the Attorney General's Cyber Digital Task Force, 'Cryptocurrency; Enforcement Framework', (U.S. Department of Justice, October 2020), <<https://www.justice.gov/archives/ag/page/file/1326061/download>> accessed 14 January 2022..

<sup>136</sup> Report of the Attorney General's Cyber Digital Task Force, 'Cryptocurrency; Enforcement Framework', (U.S. Department of Justice, October 2020), <<https://www.justice.gov/archives/ag/page/file/1326061/download>> accessed 14 January 2022..

<sup>137</sup> Department of Justice, 'Global Disruption of Three Terror Finance Cyber-Enabled Campaigns', ( 13 August 2020) <<https://www.justice.gov/opa/pr/global-disruption-three-terror-finance-cyber-enabled-campaigns>> accessed 14 January 2022.

<sup>138</sup> IMF, 'The Crypto ecosystem and the Financial Stability Challenges', (October 2021) <<https://www.imf.org/-/media/Files/Publications/GFSR/2021/October/English/ch2.ashx>> accessed 14 January 2022.

<sup>139</sup> Cryptoassets Taskforce, 'Final Report', (October 2018), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)> accessed on 13 January 2022.; European Securities and Markets Authority, 'Advice- Initial Coin Offerings and Crypto-Assets', (January 2019), <[https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391\\_crypto\\_advice.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf)> accessed 14 January 2022.

<sup>140</sup> 'Squid Game crypto token collapses in apparent scam', BBC, (2 November, 2021), <<https://www.bbc.com/news/business-59129466>> accessed 14 January 2022.

<sup>141</sup> 'Squid Game crypto token collapses in apparent scam', BBC, (2 November, 2021), <<https://www.bbc.com/news/business-59129466>> accessed 14 January 2022.

<sup>142</sup> Mehab Qureshi, 'Influencers Pitch Cryptocurrency to Recruit Young Investors, but Without a 'Disclaimer'', *The Indian Express*, (India, 19 October, 2021), <<https://indianexpress.com/article/technology/social/social-media-influencers-pitch-cryptocurrency-to-recruit-young-investors-but-without-a-disclaimer-7580284/>> accessed 23 January 2022.

<sup>143</sup> Lily Russel-Jones, 'FCA Prepares to Turn Screws on Advertising', *City A.M.* (January 19, 2022) <<https://www.cityam.com/fca-prepares-to-turn-screws-on-crypto-advertising/>> accessed 13 January 2022.

investor losses.<sup>144</sup> In this environment chances of market abuse have heightened. There have been instances of various market-abuse schemes such as the “pump and dump scheme” wherein actors engaged in market manipulation artificially increased the price of cryptoassets. Once the prices were high, these holders would sell their cryptoassets to make profits.<sup>145</sup> For example, influential gamers and other influencers participated in a pump-and-dump scheme for a token named SaveTheChildren wherein they made their followers buy the coin thereby artificially increasing the prices and thereafter sold all their tokens.<sup>146</sup> Other instances of market manipulation involve traders engaging in spoofing or market painting wherein the price of cryptocurrencies are artificially inflated by placing fake orders for such cryptocurrencies or by making it look that there is more activity than there is in the market.<sup>147</sup> This was seen in the case of Picasso which was a trade bot who many accused of painting the market by artificially increasing prices on specific crypto exchanges.<sup>148</sup>

## Risk to Financial Stability

Cryptoasset market remains relatively small compared to the global financial system.<sup>149</sup> However, this sector must be closely monitored as market developments are dynamic. The increase in the adoption rate of cryptoassets and its linkages to the wider financial sector may have implications for financial stability. As of September 2021, the total market value of cryptoassets surpassed USD 2 trillion - indicating a ten-fold increase since early 2020.<sup>150</sup> In its latest Financial Stability Report<sup>151</sup>, the IMF highlights some risks (relating to operational resilience, financial integrity, investor protection, and inadequate disclosure and reserves for some stablecoins) related to cryptoasset activities that may have an impact on financial stability. While IMF clarifies that such risks may not be systemic yet, but such risks should be monitored given the “inadequate operational and legal frameworks in most jurisdictions”.

Financial stability risks may be more pronounced in the case of stablecoins, particularly if they are adopted at a significant scale. A recent report notes that as of October 2021, the market capitalization of stablecoins issued by the largest stablecoin issuers exceeded USD 127 billion, which reflects a nearly 500% increase over the preceding twelve months. Stablecoins seek to address the volatility issue in other cryptoassets by maintaining a stable value and accordingly may become a preferred means of payments due to its potential to increase efficiency in payments. For instance, the FSB notes that<sup>152</sup> “widely adopted stablecoin with a potential reach and use across multiple jurisdictions (so-called “global stablecoins” or GSCs) could become systemically important in and across one or many jurisdictions, including as a means of making payments.” In this regard, it may be useful to discuss ways in which such stablecoins may impact financial stability. *First*, if a GSC is used as a store of value, a change in its value may cause fluctuations in a user’s wealth, which if sizeable may be concerning. *Second*, if a GSC is used as a means of payment, any disruption in the system may have a significant impact on economic activity and the functioning of the financial system. *Third*, exposures of financial institutions need to be monitored as such exposure may pose credit, market and operational risks and have systemic implications. As GSC or stablecoins become more interconnected with

---

<sup>144</sup>IOSCO, ‘Issues, Risks, and Regulatory Considerations Relating to Crypto-Asset Trading Platforms’, (Consultation Report CR02/2019, May 2019), < <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD627.pdf> > accessed 14 January 2022.

<sup>145</sup> Jiahua Xu and Benjamin Livshits, ‘The Anatomy of a Cryptocurrency Pump-and-Dump Scheme’, (2019), <[https://www.researchgate.net/publication/329206760\\_The\\_Anatomy\\_of\\_a\\_Cryptocurrency\\_Pump-and-Dump\\_Scheme](https://www.researchgate.net/publication/329206760_The_Anatomy_of_a_Cryptocurrency_Pump-and-Dump_Scheme)> accessed 14 January 2022.

<sup>146</sup> Steven Asarch, ‘FaZe Clan Members Suspended Following Allegations that their Save the Kids Cryptocurrency may have been a Scam’, (Insider, 3 July 2021) < <https://www.insider.com/faze-clan-save-the-kids-cryptocurrency-scam-controversy-2021-7>> accessed 14 January 2022.

<sup>147</sup> ‘Could a Trading Bot be Behind the Coinbase Pricing Discrepancies?’, (Coinbase, 24 December 2017) < <https://www.coinbureau.com/analysis/trading-bot-behind-coinbase-pricing-discrepancies/>> accessed 14 January 2022.

<sup>148</sup> ‘Could a Trading Bot be Behind the Coinbase Pricing Discrepancies?’, (Coinbase, 24 December 2017) < <https://www.coinbureau.com/analysis/trading-bot-behind-coinbase-pricing-discrepancies/>> accessed 14 January 2022.

<sup>149</sup> Dong He and others, ‘Virtual Currencies and Beyond: Initial Considerations’ (International Monetary Fund Staff Discussion Note, January 2016) <<https://www.imf.org/external/pubs/ft/sdn/2016/sdn1603.pdf>> accessed on 14 January 2022; Financial Stability Board, ‘Crypto-asset Markets- Potential Channels for Future Financial Stability Implications’ (October 2018), <https://www.fsb.org/wp-content/uploads/P101018.pdf>> accessed 14 January 2022.

<sup>150</sup> Dimitris Drakopoulos and others, ‘Crypto Boom Poses New Challenges to Financial Stability’, (International Monetary Fund Blog, 1 October 2021) <<https://blogs.imf.org/2021/10/01/crypto-boom-poses-new-challenges-to-financial-stability/>> accessed 14 January 2022.

<sup>151</sup>IMF, ‘The Crypto ecosystem and the Financial Stability Challenges’, (October 2021) < <https://www.imf.org/-/media/Files/Publications/GFSR/2021/October/English/ch2.ashx> > accessed 14 January 2022

<sup>152</sup>FSB, ‘Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements: Final Report and High-Level Recommendations’ (October 2020) <<https://www.fsb.org/wp-content/uploads/P131020-3.pdf>> accessed 14 January 2022.

the traditional financial system, these risks may be more pronounced. Concerns relating to stablecoins have also been raised in the US by the President's Working Group on Financial Markets set up by the US Treasury.<sup>153</sup> From a systemic risk perspective, the report highlights some important issues. For instance, the failure or distress of a stablecoin issuer or a key participant could have an adverse impact on financial stability and the real economy. Further, failure of a stablecoin to perform as per expectation may result in a "run" on such stablecoin which can spread to the real economy as the interconnectedness between stablecoins and the traditional financial system increases. The concentration of economic power due to collaboration between stablecoin issuer or wallet provider and a commercial firm and the anti-competitive effects due to lack of interoperability of a widely adopted stablecoin with other payment solutions have also been pointed out by the aforesaid report.

For other cryptoassets, large-scale use of such cryptoassets and greater interconnectedness with other parts of the financial system in due course of time could have systemic implications. Any risk associated with such cryptoassets will likely spread to the other parts of the financial system. As exposures of financial institutions to such cryptoassets increase, it could expose such institutions to several risks such as liquidity, credit, operational, reputational and money laundering risks.<sup>154</sup> Further, if cryptoassets are widely adopted as a means of payment or store of value, the volatility in their values will be a huge concern. The value of most cryptoassets is speculative and is constantly fluctuating, which may have a significant impact on the financial system if adopted widely.

## Environmental Risks

The environmental implications of cryptoasset mining have also been a significant concern. Bitcoin mining i.e. the process for creating new Bitcoins and updating transactions on the ledger consumes vast amounts of computing power and electricity. For instance, as per the Cambridge Bitcoin Electricity Consumption Index,<sup>155</sup> the electricity consumption of Bitcoin is 123.15 TWh per year, which is higher than the consumption of electricity in countries like Argentina (121.764 TWh), United Arab Emirates (122.386 TWh) and the Netherlands (110.996 TWh) per year and comparable to electricity consumption in countries like Sweden (123.249 TWh) and Norway (124.288 TWh) per year. In 2018, the BIS pointed out that such figures have often raised serious concerns about the impact of such activities on the environment, especially if scalability of cryptoasset based payment solutions are considered. However, the Bitcoin Mining Council which is a network of independent miners maintain that almost the two-thirds of energy consumed by miners come from sustainable sources.<sup>156</sup> However, it is not clear if this figure is indicative of a large section of miners.<sup>157</sup>

Notably, the energy consumption of Bitcoin is often associated with the PoW consensus algorithm adopted by cryptoassets based on permissionless blockchain, which allows anyone to become a participant and a miner.<sup>158</sup> It is argued that alternative consensus mechanism such as PoS consumes lesser energy.<sup>159</sup> For instance, research has shown that PoW blockchain networks like Bitcoin and Ethereum annually consume 130TWh and 26TWh of

---

<sup>153</sup> President's Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, 'Report on Stablecoins', (November 2021), <[https://home.treasury.gov/system/files/136/StableCoinReport\\_Nov1\\_508.pdf](https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf)> accessed 14 January 2022.

<sup>154</sup> Basel Committee on Banking Supervision, BIS, 'Prudential treatment of cryptoasset exposures', (June 2021) <<https://www.bis.org/bcbs/publ/d519.pdf>> accessed 13 January 2022.

<sup>155</sup> Cambridge Centre for Alternative Finance, 'Comparisons', (Cambridge Bitcoin Electricity Consumption Index) <<https://ccaf.io/cbeci/index/comparisons>> accessed 14 January 2022.

<sup>156</sup> Analisa R. Bala, 'Clearing Up Crypto', (*Finance and Development*, September 2021), <<https://www.imf.org/external/pubs/ft/fandd/2021/09/pdf/how-to-make-cryptocurrencies-cleaner-and-greener.pdf>> accessed 14 January 2022.

<sup>157</sup> Analisa R. Bala, 'Clearing Up Crypto', (*Finance and Development*, September 2021), <<https://www.imf.org/external/pubs/ft/fandd/2021/09/pdf/how-to-make-cryptocurrencies-cleaner-and-greener.pdf>> accessed 14 January 2022.

<sup>158</sup> Leon Perlman, 'Regulation of the Financial Components of the Crypto-Economy' (*School of International and Public Affairs Entrepreneurship & Policy Initiative Working Paper Series*), Pg 55 <[https://sipa.columbia.edu/sites/default/files/25222\\_SIPA-White-Paper-CE-Regulation-web.pdf](https://sipa.columbia.edu/sites/default/files/25222_SIPA-White-Paper-CE-Regulation-web.pdf)> accessed 13 January 2022.

<sup>159</sup> Global Future Council on Cryptocurrencies, World Economic Forum, 'Cryptocurrencies: A Guide to Getting Started' (Community Paper, June 2021), <[https://www3.weforum.org/docs/WEF\\_Getting\\_Started\\_Cryptocurrency\\_2021.pdf](https://www3.weforum.org/docs/WEF_Getting_Started_Cryptocurrency_2021.pdf)> accessed 14 January 2022.

power respectively.<sup>160</sup> In comparison Tezos algorithm which is a PoS network consumes 60MWh of power annually.<sup>161</sup>

In light of the aforesaid discussion, policymakers must take into account such opportunities and concerns associated with cryptoassets while designing an appropriate policy response. For many policymakers' risks associated with cryptoassets are perhaps more concerning than the opportunities presented by it given the lack of evidence of how such cryptoassets may help in achieving public policy objectives of regulators. Considering this, many countries have contemplated imposing bans or severe restrictions on cryptoasset related activities. However, many are quick to point out the challenges in implementing such a ban. Further, risks that have often been pointed out may also emanate due to the lack or certainty of regulations governing this sector. Therefore, policymakers need to assess the developments in the cryptoasset ecosystem, encourage the industry to innovate subject to supervision and adopt policy measures to counter the risks of cryptoassets. Such objectives are possible through a legal framework that will encourage responsible innovation in the cryptoasset industry and which enables the government and industry to work together to identify potential use cases of cryptoassets that will be critical for the future of finance.

---

<sup>160</sup> TQ Tezos, 'Proof of Work vs. Proof of Stake: the Ecological Footprint', (17 March 2021), < <https://medium.com/tqtezos/proof-of-work-vs-proof-of-stake-the-ecological-footprint-c58029faee44>> accessed 14 January 2022.

<sup>161</sup> TQ Tezos, 'Proof of Work vs. Proof of Stake: the Ecological Footprint', (17 March 2021), < <https://medium.com/tqtezos/proof-of-work-vs-proof-of-stake-the-ecological-footprint-c58029faee44>> accessed 14 January 2022.

