ICMR
Institute for Capital Market Research Malaysia

# Summary Points

1. SC defines "digital assets" to cover both "digital currencies" as a new asset class for investment and "digital tokens" as an alternative fundraising mechanism for companies. Globally, they are also sometimes referred to as crypto assets, cryptocurrencies, among other terminology.

2. Malaysia's regulatory framework to digital assets is in line with Financial Action Task Force's recommendations and SC has adopted a phased approach:

    - In 2019 SC's guidelines required all platforms offering digital currencies to be registered with SC and only the trading of existing digital currencies was permitted. There are currently 3 digital asset exchanges in Malaysia.
    - In 2020, SC issued guidelines for Initial Exchange Offerings (IEO) to allow creation of digital assets by companies on a registered platform. Those wishing to become an IEO platform are to submit their application before Feb 2021.

3. SC's approach is to ensure that the risks associated with digital assets are managed by taking into account investors' levels of awareness and understanding. In line with this several safeguards have been put in place - introduced digital asset custodians to safeguard the assets, placed investment limit of RM20,000 per year for retail investors and accorded greater flexibilities to capital market intermediaries to advertise on online channels to reach out and educate consumers via their preferred channels.

4. It also indicates recognition of the potential of digital assets, as part of the broader policy initiative on digital innovation, in widening access for both investors and issuers in capital markets. The focus on increasing participation of newer type of intermediaries, to allow for greater democratisation of finance and the broadening of fundraising avenues for the underserved small and medium enterprises and entrepreneurs with innovative business ideas has been positive.

5. This approach needs to be further complemented by addressing the demand side perspective.

    - As Malaysian investors are willing to seek professional advice where they feel a lack of understanding of a certain product, in particular ICOs, regulators and industry associations need to ensure that financial advisors and financial planners are up to date on the developments in the digital assets space and are able to give appropriate advice to clients.
    - This has to be complemented by more widespread and targeted financial education programmes both generally on the importance of diversified investments, and specifically on digital assets and platforms.
    - Given the fast pace of innovation and broad accessibility to technology, it is almost impossible for regulators to keep pace with investor behaviour when it comes to digital assets. Hence, a sandboxing approach which provides greater scope for experimentation, combined with behavioural testing may be useful for future new developments .
    - Regulators also need to be wary of adopting too paternalistic an approach that might drive investors to seek options in the unregulated space.

6. SC also needs to ensure that in providing strong investor protection, it does not inadvertently create barriers to innovation, which may limit the use of newer technologies in the capital market.

    - To further support the adoption of blockchain technologies in capital markets, the policy and regulatory environment needs to provide greater scope for experimentation with blockchain solutions. As a precursor to the "regulatory sandbox" approach, some markets are implementing proportionate regulatory approaches and adopting a "test and learn" methodology.
    - In terms of harnessing further opportunities of digital assets, Malaysia is well-positioned to accelerate the transformative potential of Islamic Finance to drive further financial inclusion opportunities and promote key Islamic Finance principles such as transparency through technologies such as blockchain e.g. Finterra WAQF Chain platform.
    - SC's more conservative regulatory approach may also slow down digital asset innovation, in comparison to other regulators in the region such as Thailand, Philippines and Singapore - markets which want to distinguish themselves with a more innovation-friendly stance towards regulations.

7. New business models leveraging innovative technologies, access to data and combining different forms of financial and non-financial activity will increasingly challenge the traditional approach of supervisory silos based on activities and geographic presence.