# V. Global Regulatory Approaches

The regulation of cryptoassets has raised some complex policy and legal issues. Regulators around the globe continue to grapple with the question of how to effectively regulate cryptoassets and what should be the contours of such regulation. Given the unique challenges and opportunities presented by cryptoassets, the risk of under-regulation or over-regulation of such assets will have serious consequences for an economy. This section sets out the key takeaways from a review of the legal framework for cryptoassets in countries across the globe. Given the cross-border nature of such cryptoassets, it is important for countries to ensure a coordinated approach towards the regulation of such cryptoassets and also learn from the experiences in other countries. For this Report, we have carefully reviewed select regulatory approaches adopted in the UK, USA, EU, Brazil, South Korea, Canada, Malta, Singapore, South Africa, Israel, Thailand, Hong Kong, Abu Dhabi, Russia, and Australia (“Surveyed Jurisdictions”). We have selected Surveyed Jurisdictions where regulators have undertaken initiatives to regulate cryptoassets.

## Defining Cryptoassets

As discussed earlier, terms like bitcoin, virtual currency, cryptocurrency, cryptoasset and digital assets are often used interchangeably. Initially, the term cryptocurrency or virtual currency was used by regulators and government officials. The FATF was the primary catalyst in bringing about this shift to virtual or digital currencies in the taxonomy of cryptoassets. In the 2014 concept paper on key definitions by the FATF<sup>162</sup>, a virtual currency was defined as a digital representation of value. The FATF definition notes that the primary functions of such virtual currencies are to act as a unit of account, or medium of exchange or store of value. It can also be traded or transferred digitally. Most importantly, it specifies that a virtual currency does not have a legal tender status thereby distinguishing it from fiat currency. Most FATF member countries followed suit by adopting the term virtual currency in their understanding of cryptoassets. However, it is only recently that countries are adopting terms such as “virtual assets”, “digital assets”, “virtual tokens”. Perhaps a reason to use the suffix “assets” as opposed to “currencies” is to avoid any public perception of such cryptoassets being treated as currency under existing laws. In 2018, the FATF updated its recommendations to introduce the term “virtual asset”.<sup>163</sup> It is defined as a digital representation of value capable of being digitally transferred and to be used as a payment or investment instrument. It clarified that it does not include securities or digital representations of fiat currencies.

There has been no global consensus on the terminology that is to be used or what exactly should it entail. However, amongst the Surveyed Jurisdictions, there are a few commonalities that were observed across definitions. *First*, they cover the nature of the asset i.e., cryptoassets are mainly defined as a digital representation of value or right. *Second*, it specifies the usage which is mainly either an instrument of payment or a store of value or unit of account. *Third*, it also stipulates the property of the asset as being transferable or tradeable. *Fourth*, some refer to cryptography, DLT or similar technologies as the underlying technology for such cryptoassets. Further, some Surveyed Jurisdictions expressly clarify in the definition that virtual assets or virtual currencies do not have legal tender status in that jurisdiction. For example, the Abu Dhabi Financial Services and Markets Regulations defines a virtual asset as a digital representation of value capable of being digitally traded and used as a medium of exchange or unit of account or store of value, but does not have legal tender status.<sup>164</sup> Similarly, in the USA, the

---

<sup>162</sup>FATF, ‘Virtual Currencies: Key Definitions and Potential AML/CFT Risks’ (June 2014) <<http://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>> accessed 13 January 2022.

<sup>163</sup>FATF (2012-2021), International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation, FATF, Paris, France < <http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/FATF%20Recommendations%202012.pdf>> accessed 14 January 2022.

<sup>164</sup>Financial Services Regulatory Authority, ‘Guidance- Regulation of Virtual Asset Activities in ADGM’, (February 2020), <<https://www.adgm.com/documents/legal-framework/guidance-and-policy/fsra/guidance-on-regulation-of-virtual-asset-activities-in-adgm.pdf?la=en&hash=2E446E61E82CB1252B499B56B485396D>> accessed 14 January 2022.

U.S. Department of the Treasury's Financial Crimes Enforcement Network's ("FinCEN") definition of virtual currency explicitly clarifies that such currency is not a legal tender.<sup>165</sup>

Some Surveyed Jurisdictions such as the UK, EU, Malta and South Africa have used the concept of DLT or cryptographic technology while defining cryptoassets. In Malta, the Virtual Financial Assets Act, 2018 creates a class of DLT assets which includes virtual financial assets, financial instruments and electronic money which is dependent on and utilises the DLT.<sup>166</sup> In EU, MiCA defines crypto-assets as a digital representation of value or rights that is capable of being traded and stored electronically by using DLT or similar technology.<sup>167</sup> Similarly in South Africa, the Crypto Asset Regulatory Working Group ("CAR WG") under the Intergovernmental Fintech Working Group ("IFWG") in their most recent position paper defines cryptoassets as a digital representation of value which is not issued by a central bank and applies cryptographic techniques and uses DLT.<sup>168</sup> International bodies have also recognised the role of DLT within the definition of cryptoassets. The FSB defines cryptoassets as a type of private asset that is primarily dependent on cryptography and DLT for their perceived or inherent value.<sup>169</sup> Further, the IMF also adopts a similarly broad definition of cryptoassets which is defined as "digital assets that use cryptography for security and are coins or tokens of distributed ledgers and/or blockchains, including asset-backed tokens".<sup>170</sup>

In a large number of Surveyed Jurisdictions, the primary approach has been to identify whether a particular type of cryptoasset has a resemblance to and can fall under the definition of securities in that jurisdiction with a view to apply securities law to such cryptoassets. This has been the dominant approach in countries such as Canada and USA. In USA, cryptoassets which are akin to securities come under the purview of the securities regulation. Securities include investment contracts, as well as instruments such as stocks, shares etc.<sup>171</sup> The USA applies the Howey test as developed in the case of SEC v. W.J. Howey Co.<sup>172</sup> to understand what is meant by an investment contract. Under this test, an investment contract is said to exist when money has been invested in a common enterprise where one reasonably expects to gain profits from others efforts. Any offering of cryptoassets that meets this definition is sought to be brought under the federal securities law. In Canada also, the primary mode of regulation has been through securities law.<sup>173</sup> Herein the investment contracts test as developed in the Canadian Supreme Court in the case of Pacific Coast Coin Exchange v. Ontario Securities Commission is used to identify and classify which cryptoassets are akin to securities.<sup>174</sup> Similarly, in Singapore cryptoassets which are similar in nature to capital market products such as collective investment schemes are governed under the Securities and Futures Act, 2001. Regulation of certain cryptoassets within the existing security law framework has often been the first step of regulation in many such countries.

---

<sup>165</sup> FinCEN, 'Application of of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies', (FIN-2013-G001, 18 March 2003), <<https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering>> accessed 18 January 2022

---

<sup>166</sup> Malta Virtual Financial Assets Act 2018.

---

<sup>167</sup> Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>>

---

<sup>168</sup> IFWG CAR WG, 'Position Paper on Crypto Assets', (2020) <[http://www.treasury.gov.za/comm\\_media/press/2020/20200414%20IFWG%20Position%20Paper%20on%20Crypto%20Assets.pdf](http://www.treasury.gov.za/comm_media/press/2020/20200414%20IFWG%20Position%20Paper%20on%20Crypto%20Assets.pdf)> accessed 14 January 2022.

---

<sup>169</sup> Financial Stability Board, 'Crypto-asset markets; Potential channels for future financial stability implications' (October 2018) <<https://www.fsb.org/wp-content/uploads/P101018.pdf>> accessed 14 January 2022.,

---

<sup>170</sup> Cristina Cuervo and others, 'Fintech Notes', (IMF Note/19/03, December 2019) <<https://www.imf.org/-/media/Files/Publications/FTN063/2019/English/FTNEA2019003.ashx>> accessed on 18 January 2022.

---

<sup>171</sup> SEC, 'Framework for "Investment Contract" Analysis of Digital Assets', <[https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#\\_ednref5](https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#_ednref5)> accessed 14 January 2022.

---

<sup>172</sup> SEC v. W.J. Howey Co., 328 U.S. 293 (1946).

---

<sup>173</sup> Canadian Securities Administrators, 'Canadian securities regulators outline regulatory framework for compliance for crypto asset trading platforms', (29 March 2021), <<https://www.securities-administrators.ca/news/canadian-securities-regulators-outline-regulatory-framework-for-compliance-for-crypto-asset-trading-platforms/>> accessed 14 January 2022.

---

<sup>174</sup> Pacific Coast Coin Exchange v. Ontario (Securities Commission), [1978] 2 SCR 112.

## Classification of Cryptoassets

Cryptoassets by their nature are dynamic and their understanding is ever-evolving. Regulators around the world are still grappling with the question on what kind of assets should be the focus of the regulation. The wide breadth of activities that can now be undertaken by the use of cryptoassets has further complicated the contours of what should be the primary instrument of regulatory oversight. Against this backdrop, the classification of cryptoassets has been diverse and varied across the Surveyed Jurisdictions. Most Surveyed Jurisdictions adopt a classification based on use cases or functions. Accordingly, cryptoassets have been divided by most of the Surveyed Jurisdictions broadly into the categories of payment tokens, security / investment tokens and utility tokens, as discussed above.

For instance, in the UK, the FCA<sup>175</sup> notes that cryptoassets may be classified into e-money tokens (which fall under the definition of e-money in the Electronic Money Regulations 2011<sup>176</sup>), security tokens and unregulated tokens (which can be divided into payment / exchange tokens and utility tokens). On the other hand, the EU MiCA recognizes the distinction between three different types of cryptoassets – utility tokens, asset-referenced cryptoassets<sup>177</sup> and e-money cryptoassets (i.e., cryptoassets that seek to maintain a stable value by referencing only a single fiat currency). In Switzerland, the Swiss Financial Market Supervisory Authority<sup>178</sup> (“FINMA”) has issued Guidelines for enquiries regarding the regulatory framework for initial coin offerings which has characterised three categories of tokens<sup>179</sup> – payment tokens, utility tokens and asset tokens.<sup>180</sup>

## Identifying a Regulator for Cryptoassets

The question of which regulator will be responsible for the regulation of cryptoassets is dependent on specific considerations. The identification of a responsible regulator is dependent on the financial regulatory architecture of a country. It is easier for countries like Singapore which has a single financial sector regulator like MAS to determine the regulator.

However, for countries with multiple financial sector regulators, the question of determining the relevant regulator is often challenging and typically the mandate of a regulator is determined by the underlying financial instrument. In such a case, the nature or the underlying economic function of the cryptoasset maybe a guiding factor. For example, in Hong Kong, there are multiple financial sector regulators,<sup>181</sup> including (i) the HKMA which has prudential supervisory jurisdiction over banks and is charged with maintaining the overall banking stability; (ii) the Securities and Futures Commission (“SFC”) which is the security and capital markets regulator of the country, and (iii) the Financial Services and Treasury Bureau, which looks after the overall financial stability and fiscal policies and is also responsible for ensuring adherence to AML/CFT obligations. In Hong Kong, only those cryptoassets which are like securities as specified under the Securities and Future Ordinance, 2003 (“SFO”) is regulated, thereby making the SFC the primary regulator.<sup>182</sup> It is responsible for ensuring compliance with obligations such as licensing and registration of entities dealing with such securities. Considering that India also has multiple financial sector regulators, there is a challenge in determining who will be the concerned regulator

---

<sup>175</sup>FCA, Guidance on Cryptoassets, (Consultation Paper CP 19/3, <January 2019>, <[fca.org.uk/publication/consultation/cp19-03.pdf](https://www.fca.org.uk/publication/consultation/cp19-03.pdf)> accessed 13 January 2022.

<sup>176</sup> Electronic Money Regulation 2011 s 2.

<sup>177</sup> Cryptoassets that seeks to maintain a stable value by referencing several cryptoassets, fiat currencies or commodities

<sup>178</sup> FINMA is Switzerland’s financial market regulator which exercises supervisory jurisdiction over the financial market players and entities and looks after the interests of creditors, investors, and policyholders. See FINMA, ‘FINMA- an overview’, <<https://www.finma.ch/en/finma/finma-an-overview/>> accessed 14 January 2022.

<sup>179</sup>FINMA, ‘Guidelines for enquiries regarding the regulatory framework for initial coin offerings (ICO)’, (16 February 2018) <<https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/>> accessed 14 January 2022.

<sup>180</sup> It represents assets such as participations in real physical underlying, companies, or earnings streams, or an entitlement to dividends or interest payments.

<sup>181</sup> FSB, ‘Cryptoassets Regulators Directory’, (2019) <<https://www.fsb.org/wp-content/uploads/P050419.pdf>> accessed 14 January 2022; The Chin Family, ‘A Quick Guide to Hong Kong’s Financial System and Services’, (2017) <<https://www.ifec.org.hk/web/common/pdf/publication/en/IEC-quick-guide-to-hk-financial-system-and-services.pdf>> accessed 14 January 2022.

<sup>182</sup>Financial Services and the Treasury Bureau, ‘Public Consultation on Legislative Proposals to Enhance Anti-Money Laundering and Counter-Terrorist Financing Regulation in Hong Kong ; Consultation Conclusion’, <[https://www.fstb.gov.hk/fsb/en/publication/consult/doc/consult\\_conclu\\_amlc\\_e.pdf](https://www.fstb.gov.hk/fsb/en/publication/consult/doc/consult_conclu_amlc_e.pdf)> accessed 14 January 2022.

for cryptoassets. Therefore, it may be useful for India to examine the approach adopted by countries with multiple regulators. For instance, in Brazil, there are multiple financial regulators such as – the Brazilian Central Bank, the Securities and Exchange Commission of Brazil (“CVM”), the Federal Revenue Office, and the National Monetary Council, with each regulator having a specific mandate. In such cases, the statutory mandate / jurisdiction of the concerned regulator as well as the economic function of the cryptoasset may be critical to identify the regulator for cryptoassets. For instance, in Brazil, the Central Bank issues warnings and guidance relating to what kind of financial activities can be undertaken for cryptoassets. The Federal Revenue Office is responsible for overseeing the taxation obligations of businesses and individuals dealing with cryptoassets.<sup>183</sup> The CVM will be the responsible regulator for regulating those cryptoassets which are in the nature of securities as under subparagraph IX of article 2nd of Law No. 6,385/76. Similarly, in USA with multiple national and state regulators, depending on whether a specific type of cryptoasset is in the nature of a security or a derivative, the SEC or the CFTC will regulate such cryptoassets respectively.