    - Current arrangements between SC and BNM in regulating digital assets could lead to regulatory fragmentation and pose a challenge in the form of monitoring risks and oversight of the overall digital asset ecosystem.
    - Further adaptions to the regulatory regime may also need to be considered in the context of SC's capacity and organisational structure in regulating and supervising the FinTech ecosystem. Regulators in emerging FinTech hubs have begun setting up dedicated innovation units within their respective organisations to monitor FinTech developments, with a focus on running regulatory sandboxes and innovation hubs, analysing new innovations and activities that fall outside the existing regulatory scopes, and acting as the liaison between financial services providers and departments within the regulatory entity. There is also a growing need for a dedicated team to use data analytics to understand the economy and financial system in more depth than ever before, which will require regulatory bodies to be proficient with data analytics tools.
    - Suptech applications are seen as being capable of turning risk and compliance monitoring from a backward-looking approach into a predictive and proactive process. Within this, data analytics applications are used for market surveillance as well as microprudential and macroprudential supervision. Supervisory agencies initiate and organise their suptech activities in several ways, which includes creating dedicated units that leverage their research functions while some are partnering with academic institutions, particularly in the area of data analytics, to keep track of the latest developments and to learn how to build state-of-the art algorithms.
    - Given that digital assets are inherently borderless in nature, regulatory approaches need to be consistent and coordinated with global regulatory approaches. In addition, collaboration with regional regulatory peers can encourage uniformity in standards, greater transparency and promote further regional cooperation.

## Background

The financial industry is undergoing transformational changes driven by the emergence of new and fast evolving technologies. These rapidly emerging technologies have the potential to not only create new business models, but also new ways of organising work with new approaches to value creation and exchange. In sum, these transformative technologies are starting to change the rules for business and society, and the Covid-19 pandemic is playing a pivotal role in accelerating these changes.

One particular technology that has become very popular and controversial are digital or cryptocurrencies backed by blockchain technology. While the first digital currency, Bitcoin, emerged in 2009, public awareness of digital currencies increased around 2016. However, every new transformative technology will go through a growth cycle - phases which range from digitalisation, deception, disruption to democratisation.[1] In the initial days of Bitcoin, many pointed out that it was overhyped, and discussions revolved within the domain of speculative investors. This is considered the period of "deception" before it really "disrupts" existing industries. After Bitcoin's well-documented meteoric boom in 2017 and bust in 2018, interest from policy makers and regulators have intensified as it became clear that changes were needed to establish a sustainable and more stable digital currency ecosystem.

The subjects of blockchain and digital currencies are, however, significant in scope and are still relatively nascent. In addition, the economic potential and risk of these topics are still widely debated in the policy and regulatory space with large differences in views concerning digital assets or digital currencies, initial coin offerings (ICOs) or tokens and exchanges. Even the terminologies are not standardised and are sometimes used interchangeably, with growing diversity in terminology over time as regulators gain a more nuanced understanding of their differences.

Broadly, we can categorise the key aspects relating to the development of digital currencies in the regulatory space from two main perspectives; firstly, as to whether digital assets or digital currencies have any legal status as an alternative form to the existing fiat currency, i.e. as a legal tender and secondly; in the treatment of digital assets or digital currencies as an investment asset class as well as a fundraising mechanism which falls under the scope of securities regulatory framework.

Central banks globally remain sceptical of accepting digital currencies as an alternative currency. The reasons are varied but can be broadly summarised as firstly, the lack of a central authority to regulate, secondly; the loss of control on monetary policy effectiveness, thirdly; the need to maintain financial stability by preserving the role of financial intermediaries and finally; to curb transactions of illicit activities i.e. money laundering.

[1] *From the book "Bold: How to Go Big, Create Wealth and Impact the World", by Peter Diamandis and Steven Kotler. They describe the 6 D's of exponential technologies from Digitalisation, Deception, Disruption, Demonetisation, Dematerialisation and Democratisation*

In Malaysia, the Bank Negara Malaysia (BNM) has registered similar concerns on the adoption of digital currencies or digital assets as reflected in the Staff Insights Report 2017/112. Nonetheless, while central banks do not recognise private digital currencies as an alternative currency for now, in many countries the digital assets can be traded on exchanges as securities. In Malaysia, digital currencies or digital assets and its related activities, can fall within the boundaries of different regulators. For example, even though the regulation of digital assets mostly falls under the purview of the Securities Commission of Malaysia (SC), BNM still requires reporting institutions to comply with requirements specific to reporting under the Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 (AMLA). This is to ensure that the digital currency transactions are not being misused for money laundering activities.

Meanwhile, more than 80% of central bank respondents to a Bank for International Settlements (BIS) survey in 2019 reported engagement in exploring the use of central bank digital currencies (CBDCs) *(Boar et al. 2020).* In October 2020, the BIS together with seven other central banks published a report[3] identifying the foundational principles necessary for any publicly available CBDCs to help central banks meet their public policy objectives. While the report does not give an opinion on whether or not to issue CBDCs, we view this as recognition that it is only a matter of time before issuances of CBDCs become more widely accepted and are likely to add further impetus to future regulatory developments to encourage innovation and promote financial inclusion. Strong advocates of the blockchain technology underpinning digital currencies argue though, that CBDCs are merely fiat currencies in digital format, which does not allow for a truly decentralised model.

In order to make this research a more focused one, we narrowed the scope of this paper's perspective to providing an assessment of the regulatory approach that Securities Commission of Malaysia (SC) has employed in managing "digital assets" as an investment asset class as well as a fundraising mechanism given the growing importance of regulatory capabilities for the development of the digital asset ecosystem. In this context, we will use the terminology of "digital assets", in line with Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019, which widened the scope of the Capital Market and Services Act 2007 to cover blockchain-based "digital assets" as the umbrella term for both "digital currencies' and "digital tokens". In other contexts, globally, they are also often referred to as crypto assets or cryptocurrencies, among other terminology.[4]

In line with this regulatory guideline, our paper makes a comparative analysis on the use of digital assets in the context of capital markets, drawing a distinction between digital assets as a new asset class for investment in which the SC regulates the trading of existing digital assets and also as an alternative fundraising mechanism for companies.

[2] https://www.bnm.gov.my/index.php?ch=en_publication&pg=en_staffinsight&ac=45&bb=file

[3] *"Central bank digital currencies: foundational principles and core features" accessed through https://www.bis.org/publ/othp33.pdf*

[4] *This report focuses mainly on "digital assets" and activities that are subject to SC's regulation. However, the report includes other terminologies such as "digital currencies" and/or "crytocurrencies", recognising the variants in its applications globally and where the different contexts should apply.*

This is in line with SC's regulatory approach based on the timeline illustrated below:

| | |
|---|---|
| January 2019 | • Digital assets covering digital currencies and tokens are included as securities within capital market -Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token)<br>• Trading of digital currencies is allowed through registered digital asset exchanges<br>• Guidelines on Recognized Markets amended to allow for digital asset exchanges |
| January 2020 | • Framework to allows alternative fundraising using digital tokens through a registered Initial Exchange Offering (IEO) operator |
| October 2020 | • Guidelines on Digital Assets to regulate IEO and Digital Asset Custodians comes into force. |

To do this, this paper attaches multiple connecting sections.

- Section 1 starts with an introduction to the key elements of blockchain as the underlying technology behind digital assets, to provide a broad understanding of how this evolving technology may impact the future of the financial industry.
- Section 2 discusses the role of digital assets as a new asset class for investment, consumer behaviour and attitudes to it, regulatory approaches taken by different jurisdictions as well as Malaysia's regulatory approach.
- Section 3 discusses the role of digital assets as an alternative fundraising mechanism, consumer behaviour and attitudes to it, regulatory approaches taken by different jurisdictions as well as Malaysia's regulatory approach.
- Section 4 provides an assessment of the regulatory approach in Malaysia and concludes with some key considerations for policy makers and the financial industry participants to work together to identify innovative opportunities for leveraging on this promising technology for overall capital market development.

It is not the intention of this study to be exhaustive. Given the rapid evolutions in its technological applications and as digital assets and its varying forms further emerge over time, further adaptations to the regulatory approaches may need to be considered.

# Section 1: Introduction

- Digital assets raise a key policy question: how great is the potential of digital assets and its underlying blockchain technology to advance capital market development? In this context, it is important to first recognise that while blockchain technology is often associated with digital currencies and financial services, its scope is far wider and can be applied in a variety of industries. Technology advocates see blockchain as an exciting new technology that will be as radical an evolution as the internet, with the potential to create new economic and business models beyond its applications in the financial industry.