Even with multiple regulators, there has been an attempt to adopt a collaborative approach to determine appropriate policy responses to cryptoasset regulation. For instance, the UK had constituted a UK Cryptoasset Taskforce which involves the three regulators- FCA, the Bank of England and HM Treasury.<sup>184</sup> The Taskforce was responsible to assess the potential impact of cryptoassets and DLT in the UK and to consider appropriate policy responses. It outlined the role of the FCA as one of the primary regulators for cryptoassets. It also designated the Bank of England to monitor the implications to financial stability posed by cryptoassets. In the HM Treasury consultation report on stablecoins, FCA is yet again seen as the primary regulator for stablecoins tasked with supervising activities relating to authorisations, prudential requirements, AML obligations etc., and monitoring actors such as token issuers, wallets, etc. The Bank of England’s jurisdiction will get triggered if any such stablecoin becomes systemic in the economy. Similarly, in South Africa, the CAR WG which functions under the IFWG consists of representatives from National Treasury, South African Reserve Bank, Financial Sector Conduct Authority, Financial Intelligence Centre, and South African Revenue Service and is tasked with the responsibility of formulating a comprehensive governmental response for the intergovernmental regulation of cryptoassets and blockchain-related concepts.<sup>185</sup> Similarly, in jurisdictions such as the EU, supranational bodies like the European Securities and Market Authority<sup>186</sup> (“ESMA”) and the European Banking Authority (“EBA”) are at the helm of cryptoasset regulation seeking to create a uniform approach across EU Member States.<sup>187</sup> In EU, EBA is responsible for ensuring the stability of the financial system and to supervise the functioning of payment, monetary, credit and investment institutions. Therefore, EBA is responsible for looking after the prudential norms, consumer protection obligations and AML/CFT obligations of cryptoassets businesses.<sup>188</sup> On the other hand, ESMA is responsible primarily for compliance with securities laws, therefore its role with regard to cryptoassets is limited to such cryptoassets which are regarded as financial instruments under the Markets in Financial Instruments Directive (“MiFID”) 2014/65/EU.<sup>189</sup> In Hong Kong as well, the HKMA being cognizant of the existence of multiple regulators and their overlapping jurisdiction has proposed a consultation to develop a collaborative approach between different financial regulators to limit regulatory arbitrage for the regulation of stablecoins.<sup>190</sup>

---

<sup>183</sup> Normative Instructions No. 1,888 2019.

<sup>184</sup> UK Cryptoassets Taskforce Final Report (2018), available at [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/752070/cryptoassets\\_taskforce\\_final\\_report\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752070/cryptoassets_taskforce_final_report_final_web.pdf)

<sup>185</sup> GovChain, ‘South Africa’, < <https://govchain.world/south-africa/> > accessed 14 January 2022.

<sup>186</sup> European Securities and Markets Authority, ‘Advice- Initial Coin Offerings and Crypto-Assets’, (January 2019), <[https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391\\_crypto\\_advice.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf) > accessed 14 January 2022.

<sup>187</sup> European Banking Authority, ‘Report with Advice for the European Commission on cryptoasset’, (January 2019), < <https://www.eba.europa.eu/sites/default/documents/files/documents/10180/2545547/67493daa-85a8-4429-aa91-e9a5ed880684/EBA%20Report%20on%20crypto%20assets.pdf?retry=1> > accessed 14 January 2022.

<sup>188</sup> European Banking Authority, ‘Report with Advice for the European Commission on cryptoasset’, (January 2019), < <https://www.eba.europa.eu/sites/default/documents/files/documents/10180/2545547/67493daa-85a8-4429-aa91-e9a5ed880684/EBA%20Report%20on%20crypto%20assets.pdf?retry=1> > accessed 14 January 2022.

<sup>189</sup> European Securities and Markets Authority, ‘Advice- Initial Coin Offerings and Crypto-Assets’, (January 2019), <[https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391\\_crypto\\_advice.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-157-1391_crypto_advice.pdf) > accessed 14 January 2022.

<sup>190</sup> HKMA, ‘Discussion Paper on Crypto-assets and Stablecoins’, (January 2022), < <https://www.hkma.gov.hk/media/chi/doc/key-information/press-release/2022/20220112c3a1.pdf> > accessed 18 January 2022.

In the absence of cooperation there can be confusion leading to legal uncertainty and there can be risks of over-regulation or under-regulation.

## Regulatory Approach

As countries are still grappling with an appropriate regulatory response to cryptoassets, there is no uniform approach that seems to appear. While at one extreme are countries<sup>191</sup> such as China and Egypt that have banned cryptoassets,<sup>192</sup> on the other extreme, there is El Salvador<sup>193</sup> that seems to have recognised bitcoin as legal tender. However, the dominant approach in the Surveyed Jurisdictions seems to be a balanced approach towards regulation of cryptoassets. The policy approaches towards regulation as adopted by some Surveyed Jurisdictions may be categorized as follows:

- (i) **Reliance on Existing Laws:** Under this approach, regulators examine if cryptoassets may be regulated under existing laws and powers conferred by such laws. For instance, in the USA, the SEC has issued a framework that is intended to guide businesses to assess if “digital assets” offered through ICOs have the characteristics of one particular type of security – an “investment contract” under federal securities laws. If it qualifies as an investment contract under existing laws, amongst other things requirements of federal securities laws relating to registration (unless exempted) will be applicable.<sup>194</sup> Similarly, the Australian Securities and Investment Commissions (“ASIC”) has issued guidance i.e. Information Sheet 225<sup>195</sup> to help businesses involved in cryptoassets or raising funds through ICOs to understand obligations under the Corporations Act 2001 and the Australian Securities and Investments Commission Act 2001. Typically, regulators under this approach use their power to issue guidance and clarification to guide businesses about the applicability of existing laws to cryptoasset related activities.
- (ii) **Amending Laws to Regulate Cryptoassets:** Under this approach, regulators may amend existing laws to extend their applicability to cryptoasset related activities. For instance, in South Korea, the Act on Reporting and Using Specified Financial Transaction Information or the Financial Transaction Reports Act was enacted in 2001 to serve as the legal framework for AML/CFT obligations.<sup>196</sup> With the objective to bolster AML controls by virtual asset providers, and financial institutions in respect of their handling of financial transactions linked to “virtual assets”, the South Korean government amended this law, which became effective on 25 March 2021.<sup>197</sup> The revised Act provides definitions on virtual assets<sup>198</sup> and virtual asset service providers (“VASPs”),<sup>199</sup> prescribes specific duties and requirements for financial institutions

---

<sup>191</sup> Mehab Qureshi, ‘Year of Bitcoin: Here’s what Made it the Most Popular Cryptocurrency in 2021’, *The Indian Express*, (June, 31 December, 2021) <<https://indianexpress.com/article/technology/crypto/year-of-bitcoin-where-do-we-stand-in-2021-7679285/>> accessed 14 January 2022.

<sup>192</sup> Global Future Council on Cryptocurrencies, World Economic Forum, ‘Navigating Cryptocurrency Regulation: An Industry Perspective on the Insights and Tools Needed to Shape Balanced Crypto Regulation’ (September 2021), <[https://www3.weforum.org/docs/WEF\\_Navigating\\_Cryptocurrency\\_Regulation\\_2021.pdf](https://www3.weforum.org/docs/WEF_Navigating_Cryptocurrency_Regulation_2021.pdf)> accessed 14 January 2022.

<sup>193</sup> Tim Fries, ‘El Salvador has adopted Bitcoin as official legal tender - but will other countries follow?’ (*World Economic Forum*, 30 September 2021), <<https://www.weforum.org/agenda/2021/09/el-salvador-officially-adopts-bitcoin-as-legal-tender-but-will-other-countries-follow/>> accessed 14 January 2022.

<sup>194</sup> SEC, ‘Framework for “Investment Contract” Analysis of Digital Assets’, <[https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#\\_ednref5](https://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets#_ednref5)> accessed 14 January 2022.

<sup>195</sup> ASIC, ‘Crypto-assets’, <<https://asic.gov.au/regulatory-resources/digital-transformation/crypto-assets/#part-a>> accessed 14 January 2022.

<sup>196</sup> Financial Services Commission, ‘Virtual Asset Oversight’ <<https://www.fsc.go.kr/eng/po090101>> accessed 14 January 2022.

<sup>197</sup> Financial Services Commission, ‘Virtual Asset Oversight’ <<https://www.fsc.go.kr/eng/po090101>> accessed 14 January 2022.  
;Financial Services Commission, ‘Revision Act on Crypto Assets Passes at Cabinet Meeting’ (17 March 2020) <<https://www.fsc.go.kr/eng/pr010101/22325>> accessed 14 January 2022.

<sup>198</sup> Virtual asset is defined by the Act “as a digital token with economic value that is digitally tradable and transferrable. The Act precludes the following items from the scope of virtual assets—digital tokens that cannot be exchanged into a fiat currency, commodities and services whose purpose of use is limited by the issuer, prepaid electronic payments or e-money, electronically registered stocks, electronic notes, electronic B/L, prepaid cards, mobile gift cards, electronic bonds and others specified by the Enforcement Decree”. See Financial Services Commission, ‘Virtual Asset Oversight’ <<https://www.fsc.go.kr/eng/po090101>> accessed 14 January 2022.

<sup>199</sup> Virtual asset service providers include “virtual asset trading service providers, virtual asset safekeeping and administration service providers and virtual asset digital wallet service providers engaged in the purchase and sale, exchange and transfer, safekeeping and administration, or intermediation and brokerage of virtual assets and virtual asset transactions”. See Financial Services Commission, ‘Virtual Asset Oversight’ <<https://www.fsc.go.kr/eng/po090101>> accessed 14 January 2022.

and VASPs, including requirements to report transactions to Korea Financial Intelligence Unit and be subject to basic AML requirements (e.g. customer due diligence, suspicious transaction reporting, etc.).<sup>200</sup> The objective of the amendment was to place Korea's legal framework on virtual assets more closely in line with the international standards set forth by the FATF. Similarly, in EU, on 19 June 2018, the 5<sup>th</sup> anti-money laundering directive - Directive (EU) 2018 / 843 ("5AMLD")<sup>201</sup> was issued which amended the 4<sup>th</sup> anti-money laundering Directive. The 5AMLD widens EU's regulatory perimeter for AML/CFT regulation and brings providers of exchange services between virtual currencies<sup>202</sup> and fiat currencies (i.e. platforms used to exchange money for cryptocurrency) and custodian wallet providers within its ambit.

- (iii) **Bespoke Regulatory Approach:** Under this approach, a new standalone law or regulation is enacted by policymakers specifically tailored to cryptoassets. This approach has been adopted by Malta wherein the Malta Virtual Financial Assets Act, 2018 was enacted.<sup>203</sup> It defines terms such as "DLT asset"<sup>204</sup>, 'virtual financial asset ("VFA")'<sup>205</sup>, "VFA service"<sup>206</sup>, etc. This is a standalone law that regulates various aspects of activities related to VFAs such as - (a) offering of VFA to the public, (b) advertisements related to VFA offering, (c) licensing requirements for VFA service providers, etc.

Similarly, in Thailand, the government has enacted the Emergency Decree on Digital Asset Businesses, 2018("Thailand Emergency Decree")<sup>207</sup> that seeks to regulate activities related to two types of "digital assets" - cryptocurrency<sup>208</sup> (likely to include payment tokens)<sup>209</sup> and digital tokens<sup>210</sup> (likely to include investment tokens, utility tokens).<sup>211</sup> Notably, assets or instruments that may utilise innovative technology or digital elements, such as securities under the Securities and Exchange Act B.E. 2535 e-money under the Payment Systems Act, 2017 and option instruments under the Derivatives Act, 2003 will be regulated under existing laws and not the Decree.<sup>212</sup> The Thailand Emergency Decree seeks to regulate the public

---

<sup>200</sup> Financial Services Commission, 'Revision Act on Crypto Assets Passes at Cabinet Meeting' (17 March 2020) <<https://www.fsc.go.kr/eng/pr010101/22325>> accessed 14 January 2022.

<sup>201</sup> Union Directive 2015/849/EU on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU OJ L 156/43.

<sup>202</sup> A virtual currency is defined to mean "a digital representation of value that is not issued or guaranteed by a central bank or a public authority, is not necessarily attached to a legally established currency and does not possess a legal status of currency or money, but is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and traded electronically." See Union Directive 2015/849/EU on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU OJ L 156/43.

<sup>203</sup> Malta Virtual Financial Assets Act 2018.

<sup>204</sup> DLT asset is defined to mean - "(a) a virtual token; (b) a virtual financial asset; (c) electronic money; or (d) a financial instrument, that is intrinsically dependent on, or utilises, Distributed Ledger Technology". Malta Virtual Financial Assets Act 2018, s 2.

<sup>205</sup> Virtual financial asset or VFA is defined as "any form of digital medium recordation that is used as a digital medium of exchange, unit of account, or store of value and that is not - (a) electronic money; (b) a financial instrument; or (c) a virtual token;". Malta Virtual Financial Assets Act 2018, s 2.

<sup>206</sup> VFA service is defined as "any service falling within the Second Schedule when provided in relation to a DLT asset which has been determined to be a virtual financial asset." Malta Virtual Financial Assets Act 2018, s 2.

<sup>207</sup> Emergency Decree on Digital Asset Businesses B.E. 2561 2018.

<sup>208</sup> It is defined to mean "an electronic data unit created on an electronic system or network for the purpose of being used as a medium of exchange for the acquisition of goods, services or any other rights, or the exchange between digital assets, and shall include any other electronic data units as specified in the notification of the SEC". Emergency Decree on Digital Asset Businesses B.E. 2561 2018, s 3.

<sup>209</sup> Baker McKenzie, 'A Complete Guide to the Regulations on Cryptocurrency and Digital Token Offerings in Thailand', (2021 Edition) <[https://www.bakermckenzie.com/-/media/files/insight/guides/2021/complete\\_guide\\_to\\_regulations\\_on\\_cryptocurrency\\_in\\_thailand\\_2021.pdf?la=en](https://www.bakermckenzie.com/-/media/files/insight/guides/2021/complete_guide_to_regulations_on_cryptocurrency_in_thailand_2021.pdf?la=en)> accessed 14 January 2022.

<sup>210</sup> It means an "electronic data unit created on an electronic system or network for the purpose of: (1) specifying the right of a person to participate in an investment in any project or business; (2) specifying the right of a person to acquire specific goods, specific service, or any specific other right under an agreement between the issuer and the holder, and shall include any other electronic data units of right as specified in the notification of the SEC." Emergency Decree on Digital Asset Businesses B.E. 2561 2018, s 3.

<sup>211</sup> Baker McKenzie, 'A Complete Guide to the Regulations on Cryptocurrency and Digital Token Offerings in Thailand', (2021 Edition) <[https://www.bakermckenzie.com/-/media/files/insight/guides/2021/complete\\_guide\\_to\\_regulations\\_on\\_cryptocurrency\\_in\\_thailand\\_2021.pdf?la=en](https://www.bakermckenzie.com/-/media/files/insight/guides/2021/complete_guide_to_regulations_on_cryptocurrency_in_thailand_2021.pdf?la=en)> accessed 14 January 2022.

<sup>212</sup> Baker McKenzie, 'A Complete Guide to the Regulations on Cryptocurrency and Digital Token Offerings in Thailand', (2021 Edition) <<https://www.bakermckenzie.com/->

offering of digital tokens and operating business relating to digital assets. For instance, in case of a public offering of digital tokens (such as through an ICO), the issuer (that must be a company) must obtain approval from Thailand's Securities and Exchange Commission ("SEC Thailand") Office, file a registration statement and file draft prospectus with SEC Thailand. Further, a "digital asset business" (which includes digital asset exchanges, digital asset broker, digital asset dealer, digital asset fund manager, and digital asset advisors) is required to obtain a license from the Ministry of Finance upon the recommendation of SEC Thailand. The decree also sets out a framework to prevent unfair digital asset trading practices. Notably, under the Thailand Emergency Decree, the Ministry of Finance is primarily responsible for enforcement of the decree and the Minister of Finance is authorized to issue ministerial regulations and appoint competent officers to perform their duties under the Decree. However, the Thailand Emergency Decree has also conferred regulatory powers on SEC Thailand to issue rules, regulations, and notifications regarding the issuance of digital tokens and operation of digital asset businesses, approve token offerings, etc.