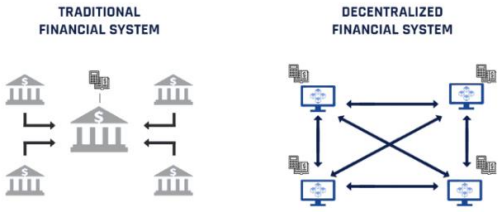
- Thus, to understand the potential of digital assets in reshaping the financial industry, it may be useful to provide an overview of the core characteristics of blockchain, as the backbone technology which most see as the genuinely innovative element within the digital asset ecosystem. In PwC's 2018 survey of 600 executives from 15 territories, 84% said that their organisations have at least some involvement with blockchain technology. We view that harnessing the potential benefits of digital assets in Malaysia's capital market space will also be highly contingent on the regulatory environment and its ongoing adaptation to ensure it remains fit for purpose given the evolving nature of the blockchain technology.

- In regulating digital assets, several regulators have adopted a "technological-neutral" approach whereby new technologies are treated at par with existing technologies.[5] However, this can prove challenging in a world where technology is evolving so swiftly and where the nature of disruptive innovation is that it does things that were not obvious in a previous context.

- One key element of the blockchain technology is decentralization. The foundations of the financial industry today, however, is built on a centralised model, through financial intermediaries such as banks, fund managers and venture capitalists. One of blockchain's primary value is that the distributed ledger technology is able to facilitate the exchange of value without the need for a trusted central authority or intermediary, allowing for important efficiency gains driven by such disintermediation as compared to a centralised (i.e., intermediated) model.

- The decentralisation of financial services refers to the elimination – or reduction in the role – of one or more intermediaries or centralised processes and will also effectively enable the decentralisation of "trust". In a decentralised system, decisions are not made by the intermediaries as the "trusted central authority" but instead by consensus across parties in the ledger and approved by a group of nodes as opposed to an individual node. Eliminating the need for a trusted central authority or intermediary has the potential to result in an increase in speed and significantly lower transaction costs compared to relying on centralised intermediaries which have an entire layer of overheads purely dedicated to confirming the authenticity of transactions.

[5] *For example, the UK FCA's approach to regulation has explicitly been "technology neutral", such that it does not mandate regulated firms to use a particular technology to facilitate their services, while acknowledging that the choice of technology may influence the way regulation applies to take account of any unique risks associated with carrying on a certain activity.*




- While conceptually, this could potentially mean a significant disruption to the financial industry, the technology is considered relatively nascent. Thus, it is still unclear exactly as to the true scale of the blockchain technology's potential to disrupt the existing financial intermediaries' business models as the technology continues to mature.

- However, global banks, start-ups and venture capitalists are already investing heavily in blockchain and digital assets. For example, JP Morgan which was a strong opponent of Bitcoin when its Chief Executive Jamie Dimon called Bitcoin a fraud in 2017, has recently announced its plans to create JPM Coin, a digital currency tied to the dollar, and Sequoia Capital has invested indirectly via investments in cryptocurrency hedge funds like Polychain Capital. There are many more examples of financial institutions future-proofing their business models, with growing conviction of its potential to transform the future of the industry.

- Another core value proposition of the blockchain technology, is enhanced security. In an open, decentralised system, security features are inherent through a consensus-based process ("proof of work") where the cryptography authenticates and allows participants to see only parts of the ledger which are relevant to them and thus, makes it virtually impossible to add, remove or change data without being detected by other users.

- However, there is now increasing recognition that a completely open, decentralised and "permission-less' system raises other important concerns; from the high demands for energy for data storage and to run the verification processes which create significant environmental costs, to how time-consuming it is to constitute an effective real-time system. An alternative to the open networks is the private or permissioned networks which have trusted "nodes" which allow for different levels of access and rights on the network. However, this limits the advantages of a fully open and decentralised system that makes blockchain very attractive to innovators.

- For instance, for digital assets to become a more mainstream fundraising mechanism, it would need to address some of the challenges associated with the traditional fundraising mechanisms such as the IPO. This includes but is not limited to, information asymmetries, the lack of transparency and involvement of costly intermediaries. With macroeconomic trends heading toward a low interest rate environment which will lead to a decline in the number of public equity listings (as the market shifts toward private placements and private equity activities), growth of digital assets is more promising in the private market space or capital formation stage.