The proposed regulatory framework MiCA in the EU is also an instance of a bespoke regulatory framework through which a comprehensive framework for regulating different types of cryptoassets (as identified in the framework and discussed above) is sought to be regulated.

While the aforesaid indicates some of the primary regulatory approaches adopted in the Surveyed Jurisdictions, set out below are some other approaches and practices that some of the Surveyed Jurisdictions are adopting. *First*, in many countries, the first point of regulation for cryptoassets has been through the AML/CFT framework. *Second*, some countries seem to also adopt a phased approach in regulation, by focusing on such cryptoassets that they believe require more urgent attention. For instance, in the UK, consultations are underway to effectively regulate stablecoins which is presently the dominant use case of cryptoassets in the UK and thereafter the UK is looking to introduce regulations initially to regulate stablecoins.<sup>213</sup> *Third*, regardless of the regulatory approaches adopted by a country, several Surveyed Jurisdictions have adopted a consultative or collaborative approach to design an appropriate policy response to cryptoassets.

## Contours of the Legal Framework

This section sets out some of the key features of the legal framework (either through an amendment or bespoke regulatory approach) adopted by some of the Surveyed Jurisdictions.

- (i) **Licensing / Registration Framework:** Under the bespoke regulatory framework discussed above, typically licensing / authorisation framework is applicable to entities providing specific services in relation to cryptoassets. This is intended to bring exchanges, custodians and other market intermediaries within the ambit of the standalone law. In some countries, existing laws may get triggered for registration requirements. For example, in the UK, if the activities of a person dealing with cryptoassets is considered a "regulated activity" as defined by the Financial and Services Market Act, 2000, licensing requirements under the same will be triggered.<sup>214</sup> On the other hand, if their activities fall under payment services or e-money services then licensing requirements under Payments Services Regulations, 2017 or Electronic Money Regulations, 2011 will apply. As gatekeepers, service providers are sought to be regulated to ensure accountability in case of any default. In some cases, issuers of cryptoassets may also be subject to approval requirements before public offering or trading in an exchange.
- (ii) **AML / CFT Requirements:** As discussed above, Surveyed Jurisdictions have extended their AML / CFT frameworks to cryptoasset service providers. Such obligations may include undertaking adequate customer due diligence / KYC, reporting of suspicious transactions to concerned regulators, including financial intelligence units, maintenance of records relating to specific cryptoasset transactions, etc.

[/media/files/insight/guides/2021/complete\\_guide\\_to\\_regulations\\_on\\_cryptocurrency\\_in\\_thailand\\_2021.pdf?la=en](/media/files/insight/guides/2021/complete_guide_to_regulations_on_cryptocurrency_in_thailand_2021.pdf?la=en) accessed 14 January 2022.

<sup>213</sup>HM Treasury, 'UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence', ' (January 2021), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/950206/HM\\_Treasury\\_Cryptoasset\\_and\\_Stablecoin\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf) > accessed 13 January 2022.

<sup>214</sup> Financial Services and Markets Act 2000.

- (iii) **Investor Protection:** Investor protection is one of the primary concerns for regulators especially in jurisdictions where securities laws are used to regulate specific cryptoassets. For instance, in Canada, there are stringent investor protection obligations which are imposed upon issuers whose main business is investing in cryptoassets such as the requirement for qualified custodians, restrictions on investment contractions and undertaking continuous disclosure obligations.<sup>215</sup> Similarly, bespoke regulatory frameworks discussed above also envisage requirements relating to advertisement of offerings of cryptoassets and provisions to prohibit unfair trading in such cryptoassets.

## Regulation of Stablecoins

In certain Surveyed Jurisdictions namely – UK, US, EU and Hong Kong, the government has focused its regulatory attention on stablecoins. Given their potential for rapid adoption and its possible impact on financial stability, as discussed above, policymakers, as well as international standard setting bodies are exploring the most effective way to regulate the rise of stablecoins. For example, the FSB<sup>216</sup> recommends that regulation of stablecoins should focus on provisions for licensing, insolvency plans, data security, cyber security, risk-management procedures and disclosure requirements. Further, it suggests that sectoral authorities should consider coordinating nationally as well as cooperating with other bodies internationally to develop a comprehensive framework for cross-border stablecoins transactions. For Surveyed Jurisdictions, in the countries mentioned above, there is harmonization on the basic scope and nature of stablecoins. It has been commonly defined as a type of token whose value is pegged or is in reference to a particular fiat currency or an asset or a combination of assets.<sup>217</sup> A broad outline of approaches adopted in four Surveyed Jurisdictions vis-à-vis stablecoins is discussed below.

In EU, MiCA seeks to regulate two types of stablecoins - asset-referenced tokens (“ART”) (that aim to maintain a stable value by referencing several currencies that are legal tender, one or several commodities, one or several cryptoassets, or a basket of such assets); and e-tokens (“EMT”) (that are intended primarily as a means of payment and aim at stabilising their value by referencing only one fiat currency). ART and EMT issuers are subject to authorisation and licensing requirements. ART issuers are subject to specific provisions such as - the requirement to file a whitepaper about the issuance of cryptoassets with the regulator with prescribed information, provisions relating to marketing communication, disclosure to holders, complaint handling procedure, prevention, management and dealing with conflict of interests, requirements relating to governance arrangements, own funds requirements, requirement relating to management, custody and investment of reserve assets, rights against issuers, etc. Notably, EMT issuers must be authorised as credit institutions or e-money institutions under existing laws. Notably, EMT is deemed to be “electronic money” under the E-money Directive.<sup>218</sup> MiCA also envisages a framework for significant ART and EMT i.e. stablecoins that may pose systemic risks.

In the UK, the HM Treasury<sup>219</sup> proposes to initially focus on the regulation of stablecoins. Currently, unregulated payment tokens like Bitcoin and Ether are proposed to be kept out of the regulatory perimeter for conduct and prudential purposes. However, such cryptoassets will continue to be subject to AML/CFT frameworks and consumer communications. The UK government’s proposal to initially focus on stablecoins seeks to: (a) take into

---

<sup>215</sup> Canadian Securities Administrators, ‘CSA Staff Notice 51-363 Observations on Disclosure by Crypto Assets Reporting Issuers’ (March 2021) < [https://www.osc.ca/sites/default/files/2021-03/csa\\_20210311\\_51-363\\_observations-disclosure-crypto-asset.pdf](https://www.osc.ca/sites/default/files/2021-03/csa_20210311_51-363_observations-disclosure-crypto-asset.pdf) > accessed 14 January 2022.

<sup>216</sup> FSB, ‘Regulation, Supervision and Oversight of “Global Stablecoin” Arrangements Progress Report on the implementation of the FSB High-Level Recommendations’, (October 2021), < <https://www.fsb.org/wp-content/uploads/PO71021.pdf> > accessed 18 January 2021.

<sup>217</sup> HM Treasury, ‘UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence’, ‘ (January 2021), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/950206/HM\\_Treasury\\_Cryptoasset\\_and\\_Stablecoin\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf) > accessed 13 January 2022; President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, ‘ Report on Stablecoins’, (November 2021), <[https://home.treasury.gov/system/files/136/StableCoinReport\\_Nov1\\_508.pdf](https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf)> accessed 14 January 2022; Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593> > accessed 14 January 2022.

<sup>218</sup> Parliament and Council Directive on the taking up, pursuit and prudential supervision of the business of electronic money institutions amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, [2009] OJL 267/7.

<sup>219</sup> HM Treasury, ‘UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence’, ‘ (January 2021), <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/950206/HM\\_Treasury\\_Cryptoasset\\_and\\_Stablecoin\\_consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950206/HM_Treasury_Cryptoasset_and_Stablecoin_consultation.pdf) > accessed 13 January 2022

account the potential of stablecoins to be used as a means of payment; (b) leverage the potential of stablecoins in increasing efficiency of cross border payments; and (c) address risks relating to financial stability, market integrity, consumer interest and risks to competition that are associated with such stablecoins. The proposed framework will cover stablecoins used as a means of payment, which includes stablecoins pegged to a single fiat currency and commodities (like gold, or multi-currency). It will not cover other payment tokens, utility tokens, security tokens and algorithm-based stablecoins. The proposed framework will extend to firms issuing stable tokens and firms providing services in relation to them, either directly or indirectly to consumers. The following services are intended to be covered under the framework: issuance, value stabilisation and reserve management, validation of transactions, the transmission of funds, providing custody and administration of a stablecoin for third party, executing transactions in stablecoins and exchanging tokens for fiat currency and vice versa. Some of the key features of the proposed framework are requirements relating to authorisation, prudential management, maintenance and management of reserve assets, orderly failure and insolvency requirements, systems, controls, risk management and governance, etc. The government notes that stable token arrangements which play a similar function to existing payments systems “may be appropriate candidates for regulation” by payments regulator and is considering whether legislative adjustments are required to clarify this. Stablecoin arrangements that reach a systemic scale may be subject to existing systemic payments regulation currently enforced by the Bank of England. Issuers and operators of stablecoins that reach a systemic scale are also proposed to be brought under the supervision of the Bank of England. While the UK has outlined some of the key features of a regulatory framework for stablecoins, it is not clear if the same will be incorporated within existing laws such as payments law with necessary modifications, or it will be implemented through a standalone framework.

In the USA, the President’s Working Group on Financial Markets<sup>220</sup> recommends a bespoke legislation for addressing the prudential risks associated with payment stablecoins. To protect investors, the report recommends that stablecoins must only be issued by entities who are deemed as insured depository institutions. These depository institutions include state and federally chartered banks and savings associations. They will be supervised at a depository institution level by a federal banking agency and at the holding company level by the Federal Reserve. They will also be subject to enhanced prudential standards for maintaining financial stability and other mechanisms available under the Federal Deposit Insurance Act such as a special resolution regime to address investor protection concerns, creditor protection concerns, etc. of failed insured depository institutions. Further, it recommends federal oversight over custodial wallet providers. This includes provisions imposing restrictions on commercial affiliation, ensuring adherence to risk-management standards, liquidity and capital requirements and limits on the use of transaction data. To counter risks to the payment system, the report also recommends that the federal supervisor of a stablecoin issuer must be given the power to compel any entity that it deems is performing a crucial activity within the stablecoin framework to adhere to apposite risk-management standards. Further, to mitigate systemic risks, it also looks to equipping the supervisor with the power to introduce standards to promote interoperability among stablecoins and/or stablecoins with other payment systems. While the formulation of the legislation is still underway, the report seeks to introduce some interim measures which will address the growing rise of stablecoins. It recommends that the Financial Stability Oversight Council<sup>221</sup> (“Council”) designate specific activities within stablecoins arrangements as systematically important payment, clearing and settlement (“PSC”) activities. This would enable the appropriate agencies to stipulate apposite risk-management policies for entities involved in PSC activities such as requirements relating to reserve assets and prudential obligations. The report further recommends a coordinated and flexible approach to be undertaken by existing agencies in the interim. For instance, it stipulates that Commodity Exchange Act, 1936 can be invoked to look after investor interests for stablecoins which are akin to securities and the Consumer Financial Protection Bureau can explore how to impose safeguards contained within the consumer protection framework.

---

<sup>220</sup> President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, ‘ Report on Stablecoins’, (November 2021), <[https://home.treasury.gov/system/files/136/StableCoinReport\\_Nov1\\_508.pdf](https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf)> accessed 14 January 2022

<sup>221</sup> The Council is tasked with identifying the risks to the financial stability of USA and responding to the same. See, U.S. Department of the Treasury, ‘Financial Stability Oversight Council’, < <https://home.treasury.gov/policy-issues/financial-markets-financial-institutions-and-fiscal-service/fsoc> > accessed on 18 January 2022.

Recently, in Hong Kong, the HKMA has released a discussion paper addressing the concerns relating to stablecoins (“Discussion Paper”).<sup>222</sup> Within the existing framework, the Discussion Paper states that stablecoins which fall within the definition of Stored Value Facilities<sup>223</sup> (“SVF”) within the Payment Systems and Stored Value Facilities Ordinance, 2004 (“PSSVFO”) is to be regulated within such regulations. Under the PSSVFO, issuers of stablecoins which are akin to SVF are mandatorily required to obtain a license from the HKMA. However, the Discussion paper is cognizant that not all stablecoins can be fitted within the existing definition of SVFs. To qualify as an SVF, the facility issuer using the stored value needs to be the same issuer who gives undertaking for making person-to-merchant or person-to-person payments using such stored value. Some stablecoins involve multiple entities and the issuer of stablecoin may not undertake to use it as a means of payment for any third party. Thus, such stablecoins are disqualified from the ambit of SVFs according to the Discussion Paper. For such stablecoins it proposes a policy directive. For payment stablecoins, the HKMA seeks to adopt a risk-based approach to regulate activities such as issuing, creating, destroying tokens, managing reserves, validating records, storing private keys, facilitating redemption mechanisms, etc. It envisages an authorisation regime under the HKMA. It stipulates that the abovementioned activities cannot be carried out by any entity other than entities incorporated within Hong Kong and owns a license. The regulations will also need to provide for prudential requirements, fit and proper requirements for ownership and management, the sufficiency of the backed assets in the reserves, AML/CFT requirements, redemption guidelines, risk-management and cyber security standards and disclosure norms. The Discussion Paper is considering to carrying out such regulations either by way of amending the PSSVFO or by introducing a standalone legislation for regulating payment stablecoins.

---

<sup>222</sup> HKMA, ‘Discussion Paper on Crypto-assets and Stablecoins’, (January 2022), <<https://www.hkma.gov.hk/media/chi/doc/key-information/press-release/2022/20220112c3a1.pdf>> accessed on 18 January 2022.

<sup>223</sup> SVF is defined as “(1) For the purposes of this Ordinance, a facility is a stored value facility if— (a) the facility may be used for storing the value of an amount of money that— (i) is paid into the facility from time to time; and (ii) may be stored on the facility under the rules of the facility; and (b) the facility may be used for either or both of the following purposes— (i) as a means of making payments for goods or services under an undertaking (whether express or implied) given by the issuer as specified in subsection (2); (ii) as a means of making payments to another person (other than payments mentioned in subparagraph (i)) under an undertaking (whether express or implied) given by the issuer as specified in subsection (3). (2) The undertaking for subsection (1)(b)(i) is an undertaking that, if the facility is used as a means of making payments for goods or services, the issuer, or a person procured by the issuer to accept such payments, will accept the payments up to the amount of the stored value that is available for use under the rules of the facility. (3) The undertaking for subsection (1)(b)(ii) is an undertaking that, if the facility is used as a means of making payments to another person (**recipient**) (other than payments mentioned in subsection (1)(b)(i)), the issuer, or a person procured by the issuer to make such payments, will make the payments to the recipient up to the amount of the stored value that is available for use under the rules of the facility. (4) A facility is not a stored value facility for the purposes of this Ordinance if it is a single-purpose stored value facility. (5) In this section— **issuer**, in relation to a facility, means the person who issues the facility; **rules** in relation to a facility, means the rules or terms that govern the operation, use or functioning of the facility; **single-purpose stored value facility** means a facility—(a) that may be used for the purpose mentioned in subsection (1)(a); and (b) in respect of which the issuer—(i) gives an undertaking that, if the facility is used as a means of making payments for goods or services (not being money or money’s worth) provided by the issuer, the issuer will provide the goods or services under the rules of the facility; and (ii) does not give any other undertaking that falls within the description of subsection (2) or (3); **stored value** in relation to a facility, means the value stored on the facility as mentioned in subsection (1)(a). (6) For the purposes of this section— (a) a facility may be in physical or electronic form, but does not include cash; (b) a reference to money is a reference to— (i) money in any currency; or (ii) any declared medium of exchange; and (c) except in subsection (5), a reference to goods or services includes money or money’s worth. See PSSVFO, s.2A.

# VI. Recommendations

---

From an initial regulatory approach of an indirect ban, Indian policymakers seem to be moving towards an accommodative approach that envisages stringent regulation of the cryptoasset market and its players.<sup>224</sup> Given that the policy stance appears to be rightly moving towards regulation of cryptoassets (as opposed to an outright ban), this Report briefly touches upon why such regulation and not an outright ban is perhaps the better solution to supervise the growth of the cryptoasset market and activities in India. After setting out the reasons for advocating “regulation” as opposed to “banning”, this Report then sets out regulatory principles that may be considered by policymakers while designing regulations for cryptoassets. Guided by these principles, the analysis of risks and opportunities discussed in the preceding chapter and best practices adopted in other jurisdictions, this Report then presents a blueprint of a proposed law to regulate cryptoassets in India.

## Why is “Regulating” (as Opposed to Banning or not Regulating) Necessary?

1. Cryptoassets and their underlying technology are likely to have far-reaching ramifications for the financial system. As their use cases evolve, they are likely to impact various economic activities relating to payments, investment, and capital raising. Therefore, it is important to assess the appropriateness and effectiveness of the legal framework to tap into the potential of such innovation and mitigate the risks (already discussed in Chapter IV) that accompanies it.
2. Many countries, including India, have consistently clarified that cryptoassets are not recognised as “legal tender” while at the same time refraining from bringing such cryptoassets under any regulatory framework for the fear of legitimizing it. However, by retaining this regulatory forbearance stance, countries run the concomitant risk of allowing the reckless growth of the crypto market. Without any regulatory scrutiny, the risks posed by cryptoasset may be heightened, should they gain widespread adoption. This also raises the potential creation of a parallel payment or financial system that may be difficult to manage or regulate later. Regulatory void for cryptoassets is also contrary to the guidance issued by the FATF (of which India is a member) on the need to regulate VASPs against money laundering and terrorist financing risks.
3. Typically, most entities operating in the financial system are subject to a highly regulated environment to protect the interests of consumers / investors and to ensure a safe and sound financial system. Such regulations are often aimed at intermediaries that provide services to facilitate financial transactions. In the case of cryptoassets, while some transactions may have the presence of intermediaries (such as exchanges), some transactions may happen on a peer-to-peer basis without the need for intermediaries. Arguably, many players in the cryptoasset market also provide services comparable to certain financial services that impact the interests of consumers as well as the financial system. To that extent, it is important to subject such intermediaries to a regulatory framework. The regulatory void may give rise to potential risks relating to customer / investor protection, tax evasion, market manipulation, circumvention of exchange controls, privacy, cyber security and financial stability risks in certain cases.
4. Currently, the size of the cryptoasset market as compared to the global financial system is not big enough to pose systemic risks. However, the rise of new types of cryptoassets such as stablecoins coupled with the entry of big technology companies with their vast consumer network evincing interest in supporting

---

<sup>224</sup> Jayshree P. Upadhyay, ‘Clarity on crypto: No plan to ban; SEBI to regulate’, *Livemint*, (India, 3 December 2021), <<https://www.livemint.com/market/cryptocurrency/no-ban-sebi-to-regulate-cryptos-11638471774414.html>> accessed 14 January 2022; Nikita Prasad, ‘Crypto Not Recognised as Legal Currency, To be Regulated in India: 5 Points’, *NDTV*, (India, 2 December, 2021), <<https://www.ndtv.com/business/new-crypto-bill-private-cryptocurrency-to-be-regulated-not-banned-crypto-not-legal-currency-in-india-5-points-2634568>> accessed 14 January 2022; BI India Bureau, ‘No crypto ban in India- SEBI will reportedly be pulled in to regulate the sector’, *Business Insider India*, (India, 3 December 2021), <<https://www.businessinsider.in/cryptocurrency/news/no-crypto-ban-in-india-sebi-will-reportedly-be-pulled-in-to-regulate-the-sector/articleshow/88065166.cms>> accessed 14 January 2022.

payment systems built around such cryptoassets indicate future possibilities of such systems becoming systemically significant as interest, investment and participation in cryptoassets and related activities continue to grow. Further, systemic implications may also emerge when existing financial institutions get exposed to a system built around cryptoassets. To that extent, it is necessary to design regulations to keep a tab on entities in the cryptoasset ecosystem that have become or have the potential to become systemically important.

5. One of the regulatory approaches that many policymakers considered initially was to impose an outright ban on trading, dealing and use of cryptoasset. However, very soon, many experts and policymakers have figured out the futility of a ban for two primary reasons. A ban on cryptoassets that exists virtually, is decentralized and defies geographical boundaries and where key players (such as the issuer) remain anonymous is extremely difficult to implement. Further, a ban is likely to be counterproductive as it may push the market underground, making it impossible for policymakers to monitor the developments in the market. Such a scenario may be misused by miscreants to use cryptoassets for illegal activities. There have been reported instances of how after the RBI circular which banned RBI regulated financial institutions from dealing with cryptoassets, there was an increase in illegal transactions such as hawala transactions to facilitate the trade of cryptoassets.<sup>225</sup> This will in turn exacerbate the risks that have been discussed above since the usage will not stop but it will be carried out in an unregulated space with no checks and balances in place. India may also lose on gaining expertise or leveraging the potential of innovative solutions based on cryptoassets and DLT in case of a ban.

## Principles for Regulating Cryptoassets and Cryptoasset Service Providers

1. While certain features may be common for all cryptoassets, given the varying use cases, economic incentives and the players involved, it may not be possible to pigeonhole all cryptoassets as a singular type of financial instrument. Therefore, policymakers should develop / adopt a taxonomy of cryptoassets and / or tokens for designing regulations. The taxonomy will enable policymakers to identify the features of the cryptoassets, main actors and underlying risks.
2. Based on the aforesaid taxonomy, to the extent cryptoassets resemble existing financial instruments, policymakers must examine the adequacy of existing laws to regulate such cryptoassets. For instance, if some cryptoassets (such as security tokens) are used to raise capital by an issuer that resemble existing securities and rights conferred by it on investors/ shareholders, policymakers must examine if existing regulations under Companies Act, 2013 and Securities and Exchange Board of India Act, 1992 ("SEBI Act") may be made applicable to such cryptoassets. In most likelihood, cryptoassets that exist today may not be captured or adequately regulated under existing laws (see below for discussion). Therefore, it may be necessary to create a separate framework for regulating such cryptoassets.
3. In cases, where there is no underlying asset that is represented in the cryptoasset, the focus of the regulation should be on the entities that provide financial services in relation to such cryptoassets as opposed to the cryptoasset per se.
4. The legal framework should adopt a risk-based approach where regulation is commensurate to the level of risk posed by the activity in question. There should be a mechanism to identify entities and activities that may have systemic implications for the entire financial system. For such entities, a heightened oversight and monitoring system must be designed.
5. The enforcement of any legal framework to regulate cryptoassets will require a coordinated approach by various regulators. While a single regulator may be primarily responsible for regulating the concerned

---

<sup>225</sup> Atanu Biswas and Bimal Roy, 'Bitcoin, the New Hawala', *The Economic Times*, (India, 14 June 2017), <<https://economictimes.indiatimes.com/blogs/et-commentary/bitcoin-the-new-hawala/>> accessed 14 January 2022.

service providers, there are other regulators and statutory authorities that may have to be adequately empowered to regulate or oversee specific aspects of the sector. This is particularly important in a country like India where there are multiple regulators and authorities. For instance, while India may identify a specific regulator as the lead regulator for enforcing the legal framework applicable to cryptoasset service providers (“CASPs”), it will also have to empower regulators like RBI, tax authorities and enforcement directorate to regulate specific aspects of the market. This is important given the exposure of the cryptoassets market to financial institutions and its potential to be used for money laundering, illicit financing and tax evasion.

6. Policymakers may consider adopting a phased approach towards regulation, where regulatory treatment is assessed before imposing stringent regulatory requirements. This may imply that regulatory focus is initially on those cryptoassets and aspects that pose significant risk. For instance, many features of cryptoassets are still evolving and accordingly it may not be feasible to regulate such aspects.

## Possible Regulatory Approaches for Regulating Cryptoassets

With India planning to introduce a bill to regulate cryptoassets, there is debate on whether such cryptoassets may be treated as a security, commodity or a separate asset class. This section examines the possible options to regulate cryptoassets in India. *First*, all cryptoassets may be subject to an existing law with necessary modifications. *Second*, a new standalone law is enacted for designing a regulatory framework for cryptoassets. In the first approach, this section examines if cryptoassets can be accommodated within existing asset classes regulated under existing laws. In this regard, we have deliberately not assessed its implication as a currency because a cryptoasset as it operates today do not fulfill the three economic functions of money (store of value, unit of account, and means of payment), is not backed by any government / central bank and accordingly may not be treated as a currency. Even though there are businesses that may accept cryptoassets as payment, such businesses are limited in number to effectively treat such cryptoassets as a credible means of payment.<sup>226</sup> Further, cryptoassets are also largely considered as not likely to be able to perform the other two functions of money - store of value and unit of account. The prices of cryptoassets fluctuate extremely, sometimes even on an intraday basis. Therefore, the ability to purchase certain goods and services (purchasing power) using cryptoassets varies over time, and makes it a poor store of value.<sup>227</sup> There is not much evidence to support that cryptoassets are used as a unit of account. The extreme volatility of such currencies is likely to prevent them from becoming a useful unit of account. Due to the fluctuations in their values on a day-to-day basis, retailers will be required to recalculate prices frequently, which can be costly and confusing. Therefore, the uncertainty in their market value often makes cryptoassets difficult to be used a valid reference point for setting consumer prices.<sup>228</sup>

### Approach A: Reliance on Existing Laws

#### Treatment of Cryptoasset as a Security

Section 2(h) of the Securities Contracts Regulation Act, 1956 (“SCRA”) provides an inclusive definition of “securities”. As per this definition, securities include: (a) shares, debentures or “other marketable securities of a like nature in or of any incorporated company or a pooled investment vehicle or other body corporate”; (b)

<sup>226</sup> Reserve Bank of Australia, ‘Cryptocurrencies’ accessed 18 January 2022; Deutsche Bank Research, ‘Part III. Digital Currencies: the Ultimate Hard Power Tool’ (2020) accessed 28 March 2021; Garrick Hileman and Michel Rauchs, ‘Global Cryptocurrency Benchmarking Study’ (2017) accessed 18 January 2022.

<sup>227</sup> Reserve Bank of Australia, ‘Cryptocurrencies’ <<https://www.rba.gov.au/education/resources/explainers/cryptocurrencies.html>> accessed 18 January 2022; Committee on Banking, Housing, and Urban Affairs, ‘Senate Hearing on Exploring the Cryptocurrency and Blockchain Ecosystem’ (2018) <<https://www.govinfo.gov/content/pkg/CHRG-115shrg34525/pdf/CHRG-115shrg34525.pdf>> accessed 18 January 2022.

<sup>228</sup> Eddie GERBA, Margarita Rubio, ‘Virtual Money: How Much do Cryptocurrencies Alter the Fundamental Functions of Money?’ (December 2019) <<https://www.europarl.europa.eu/cmsdata/207652/12.%20PE%20642.360%20LSE%20final%20publication-original.pdf>> accessed 18 January 2022; Reserve Bank of Australia, ‘Cryptocurrencies’ <<https://www.rba.gov.au/education/resources/explainers/cryptocurrencies.html>> accessed 28 March 2021; Committee on Banking, Housing, and Urban Affairs, ‘Senate Hearing on Exploring the Cryptocurrency and Blockchain Ecosystem’ (2018) <<https://www.govinfo.gov/content/pkg/CHRG-115shrg34525/pdf/CHRG-115shrg34525.pdf>> accessed 18 January 2022.

derivative; (c) units or other instrument issued by a collective investment scheme, pooled investment vehicle or under a mutual fund scheme; (d) government securities; or (e) such other instruments declared by the central government to be “securities”. Therefore, SCRA envisages a wide definition of “securities” along with the flexibility to the government to notify additional instruments as “securities.”

### **Legal Implication of Treatment of Cryptoassets as Securities**

- Securities and Exchange Board of India (“SEBI”) will primarily assume responsibility for regulating cryptoassets and market participants.
- Exchanges and other market intermediaries operating in the cryptoasset market will be brought within the ambit of the SEBI Act and the SCRA.
- The process of issuing, transferring and trading cryptoassets is likely to be caught in the regulatory ambit.
- Like most market intermediaries, a separate set of regulations under the SEBI Act may have to be issued to regulate market intermediaries dealing in cryptoassets.
- Since the existing legal framework under SCRA and the SEBI Act and regulations issued thereunder was not designed for such cryptoassets based on decentralized systems, SEBI will have to clarify the implementation of such framework to entities operating in the cryptoasset market.

### **Preliminary Assessment and Suggested Approach**

For cryptoassets to be treated as a security, they must fall within any of the categories defined under the SCRA. In case it does not fall within the existing categories, the Central Government will have to specifically notify cryptoassets as a specific class of security. In doing so, the following points must be considered:

- (a) The preceding chapter on the classification of cryptoassets indicates that it may not be possible to pigeonhole cryptoassets under one category. In certain cases, cryptoassets like security tokens issued by a body corporate that confer investors with rights to profit or voting rights and are freely marketable may exhibit features of a share or debenture and fall within the definition of “securities”. However, there may be other cryptoassets such as utility tokens or stablecoins that may not exhibit such features and may not be categorised as a share. Further, the existing definition of securities may also not encompass hybrid cryptoassets discussed above.
- (b) Similarly, one may argue that if a stablecoin is designed in a manner that it derives its value from the “prices, or index of prices, of underlying securities” i.e., backed by shares in a company, it may be considered as a derivative. However, the feasibility of such a stablecoin is not clear. Similarly, the definition of “derivatives” as set out in SCRA is unlikely to be applicable to the most common types of cryptoassets traded in India.
- (c) While the government may notify cryptoassets as a separate class under the SCRA, by applying the rule of *ejusdem generis*,<sup>229</sup> one may argue that this power to notify securities must be construed as limited to things of the same kind or nature as described in the preceding sub-clauses. In most cases, securities as defined above confer rights and are issued by a body corporate. These features may not be true in the case of certain cryptoassets.