- However, at this juncture, fundraising in private markets and even public IPOs are highly confidential with high levels of information asymmetries. For blockchain technology to be able to offer more investor protection than traditional fundraising mechanisms, it would need to rely on "private-permissioned" protocols which would still then rely on the involvement of intermediaries and related costs and would limit the benefits of an open decentralised system.

- Another big promise of blockchain technology is its capacity to scale and leverage on network effects. The term "network effects" generally refers to systems that gain in utility the more people use them, making it more efficient through lower costs, speed and being able to access a more distributed network of people and organisations. Among investment banks, blockchain technology could reduce reconciliation and other infrastructure costs by $8–12 billion a year, according to one report.[6] However, with scalability and network effects, the original idea of full decentralisation with enhanced security may become less effective.

- An idea central to the blockchain design of any public blockchain is what is known as the 'the blockchain trilemma', a term coined by Vitalik Buterin, founder of Ethereum. The blockchain trilemma refers to the trade off in any network between scalability, decentralization and security. Any two will succeed at the expense of the third. In the case of Ethereum, for instance, emphasis was placed on decentralisation and security, limiting the number of transactions per second, its scalability.

- This is an existing challenge in the developer community, however until it is resolved, blockchain in financial services applications will not be adopted on a large scale. Nonetheless, given the rapid pace of innovation in financial services, regulators may not be able to fully predict or control what the future industry will look like, but instead will need to monitor developing trends and adapt practices accordingly.

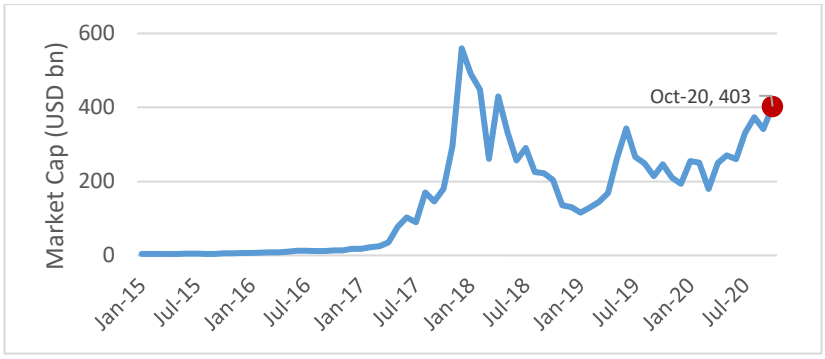
[6] *"Blockchain could save investment banks up to $12 billion a year, Accenture" Reuters, 17 January 2017*

# Section 2: Digital assets as a new asset class for investment

## (i) State of Play

- The increasing acceptance of digital currencies post the financial crisis of 2008 has led to the debate of potential disruption to the global monetary system, challenging the dominance of legal tender issued by sovereigns around the world.
- While Bitcoin has been the pioneer and leading digital currency, like any other commodity in a competitive market, the offerings of newer assets have been growing at an exponential rate. According to CoinMarketCap, as of end October 2020, the total market capitalization of cryptocurrencies was US$402.6 billion, up from the December 2019 total market cap of US$193.0 billion.

Cryptocurrency: Total Market Capitalization (USD billion)




*Source: Coinmarketcap.com*

- Cryptocurrencies are not backed by real assets or tangible securities. They are traded between consenting parties with no broker and tracked on digital ledgers. This has led to high price volatility, but has also made it appealing as a high returns asset class.
- With increased public interest in the trading of cryptocurrencies, regulators which did not want to resort to banning it altogether had to adopt a more "balanced" approach between protecting their monetary sovereignty and investor protection as well as encouraging more innovative developments.
- As a result, cryptocurrency exchanges became an important evolution of the cryptocurrency market, as without it there is no platform to trade cryptocurrencies and regulators have more control over those cryptocurrency exchanges which are registered with them.
- A cryptocurrency exchange allows customers to trade cryptocurrencies or digital currencies for other assets, such as conventional fiat money or other digital currencies. They allow exchanging one cryptocurrency for another, the buying and selling of coins, and the exchange of fiat money into crypto. Crypto exchanges set the rate of the currencies — both coins and tokens.
- Cryptocurrency exchanges are ranked based on trading volume, transaction speed, transaction fees charged, number of supported coins and multiple payment methods. The top 3 exchanges globally are:

i. Binance - Biggest Bitcoin exchange in the world in 2020. Binance operates like an ecosystem that comprise a wallet, lab and exchange. In addition to being an advanced crypto exchange, Binance has a native coin Binance Coin (BNB). Users on the platform that trade with this coin receive a discount when the transactions are crypto to crypto. Binance supports the trading of over 130 coins. With a trading volume of over $1.7 billion, users only have to pay 0.1% of their total transaction cost as transaction fees. One key benefit of this crypto exchange is that it has two trading versions – advanced and basic interface.