Based on the aforesaid, it is evident that while it is possible to design cryptoassets that exhibit features similar to certain categories of securities, it cannot be expressly concluded that all cryptoassets will fall within the definition of the “securities” defined under SCRA. Given the evolving design and use cases of cryptoassets, it may be an overstretch to attempt to club all cryptoassets as “securities”.

---

<sup>229</sup> N.S. Bindra, *Interpretation of Statutes*, (12 edn, Lexis Nexis, 2017), 382-384.

## Treatment of Cryptoasset as Commodity

If all cryptoassets cannot be fitted under the existing definition of financial products or instruments like money or securities, an alternative that many argue is to treat cryptoasset as a commodity/asset/good.<sup>230</sup> Many news reports in India claim that the government is considering to treat cryptoasset as a commodity / asset for regulation and taxation purposes.<sup>231</sup> This may emerge from the fact that globally there have been instances, where courts have treated such cryptoassets as commodities.<sup>232</sup> Notably, there is no specific definition of 'commodity' under a particular law. The closest definition that comes to commodity is the definition of "goods" in the SCRA and the Sale of Goods Act, 1930 ("SGA"). The SCRA defines "goods" to mean every kind of moveable property other than actionable claims, money and securities.<sup>233</sup> While the SGA also defines goods to mean moveable property, it includes stocks and shares within the definition of goods.<sup>234</sup> The General Clauses Act, 1977 defines "moveable property" to be property of every kind, except immoveable property (which is defined to include land, benefits to arise out of land, and things attached to the earth, or permanently fastened to anything attached to the earth).<sup>235</sup> In the past, Supreme Court<sup>236</sup> has held that "good" may mean both tangible and intangible goods. Something can be considered as a "good" provided it meets three conditions: (a) it has utility; (b) is capable of being bought and sold; and (c) is capable of being transmitted, transferred, delivered, stored and possessed. If a software satisfies these attributes, the same would be goods. Notably, in this case, the court was dealing with the issue of taxation. However, the judgment is relevant to argue that cryptoassets may be considered as "good".

### Legal Implication of Treatment of Cryptoassets as Commodity

Treatment of cryptoasset as a commodity / good / asset may subject it to multiple regulations as discussed here.

- SCRA: The definition of commodity derivatives i.e. a contract relating to goods / commodities under the SCRA maybe relevant for cryptoassets. *First*, is it the definition of commodity derivative which is a contract for delivery of such goods as may be notified by the Central Government or contract for differences which derive its value from prices or indices of prices of such underlying goods or activities, services, rights, interests and events. Such commodity derivatives are traded in a commodity derivative market. Before we assess the legal treatment of cryptoassets as commodity derivatives, it is essential to assess if cryptoassets may be categorised as commodity derivatives. As discussed above, while certain cryptoassets such as stablecoins may derive their value from some prices or indices of prices, this may not be true for most cryptoassets that exists today. This leaves us to the first part of the definition that refers to a contract for delivery of goods notified by the Government. Notably, SEBI in a Frequently Asked Question ("FAQ")<sup>237</sup> notes that commodities usually refer to "tangible goods that can be

---

<sup>230</sup> Saloni Shukla & Sachin Dave, 'Govt Plans to bring a bill, cryptocurrencies to be treated as commodity', *The Economic Times*, (India, 3 September, 2021), < <https://economictimes.indiatimes.com/news/economy/finance/virtual-currencies-govt-plans-to-bring-a-bill-cryptos-to-be-treated-as-commodity/articleshow/85885645.cms>> accessed on 14 January 2022; Pawan Nahar, 'Crypto as commodity: What does it mean for you and the industry?', < <https://economictimes.indiatimes.com/markets/cryptocurrency/crypto-as-commodity-what-does-it-mean-for-you-and-the-industry/articleshow/85892934.cms?from=mdr>> *The Economic Times*, (New Delhi, 3 September 2021).

<sup>231</sup> Saloni Shukla & Sachin Dave, 'Govt Plans to bring a bill, cryptocurrencies to be treated as commodity', *The Economic Times*, (India, 3 September, 2021), < <https://economictimes.indiatimes.com/news/economy/finance/virtual-currencies-govt-plans-to-bring-a-bill-cryptos-to-be-treated-as-commodity/articleshow/85885645.cms>> accessed on 14 January 2022; 'Cryptocurrencies likely to be treated as commodities, may face taxation: Report', *India Today*, (New Delhi, 3 September 2021) < <https://www.indiatoday.in/business/story/cryptocurrency-draft-bill-details-taxation-classification-of-virtual-coin-1848885-2021-09-03>> accessed 14 January 2022.

<sup>232</sup> For example, In the matter of BFXNA Inc, d/b/a BITFINEX CTFC Docket No. 16-19 dated 02-06-2016; In re Coinflip, Inc, CFTC Docket No. 15-29 dated 19-09-2015; Commodity Futures Trading Commission v. My Big Coin Pay, Inc. et al., 334 F. Supp. 3d 492; Commodity Futures Trading Comm'n v. McDonnell, 287 F. Supp. 3d 213.

<sup>233</sup> The Securities Contract (Regulations) Act 1957, s 2(bb).

<sup>234</sup> Sale of Goods Act 1930, s 2(7).

<sup>235</sup> General Clauses Act 1977, s 3(26).

<sup>236</sup> *Tata Consultancy Services v. State of Andhra Pradesh* (2005) 1 SCC 308 (SC).

<sup>237</sup> SEBI, 'FAQs on Commodity Derivatives', (August 2021) < [https://www.sebi.gov.in/sebi\\_data/faqfiles/nov-2021/1636459721896.pdf](https://www.sebi.gov.in/sebi_data/faqfiles/nov-2021/1636459721896.pdf)> accessed on 14 January 2022.

interchanged with other goods of the same type” and are “mostly used as inputs in the production of other goods or services”. Therefore, goods like gold, crude oil, copper and natural gas are treated as goods. Currently, commodities that are traded in such commodity derivatives include agricultural commodities (such as palm oil, soyabean oil, etc) and non-agricultural commodities (such as bullion and gems, energy commodities and metal commodities). Further, commodities notified under the SCRA typically have a “large demand and supply” that may not be the case with cryptoassets<sup>238</sup> While an FAQ does not have a binding value and is used for informational purposes, a reading of the same indicates that existing regulations under the SCRA do not envisage digital assets / cryptoassets as a commodity for the purposes of commodity derivative markets. Therefore, unless a new class of commodities such as cryptoasset / digital asset commodities is created, it may not be possible to bring all cryptoassets within the ambit of the SCRA.

- Implications under the Foreign Exchange Management Act, 1999 (“FEMA”): If cryptoassets are classified as goods or commodities, the implications of trading in cryptoassets under FEMA will have to be assessed. While FEMA does not define the term “goods” or “commodities”, it regulates various aspects of export and imports of goods, including payments paid and received for such goods. As per the Foreign Exchange Management (Export of Goods & Services) Regulations, 2015, the export of goods also includes the transmission of software through electronic media.<sup>239</sup> Reading this in light of the aforesaid Supreme Court judgment, one may argue that the FEMA framework will be applicable to the export of software such as cryptoassets. Accordingly, if cryptoassets are treated as goods, the applicability of the following provisions under the FEMA framework will have to be undertaken:
  - Whether transferring of cryptoassets outside India is an export that falls within the FEMA framework? If yes, there are several obligations under the FEMA framework, including Foreign Exchange Management (Export of Goods & Services) Regulations, 2015, Master Direction – Export of Goods and Services and Foreign Exchange Management (Manner of Receipt and Payment) Regulations, 2016 will be applicable. This will mean that that export value must be paid to authorised dealers, filing of relevant declarations, etc.
  - Whether transmission of cryptoasset into India from a country outside India constitutes an import under FEMA? If the answer is yes, obligations under Master Direction – Import of Goods and Services and Foreign Exchange Management (Manner of Receipt and Payment) Regulations, 2016 maybe applicable.
  - Whether payments for cryptoassets constitute a capital or current account transaction under FEMA? Under FEMA, all transactions with persons resident outside India are categorised as “capital account transactions” or “current account transactions”. “Capital account transaction” means a transaction that alters the assets or liabilities, outside India of persons resident in India or assets or liabilities in India of persons resident outside India.<sup>240</sup> “Current account transaction” means a transaction other than a capital account transaction.<sup>241</sup> It includes payments due in connection with foreign trade, other current business, services, and short-term banking and credit facilities in the ordinary course of business. Broadly, capital account transactions. As a basic rule, all current account transactions are permitted unless specifically prohibited and all capital account transactions are prohibited unless permitted. Transactions in foreign exchange are typically required to be carried out through authorised dealers.

---

<sup>238</sup> SEBI, ‘FAQs on Commodity Derivatives’, (August 2021) < [https://www.sebi.gov.in/sebi\\_data/faqfiles/nov-2021/1636459721896.pdf](https://www.sebi.gov.in/sebi_data/faqfiles/nov-2021/1636459721896.pdf)> accessed on 14 January 2022.

<sup>239</sup> Foreign Exchange Management (Export of Goods and Services) Regulations 2015, reg 2(iv)

<sup>240</sup> Foreign Exchange Management Act 1999, s 2(e).

<sup>241</sup> Foreign Exchange Management Act 1999, s 2(j).

### ***Preliminary Assessment and Suggested Approach***

Based on the aforesaid assessment, it is evident that the treatment of cryptoasset as “goods” or “commodities” is likely to raise several legal questions under different laws that were never designed keeping in mind such digital assets / cryptoassets. In most cases, it may not even be possible to bring different types of cryptoassets within the ambit of existing laws without carrying out major amendments or changes. This will subject cryptoasset related activities to a range of laws, and yet perhaps leaving out certain cryptoassets from the ambit of existing laws.

### **Treatment of Cryptoasset as a Payment System**

As per the Payment and Settlement Systems Act, 2007 (“PSS Act”), a payment system is a system that enables payment to be effected between a payer and a beneficiary, involving clearing, payment or settlement service or all of them. In case cryptoassets facilitate payment, one may argue that it may fall within the definition of a payment system. Relying on its powers under sections 10 and 12 of the PSS Act, RBI has issued several directions to bring several entities operating infrastructures or systems facilitating payments within the ambit of the PSS Act. Typically entities providing debit card, credit card, payment gateway functions or entities operating payment infrastructures like that of the National Payment Corporation of India are covered by the PSS Act. It is evident that all such payment systems are used to process payments in fiat currencies as opposed to payments in virtual tokens or cryptoassets. Therefore, by way of a review of the payment systems authorised under the PSS Act, it is evident that legislative intention may not be to include cryptoassets as a payment system. However, attention may be drawn to one specific type of payment system that is recognised by RBI i.e. a prepaid payment instrument (“PPI”). PPI is defined to mean instruments that facilitate the purchase of goods and services, financial services, remittance facilities, etc., against the value stored therein.<sup>242</sup> PPIs store a definite value which is equivalent to the amount that the holder has paid to the PPI issuer. In this regard, PPIs are different from cryptoassets like Bitcoin that do not have a stable value and is based on the demand and supply of such cryptoassets in question. However, in case a stablecoin is pegged against a single fiat currency such as the Indian rupee and which represents a claim against the issuer, arguably it may bear features similar to a PPI. However, there are important distinctions that must be noted. Holders of PPIs have a claim on the PPI issuer and a right to redeem the PPI at any moment against the fiat currency that is a legal tender at par value with that currency. Contrary to this, a single fiat-currency backed cryptoasset may not provide holders with these exact rights.

### ***Legal Implication of Treatment of Cryptoassets as Payment System / PPI***

The operator will be required to be authorised by RBI. In the case of a PPI, the PPI is redeemable for the same amount that was paid to the PPI issuer and no interest may be paid on PPIs. Categorisation of a cryptoasset as a payment system / PPI will subject it to regulatory requirements under the PSS Act and regulations issued thereunder.

### ***Preliminary Assessment and Suggested Approach***

As discussed above, the definition of payment system and PPIs may not be made applicable to all cryptoassets. While one may argue that a stablecoin backed by Indian currency may bear features similar to a PPI, this is a mere assumption now as the technical and economic feasibility of such a stablecoin is not yet tested. Further, since most cryptoassets have often been a subject of concern due to their volatility in prices and the reluctance of India’s central bank regarding the adoption of such cryptoassets, it is unlikely that this categorisation will hold good for all cryptoassets.

### **Approach B: Enact a Standalone Law to Regulate Market in Cryptoassets**

Under this approach, the government may consider enacting a standalone and bespoke regulatory framework for regulating all activities associated with cryptoassets. This will imply that cryptoassets will be defined as a

<sup>242</sup>RBI, ‘Master Direction on Prepaid Payment Instruments (PPIs)’, (August 2021), <[https://www.rbi.org.in/Scripts/BS\\_ViewMasDirections.aspx?id=12156](https://www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=12156)> accessed 14 January 2022.

standalone category of financial instrument / asset under the proposed law and relevant players will be regulated under this law. However, the enactment of a new law does not automatically exclude the provisions of existing laws. The existing legal framework relating to anti-money laundering and KYC may be amended to extend its application to market participants of the cryptoasset sector.

As discussed above, existing laws are not well-equipped to regulate cryptoassets. Even if one may argue that some types of cryptoassets maybe brought within the ambit of certain existing laws, this approach will leave most cryptoassets outside the regulatory ambit. Further, the classification of cryptoassets under an already defined financial asset class raises complex legal questions and may create more uncertainty for businesses as several laws may have to be amended to accommodate cryptoassets. Therefore, this Report suggests Approach B as a more feasible regulatory approach to regulate cryptoassets.

## Blueprint of a Law to Regulate Cryptoassets

### Recommendations

This Report recommends that India should enact a new standalone law known as the Regulation of Cryptoasset Market Act (“Proposed Law”). This law should be used to create a bespoke regulatory framework for cryptoassets and entities providing cryptoasset related activities and services or CASPs as well as suggest amendments to existing laws (wherever necessary) to extend its applications to CASPs. The aforesaid principles should guide the regulatory architecture of the Proposed Law. The objectives of the Proposed Law are multi-fold as described below.

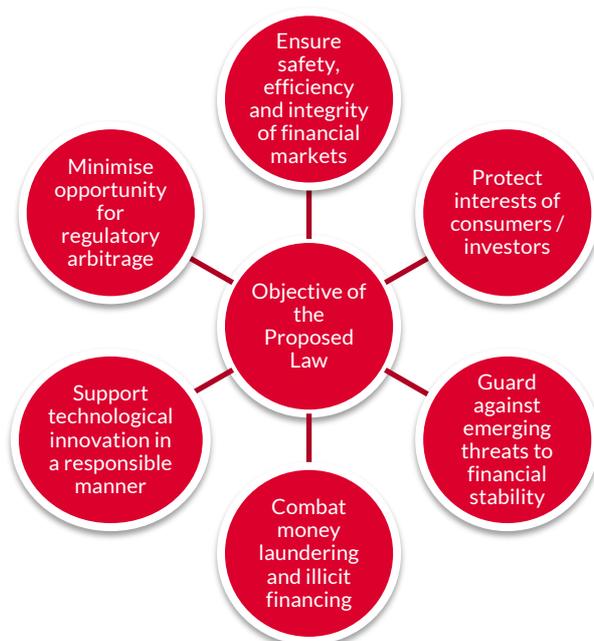


Figure 5: Objectives of the Proposed Law

To realise the aforesaid objectives, the following provisions / features must be incorporated in the Proposed Law. The succeeding section highlights the contours of the Proposed Law that maybe considered by policymakers designing a law to regulate cryptoassets and CASPs.

### Defining Cryptoassets

Regulatory clarity on the definition of cryptoassets is important since it impacts its classification and its regulatory treatment. In the preceding chapters, the Report discusses multiple terminologies and definitions that have been used to refer to and define cryptoassets. Broadly, common features in the definition adopted by regulators and global standard-setting bodies are: (a) digital representation of value; (b) potential to be used as medium of exchange; and (c) focus on its electronic nature, based on cryptography, DLT or similar technologies. Most central banks and regulators have refrained from referring to it as cryptocurrency to avoid any perception that it may be viewed as a form of currency. These features may also inform the definition in the Proposed Law.

1. *The Proposed Law should use the term “cryptoasset” as opposed to “cryptocurrency” or “virtual currency” to avoid any perception that it is viewed as a currency.*
2. *The definition of cryptoassets may contain the following features: (a) digital representation of value or rights; (b) it is not issued and guaranteed by a central bank; (c) it can be transferred, stored and traded electronically; and (d) which may utilize cryptography, distributed ledger technology or similar technologies.*
3. *The definition may also carve out necessary exemptions. For instance, in South Korea, digital tokens that cannot be exchanged into a fiat currency, commodities and services whose purpose of use is limited by the issuer, prepaid electronic payments or e-money, electronically registered stocks, electronic notes, prepaid cards, mobile gift cards, electronic bonds are excluded from the definition of “virtual assets”. In the EU, legal tender is excluded from the definition. In Malta, the definition of VFA clarifies that e-money, financial instruments and virtual tokens<sup>243</sup> (like utility tokens) are not included within the definition of VFA.*

## **Who Should be Regulated under the Proposed Law?**

There are multiple players participating in the entire lifecycle (from issuance, mining to trading) of a cryptoasset. While it may not be necessary or even possible at this stage to subject all such entities to regulations, it is important to subject certain entities providing services as described under the Proposed Law to regulations. Such an oversight over entities that primarily act as gatekeepers will be necessary for the regulators to monitor the transactions and fix accountability. Cryptoasset market participants involved in trading, exchange, distribution, custody, brokerage, etc. may be caught within the ambit of the Proposed Law.

### *Service Providers*

1. *The Proposed Law should be made applicable to CASPs.*
2. *The Proposed Law should provide a definition of CASP. It may be a legal or natural person that as a part of its business or occupation provides “cryptoasset services”.*
3. *Cryptoasset services may be defined to include such services as is specifically listed under the law. This may include services relating to: (a) exchange between cryptoasset and fiat currency; (b) exchange between one or more forms of cryptoasset; (c) transfer of cryptoasset; (d) custody and administration of cryptoassets or instruments enabling control over such assets; (e) facilitating buying and selling of cryptoassets; (f) providing investment advice on cryptoassets; and (g) such other services as may be notified by the Government under the Proposed Law.*
4. *To enable flexibility to the government to bring new players under the ambit of the Proposed Law, the law should enable the government to notify “cryptoasset services” later.*

### *Issuers*

5. *Issuers that intend to offer cryptoassets to the public in India or list their cryptoasset for trading in an exchange should also be subject to provisions of the Proposed Law. From a jurisdiction and enforceability perspective, there are two options that may be considered. First, only an issuer based in India may be considered. Second, any*

<sup>243</sup> Virtual token *inter-alia* is defined to mean a form of digital medium recordation whose utility, value or application is restricted solely to the acquisition of goods or services, either solely within the DLT platform on or in relation to which it was issued or within a limited network of DLT platforms. See Malta Virtual Financial Assets Act 2018.

*issuer (irrespective of its location) that intends to offer cryptoassets in India may be considered. In such a case, it may be worthwhile to require such an issuer to have an authorised representative in India.*

- 6. The Proposed Law should provide an adequate time period to existing market participants, including issuers and CASPs to comply with the provisions of the Proposed Law.*

## **Restriction or Prohibition on Specific Use Cases of Cryptoassets**

Policymakers remain concerned about the use of cryptoassets for payment purposes considering the volatility with such assets as well as anonymity associated with many cryptoassets. Considering that cryptoassets are being used for various economic functions that keep on evolving, it may be useful to assess such use cases to identify risks and opportunities. Accordingly, the Proposed Law may empower the Central Government in consultation with concerned regulators to restrict certain use cases of cryptoassets. For instance, in the UK, the FCA<sup>244</sup> has banned the sale, marketing and distribution to all retail consumers of any derivatives and exchange traded notes that reference unregulated transferable cryptoassets by firms acting in, or from, the UK. This will include cryptoassets that are not “specified investments” regulated under existing laws or e-money that is specifically regulated by FCA. This includes well-known tokens like Bitcoin, Ether or XRP. The FCA notes that such products are not suitable for retail consumers because of various reasons cited by the FCA such as: (a) inherent nature of the underlying assets that have no reliable basis for valuation; (b) prevalence of market abuse and financial crime in the secondary market; (c) extreme volatility in cryptoasset price movements; (d) inadequate understanding of cryptoassets by retail consumers; and (e) lack of legitimate investment need for retail consumers to invest in these products.<sup>245</sup> This ban was imposed pursuant to a public consultation on the draft rules and a cost benefit analysis of such a ban, which is a standard practice adopted by FCA.

- 1. Given the risks associated with cryptoassets, including price volatility and the lack of consumer awareness about such products, the use cases of cryptoassets and their impact on retail consumers need to be monitored by the government.*
- 2. The Proposed Law should empower the Central Government to prohibit or restrict the use of cryptoassets for specific purposes or activities in case such purposes are not in the public interest, including adversely affecting interests of consumers and safety and soundness of financial markets. Such prohibition or restriction may be notified by the Central Government in consultation with the relevant financial sector regulators like RBI and SEBI.*
- 3. Such a provision may also be used to prohibit the usage of cryptoassets for certain purposes like using cryptoassets as an underlying asset for derivatives or for payment purposes.*
- 4. Further, this provision may also be used to impose restrictions on a particular use case. For instance, restrictions may be imposed on certain types of stablecoins, or limits may be placed on transactions using certain cryptoassets.*
- 5. These restrictions or prohibitions will not be of a permanent nature. The Proposed Law will provide a regulatory sandbox mechanism framework that will enable regulators to test such use cases under a controlled and regulated environment to assess its risks and opportunities. While a particular use case may be prohibited or restricted under the Proposed Law, the regulatory sandbox mechanism allows the government to keep open the possibility of relaxing or removing such prohibition or*

---

<sup>244</sup> FCA, ‘FCA bans the sale of crypto-derivatives to retail consumers’, (6 October 2020) <<https://www.fca.org.uk/news/press-releases/fca-bans-sale-crypto-derivatives-retail-consumers>> accessed 14 January 2022.

<sup>245</sup> FCA, ‘FCA bans the sale of crypto-derivatives to retail consumers’, (6 October 2020) <<https://www.fca.org.uk/news/press-releases/fca-bans-sale-crypto-derivatives-retail-consumers>> accessed 14 January 2022.

*restriction later if adequate safeguards can be designed to mitigate risks on the basis of which such restriction or prohibition was imposed in the first place.*

- 6. The Supreme Court in the case of Internet and Mobile Association of India v RBI<sup>246</sup> lifted the ban imposed by RBI on its regulated entities from dealing in “virtual currencies” (“VC”). The Court noted such a ban infringed on the right exercise Article 19 (1) (g) by VC exchanges and hence, restriction on such fundamental right needs to pass the test of proportionality and reasonableness. Keeping in mind this observation, while imposing a restriction or prohibition on a use case, it is important that the rationale for the same is well laid out with supporting evidence.*

## **Restriction on the Trading of Certain Cryptoassets**

Reports indicate that there are more than 6,000 cryptocurrencies.<sup>247</sup> While several coins and tokens may be issued with adequate safeguards and safe for use for retail users, given the features of the cryptoassets, the possibility of miscreants designing coins and tokens for illegal purposes as well as with features that make it impossible for enforcement agencies to track actors and users using such coins or token cannot be ruled out. Similarly, it may be useful to remain cautious of transactions in cryptoassets in high-risk countries that are on the FATF watchlist. Therefore, it may be useful that the Proposed Law empowers the Central Government in consultation with concerned regulators to prohibit exchanges and other CASPs to deal in or list tokens or coins that have been notified by the Central Government under the Proposed Law.

- 1. The Proposed Law may empower the Central Government to notify a list of “Prohibited Cryptoassets”. Upon such notification, CASPs and users are prohibited to deal in such cryptoassets, including the listing of such cryptoassets on exchanges.*
- 2. A cryptoasset may be notified as a “Prohibited Cryptoasset” if the dealing in such cryptoasset is detrimental to public interest. This may include cryptoassets that fail to meet requirements of the applicable laws in India, are prone to be misused for illicit financing activities due to specific features of the cryptoasset or that the cryptoasset transaction is in countries that are high-risk. Such grounds maybe considered to be included in the Proposed Law that has to be fulfilled for notifying a cryptoasset as a Prohibited Cryptoasset.*
- 3. In notifying such cryptoassets, the Central Government must consult the concerned regulators i.e., SEBI and RBI.*
- 4. The Proposed Law should also provide a mechanism for the issuer impacted by such notification to approach the Central Government to make a representation. In case such an issuer is able to address the concerns of the Central Government with suitable modifications, the cryptoasset may be removed from the aforesaid list.*
- 5. Any representation to the Central Government under this provision may be forwarded to the Inter-Regulatory Council established under the Proposed Law as discussed below.*
- 6. Any such prohibition will have to factor in investments (if any) made by residents in India in such cryptoassets to ensure that investors do not incur huge losses.*

---

<sup>246</sup> Internet and Mobile Association of India v. Reserve Bank of India, 2020 SCC OnLine SC 275.

<sup>247</sup> ‘Number of cryptocurrencies worldwide from 2013 to January 2022’, (Statista) <<https://www.statista.com/statistics/863917/number-crypto-coins-tokens/>> accessed 14 January 2022.

## Regulation of Issuers of Cryptoassets

As discussed above, the Proposed Law may consider regulating issuers of cryptoassets that offer such cryptoassets to the public in India or for trading in an exchange. This is likely to cover issuers of various types of crypto tokens as well as stablecoins. In designing such requirements, a risk-based approach must be adopted to ensure that the regulatory burden is commensurate to the risk posed by the activity in question.

1. *No issuer must be allowed to offer cryptoasset to the public in India or apply for the admission of such cryptoasset to trading on an exchange in India unless the requirements of the Proposed Law are complied with.*
2. *The obligation of issuers will depend on the nature of cryptoasset being issued. For instance, in EU, MiCA proposes stringent regulation for issuers of ARTs and ERTs as opposed to other tokens (such as utility tokens). Accordingly, it is critical that India also adopts a risk-based classification of cryptoassets to inform the regulatory compliance under the Proposed Law. In line with the EU framework, a possible approach that may be considered by the Proposed Law is to have two frameworks - one for issuers of an asset or currency-backed cryptoassets (single or basket of currencies) popularly referred to as stablecoins; and the other for other types of cryptoassets (that may include utility tokens or other investment tokens not covered by existing laws). It is important that the definitions of these terms are clearly set out under the Proposed Law to avoid any uncertainty.*
3. *The issuers of such asset or currency-backed cryptoassets may be subject to stringent requirements as compared to other issuers of other cryptoassets. For instance, issuers of such cryptoassets may be subject to stringent authorisation requirements. The Proposed Law should limit the issuance of such cryptoassets to persons meeting qualifications set out in the law.*
4. *In both cases, the issuers must be required to file a prospectus / white paper with the concerned regulator who must approve the same for the issuance to happen. In certain cases where the issue size is small or is limited to specific investors, the prior approval requirement may be dispensed with for the second category of cryptoassets. For cryptoassets (excluding stablecoins) that are currently operating in the market, the Proposed Law will have to provide a mechanism that does not unduly impact investments made in such cryptoassets.*
5. *The Proposed law should enumerate the main contents of the whitepaper to enable investors to make an informed decision regarding investment in such cryptoassets.*
6. *The issuer should be allowed to offer cryptoassets to the public only through such platforms / exchanges and CASPs that have been specifically authorised under the Proposed Law to provide cryptoasset related services.*
7. *The Proposed Law should also contain provisions regarding advertisements relating to such cryptoasset offering or admission of such cryptoasset to trading. Liability for misstatement in the white paper or advertisement may also be set out under the Proposed Law.*
8. *It may be necessary to require the physical presence of issuers of certain types of cryptoassets, such as stablecoins. For example, EU MiCA, require issuers of ARTs to be legal entities established in the Union in order to obtain authorization for the issuance of tokens.<sup>248</sup>*

<sup>248</sup> Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937, [2020], <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0593>> accessed 14 January 2022.

9. *The issuers of stablecoins may be subject to more stringent requirements such as requirements relating to eligibility, governance arrangements, capital requirements, management of the reserve assets and the stabilization mechanism, handling of funds, specification of rights of holders of such stablecoins, provisions for dealing with insolvency or winding up of issuers and its impact on the stablecoin arrangement, grievance redressal mechanism, etc.*
10. *The issuers of other cryptoassets may be primarily subject to provisions relating to monitoring and reporting framework and other provisions discussed above.*
11. *All issuers may be required to conduct their business in a fair and transparent manner, communicate clearly and fairly with their investors, identify and manage conflicts, have arrangements to protect the funds of investors, and maintain adequate security standards.*
12. *The Proposed Law should also empower the concerned regulator (i.e., RBI) to designate certain cryptoassets as significantly important cryptoassets on the basis of specific parameters like customer base, transactions carried out using such cryptoassets, its interconnectedness with the financial system, etc. This is to identify such cryptoassets that may have a significant impact on financial stability. Any entity that issues such cryptoassets should be subject to stringent supervision of the regulator and the Proposed Law should empower the regulator with specific powers to monitor the activities of such issuer vis-à-vis such cryptoasset. Such provisions will enable policymakers to keep a check on the growth of stablecoins to avoid a situation where it starts posing a threat to fiat currency or if it runs the risk of creating a parallel economy.*
13. *The Proposed Law may also regulate the exposure of financial institutions to different types of cryptoassets. This may be particularly relevant for significantly important cryptoassets.*

## **Regulation of CASPs**

The Proposed Law will regulate CASPs that provide cryptoasset services as enumerated under the Proposed Law. It is possible that there will be many cryptoassets where the issuer is not ascertainable. In such a case, the regulation of gatekeepers to such an ecosystem is relevant to protect the interests of investors and the market.

1. *Any person that provides cryptoasset services defined under the Proposed Law must have a physical presence in India and must be specifically authorised by the concerned regulator to provide such services. The intention of this provision is to cover market intermediaries providing services relating to cryptoassets.*
2. *CASPs authorised under the Proposed Law will be subject to requirements relating to capital and their own funds, fit and proper person criteria for management, governance, safekeeping of consumer funds and cryptoassets, a framework for redressing grievances of consumers, reporting to regulator, disclosure of information to consumers, anti-money laundering and KYC, maintaining prescribed security standards, mandatory audit of its systems and accounts, risk management framework (including requirements for maintaining operational resilience), attribution of liabilities in case of unauthorized loss to customers, protection of consumer data, etc.*
3. *The Proposed Law should also prohibit disclosure as well as misuse of insider information, market manipulation and such other unfair practices as may be set out in the law.*

4. *The Proposed Law should outline instances when a CASP will be held liable for the loss of the consumer in case of its failure to meet the obligations under the law. In the event of any security breach, malfunction or hacks to the system that results in loss to the consumer, the Proposed Law may provide a safe harbour provision for CASPs in case it is able to prove that it had taken necessary due diligence as envisaged under the law and that loss occurred due to events beyond the reasonable control of the CASP.*
5. *Specific obligations may also be set out for specific type of cryptoasset services. For instance, the Proposed Law may consider regulating on the following aspects for trading platforms and exchanges - transparency and fairness in granting access to the platform, user on-boarding, risk mitigation processes, types of cryptoassets that may be traded, grievance redressal mechanism, liability for loss, managing conflict of interests, reporting and disclosure requirement, etc.*
6. *CASPs should be subject to requirements relating to customer due diligence, KYC, enhanced customer due diligence for high-risk customers, record keeping of transactions, reporting of suspicious transactions, etc. under the Prevention of Money Laundering Act, 2002 (“PMLA”). Accordingly, the PMLA may be amended to bring such CASPs within the ambit of reporting entities.*
7. *The concerned regulator may be allowed to call for information or conduct inspection of such CASPs in certain cases as specified under the law.*
8. *In line with the risk-based approach suggested for issuers of cryptoassets, it may be worthwhile to also consider designating certain CASPs as significantly important based on specific parameters such as customer base, transactions undertaken, interconnectedness with the entire financial system, etc. Such CASPs should be subject to enhanced regulatory supervision.*
9. *The Proposed Law should also set out provisions relating to maintenance of robust risk governance and risk control policies and practices by CASPs to address risks relating to credit, market and liquidity risks, operational risks, etc.*
10. *Implications under FEMA of transactions in cryptoassets outside India and corresponding obligations of CASPs should also be spelled out, including requirements for reporting, mode of receiving and making payments, drawing funds, etc. Based on an analysis of the size and risks associated with such foreign exchange transactions involving cryptoassets in India, the government may consider imposing a limit on retail transactions involving foreign exchange.*
11. *Given the technical and fast evolving nature of the sector, it is important that the government closely works with the industry to design best practices and standards that may be adopted by CASPs. Accordingly, it is suggested that the Proposed Law may consider empowering the Government to recognise a self-regulatory organization (“SRO”) of CASPs that may prescribe standards on specific issues such as cyber security, technical requirements and assist the regulator in enforcing the provisions of the law. Such an SRO model is adopted by RBI in the case of digital payments and Non-Banking Financial Company-Micro Finance Institutions (“NBFC -MFI”).*

## **Identifying the Concerned Regulator**

Given that the cryptoasset market in India is still evolving and its size as compared to the entire financial system is relatively small, it may not be feasible to create a regulator for cryptoassets in India. Instead, the government should draw up the expertise of existing regulators like SEBI and RBI for the purposes of regulating cryptoasset markets in India. While SEBI may take a lead in regulating the market conduct aspects, RBI may be involved in

prudential regulation for specific cryptoassets that may be closely connected to the financial system. The role of each regulator must be clearly delineated in the Proposed Law to avoid any overlap or cracks.

- 1. The Proposed Law may consider designating SEBI as the primary regulator for the regulation of CASPs and issuance of cryptoassets other than stablecoins.*
- 2. In the case of stablecoins, RBI should be designated as the primary regulator. The power to designate and regulate significantly important cryptoassets should also be conferred on RBI.*
- 3. The Proposed Law must empower the concerned regulator to take appropriate action in case of non-compliance with the provisions of the law. For instance, in case of any non-compliance by an issuer or a CASP, the concerned regulator may take actions such as: cancellation of registration / authorisation, suspend offering, advertisement, trading, pass cease and desist orders, and impose civil penalties. It may also bar entities from trading or providing services in the Indian market. Criminal sanctions may also be imposed.*

### **Constitution of an Inter-Regulatory Council**

The Proposed Law will require participation and coordination between the Ministry of Finance, RBI and SEBI. Accordingly, the Proposed Law may consider setting up a council consisting of representatives from RBI and SEBI to track the developments in the cryptoasset market and to carry out specific functions as envisaged under the Proposed Law.

- 1. The Proposed Law may set up an Inter-Regulatory Council that consists of representatives of the Ministry of Finance, RBI and SEBI. This council will primarily be responsible for the following:*
  - (a) tracking the developments in the cryptoasset market and advice the government on requisite changes to the Proposed Law (if any);*
  - (b) identifying such use-cases of cryptoassets that may be prohibited or restricted under the Proposed Law;*
  - (c) identifying such cryptoassets that may be notified as ‘Prohibited Cryptoasset’ under the Proposed Law;*
  - (d) operating an inter-regulatory sandbox that will permit the live testing of novel use cases of cryptoassets to identify risks and opportunities.*
- 2. The council may consult experts from other government agencies or the private sector.*

### **Regulation of Stablecoin Arrangements**

Stablecoin is a type of cryptoasset. As discussed, stablecoins may be designed in different ways where their value may be pegged to several commodities, fiat currencies, other cryptoassets or to a single fiat currency. Given that such stablecoins maintain a stable value as compared to other cryptoassets, they may be adopted widely. Therefore, in the absence of adequate regulation of such cryptoassets they have the potential to become systemically important. Therefore, the regulation of issuers of stablecoins and CASPs providing stablecoin services is crucial - both from market conduct as well as from a prudential perspective.

- 1. The Proposed Law may allow certain use cases with stablecoins. For instance, certain stablecoins where there is a credible stabilization mechanism may be*

*allowed under the Proposed Law. For instance, a stablecoin pegged by the Indian rupee. Further, the Proposed Law may prohibit certain types of stablecoins or restrict the use cases of approved stablecoins under the provisions discussed above.*

2. *In case the Proposed Law allows stablecoins, it is important to consider a few issues for the regulation of stablecoins. The preceding recommendations already recommend that issuers must be subject to authorisation requirements. Other issues that will require consideration are:*
  - (a) *Eligibility conditions for issuers - whether it should be restricted to existing financial institutions like banks or payment system operators or should it be open to other players also?*
  - (b) *Regulating exposure of banks and other financial institutions to such stablecoins.*
  - (c) *Process to ensure that the stabilization mechanism may be monitored by the regulator to ensure that it is operating as per terms and conditions approved by the regulator, including the composition of the underlying assets.*
  - (d) *The redeemability of such stablecoins, especially issues such as rights of parties to redeem, the obligation of the redeemer to fulfill the arrangement, the period for redemption and determination of redemption value.*
  - (e) *Provisions on governance arrangements, market integrity, consumer and investor protection, disclosure requirements for issuers and services providers, rules on conflict of interest, risk management, robust controls for systems where such stablecoins are traded, attribution of liabilities in case of unauthorised transactions, AML/CFT framework, provisions to deal with resolution or winding down of such arrangements, etc. must also be outlined. Notably, some of these provisions will also be applicable to activities related to other cryptoassets (though the extent of compliance may vary).*

## **Investment in Enforcement**

From an enforcement perspective, cryptoasset related activities are likely to pose some challenges. This is particularly true due to their specific characteristics - pseudonymous features of cryptoassets coupled with the possibility of conducting such transactions digitally and outside India. Further, as technologies evolve, miscreants may attempt to anonymize transactions and the identity of parties to avoid being caught. Therefore, it is critical that India invests in equipping enforcement authorities with the necessary skill set and tools for enforcing the provisions of the law. This will also include investment in regtech solutions that will assist regulators and enforcement agencies to collate and study relevant data to prevent crimes using cryptoassets. In the USA, the Department of Justice has constituted a National Cryptocurrency Enforcement Team,<sup>249</sup> to tackle “complex investigations and prosecutions of criminal misuses of cryptocurrency, particularly crimes committed by virtual currency exchanges, mixing and tumbling services, and money laundering infrastructure actors.” For an effective legislative response to cryptoassets, it is important that India also invests in an effective enforcement either at the level of individual regulators or through the constitution of a Cryptoasset Enforcement Taskforce comprising of representatives of various regulators and statutory authorities that will be responsible for regulating various aspects of cryptoasset activities.

## **Investor Education**

The interest of retail consumers in cryptoassets is evident with the increasing investment in the sector. In the preceding chapters, this Report discusses the risks posed by cryptoassets to customer and investor protection.

---

<sup>249</sup> Department of Justice, ‘Deputy Attorney General Lisa O. Monaco Announces National Cryptocurrency Enforcement Team’, ( 6 October 2021), <<https://www.justice.gov/opa/pr/deputy-attorney-general-lisa-o-monaco-announces-national-cryptocurrency-enforcement-team>> accessed 14 January 2021,

Such risks are heightened since the sector remains unregulated. As cryptoassets may carry a risk that retail investors may not fully understand and may lead to investor losses, investor education is of paramount importance. While the Proposed Law outlines obligations on CASPs and issuers regarding disclosure of relevant information to investors, it is also important that investors are empowered to make sense of the information submitted by market players and also cautioned against illegal and risky investments. Therefore, it is pertinent that the legal response under the Proposed Law is coupled with positive measures undertaken by regulators to create investor awareness. In doing so, the regulator can also work closely with the SRO proposed under the Proposed Law. The Proposed Law can also be used to create an Investor Protection Fund along the lines of the fund created pursuant to the SEBI Act. The proceeds of the fund may be used by the regulator for such investor awareness programmes. Further, the regulator should maintain on its website a list of entities that have been authorized by the regulator to issue cryptoassets and act as a CASP.

## International Cooperation

The cross-border remit of cryptoassets limits the effectiveness of national approaches. Many CASP and issuers operate across borders, making the task of supervision and enforcement challenging. Therefore, it is important that policy response in India also focuses on fostering partnerships with overseas regulators and enforcement authorities for effective supervision of cryptoasset related activities. Accordingly, the Proposed Law should also enable regulators to share and receive relevant information regarding cryptoasset activities.

## CBDC and the Proposed Law

While there are reports that the upcoming bill on cryptoassets in India is likely to contain a provision enabling RBI to issue a CBDC since CBDC is fundamentally different from a cryptoasset, provisions relating to CBDC should not be incorporated in a law that deals primarily with cryptoassets. Since the definition of cryptoasset as suggested above will clarify that cryptoasset is not issued by the central bank, it is abundantly clear that CBDC will not fall within the scope of the Proposed Law. Any legal framework for CBDC should either be spelled out in the RBI Act or a separate law.

### SUMMARY OF RECOMMENDATIONS

1. Enact a standalone law to regulate cryptoassets in India known as the “Regulation of the Cryptoasset Market Act” (Proposed Law).
2. The Proposed Law should regulate issuers of cryptoassets and entities providing cryptoasset related services as defined under the law.
3. To start with, it may be necessary for the framework to distinguish between asset-backed / fiat currency-backed cryptoassets popularly referred to as ‘stablecoins’ and other types of cryptoassets. RBI will be responsible for regulating the former category of cryptoassets and SEBI will be responsible for the latter category.
4. SEBI will be responsible to regulate cryptoasset service providers.
5. RBI will also be empowered to designate significant cryptoassets and significant cryptoasset service providers that may pose systemic risks. Once designated, such cryptoassets and service providers will be subject to stringent oversight of RBI.
6. Issuer of asset backed / fiat backed cryptoassets will be subject to an authorisation requirement along with the requirement to file prospectus / whitepaper for issuing cryptoassets in India and for admission to trading on a trading platform. Issuers of other cryptoassets will only be subject to requirement to file prospectus / white paper with the concerned regulator (SEBI). The Proposed Law also sets out specific requirements that must be

complied with by such issuers, more specifically issuers of asset backed / fiat backed cryptoassets.

7. Cryptoasset service providers will be required to obtain an authorisation from SEBI to provide services. They will also be subject to requirements relating to communications with investors, customer due diligence, investor protection, prevention of market abuse, etc.
8. The Proposed Law also empowers the Central Government to notify a list of “Prohibited Cryptoassets” and also prohibit / restrict specific use cases of permissible cryptoassets. In doing so, the Proposed Law will lay out specific grounds such as public interest, prevention of crime, safety and soundness of financial system, as possible grounds on the basis of which the Central Government may issue such restrictions and prohibitions. In executing such decisions, the Central Government must consult the two regulators i.e., RBI and SEBI.
9. The Proposed Law also envisages the creation of an Inter-Regulatory Council consisting of representatives from the Ministry of Finance, RBI and SEBI, that will amongst other things undertake the following actions - (a) issue prohibitions and restrictions discussed above; (b) operate a regulatory sandbox that allows experimenting with innovative crypto based solutions, (c) track developments in the sector to assess if the law is adequate to support innovation in the sector and mitigate risks; etc. The council may also invite stakeholders from other government agencies and the private sector for their inputs and suggestions on specific issues.
10. Given the fast evolving and technical nature of the sector, the report also suggests that India may consider setting up a self-regulatory organisation of cryptoasset service providers that may prescribe standards on specific issues such as cyber security, technical requirements and assist the regulator in enforcing the provisions of the law.
11. Along with the Proposed Law, India must also focus on investment in creating a specialised taskforce consisting of skilled and well-trained officers for enforcing the provisions of the law, investment in investor education and also fostering partnerships with other countries for effectively regulating cryptoassets.

\*\*\*\*\*

[www.vidhilegalpolicy.in](http://www.vidhilegalpolicy.in)

**Vidhi Centre for Legal Policy  
D-359, Defence Colony  
New Delhi - 110024**

**011-43102767/43831699**

**vidhi@vidhilegalpolicy.in**