ii. Coinbase - Founded in 2012 with its headquarters in San Francisco, it is one of the oldest cryptocurrency exchanges in the world. Coinbase, unlike most of the other crypto exchanges, offers users fast deposit and withdrawal, competitive fees, advanced trading features, as well as multiple deposit options. With a trading volume of over $217 million, Coinbase Pro supports the trading of over 30 different cryptocurrencies. One of the core benefits of this Bitcoin exchange is that it is fully regulated by the United States.

iii. Bitcoin Mercantile Exchange (BitMex) is one of the premier Bitcoin exchanges in the world. Reports suggested that BitMex had managed to record a $2 billion Bitcoin transaction in 24 hours. While being a Bitcoin exchange, BitMex supports the trading and sale of other cryptocurrencies like Ethereum, Cardano, EOS, Litecoin, Bitcoin Cash, etc. Surprisingly, BitMex has a trading volume of over $3 billion. One key benefit of this exchange platform is that it affords users the opportunity to leverage future contracts on the platform.

- Digital assets can offer a range of potential benefits and opportunities for policy makers, including supporting financial inclusion efforts. At the same time, the proliferation of digital assets and the availability of digital assets for even the less-sophisticated retail investors has been a key factor driving increased regulatory attention toward investor protection in the digital asset space. We further discuss Malaysia's consumer behaviour and attitudes toward digital assets as a new asset class for investment below.

## (ii) Consumer behaviour and attitudes

- In 2019, OECD conducted a survey on consumer behaviour and attitudes towards cryptoassets in Asia, including cryptocurrencies and ICOs.[7] This survey included respondents from Malaysia, Vietnam and the Philippines. 23% of Malaysian respondents reported currently holding some form of cryptocurrency. This was notably lower than the reported holdings for Philippines (32%) and Vietnam (35%).

- It was found that there was a high level of awareness of cryptocurrencies in Malaysia (84%). Despite the level of awareness, understanding of the products remain low – 89% of Malaysians surveyed chose "to some extent", "not very well" or "not aware" when asked to rate their understanding of cryptocurrencies. Crucially, OECD has noted that the actual levels of understanding is likely to be even lower than reported levels given the tendency among many to overestimate self-reported levels of knowledge and understanding. This means that many financial consumers are putting money into assets which they do not have a clear idea

[7] *OECD (2019) Cryptoassets in Asia: Consumer Attitudes, Behaviours and Experiences.*

about. Interestingly, investors in the other countries surveyed reported higher levels of understanding than in Malaysia, with 23% in Vietnam and 17% in Philippines saying that they understood cryptocurrencies "very well", vs. 11% in Malaysia.

- The survey results demonstrated various motives behind investing in digital assets, with the most popular reason for purchasing cryptocurrencies being to make money quickly (38% in Malaysia). Given the complexity of digital assets, many might not understand the product or the underlying technology, but are buying in due to the perception of digital assets as a high-reward investment. This is particularly concerning when analysed in context with other findings from the same survey – 44% of Malaysian respondents did not understand diversification as a means of managing investment risks, while 29% of those who had invested in cryptoassets said that they had invested more than they could afford to lose. Investors may be putting themselves into a financial precarious position if they hold no other long-term investments and are putting all their money into a higher-risk product like digital assets that they may not have a clear understanding on.

- Digital assets tend to appeal to younger consumers. In Malaysia, holdings were greatest among the 25-34 age group followed by 35-44 year olds. Of the respondents who owned such assets, more than 75% obtained their information from online sources, such as online articles, blogs, social media platforms and online advertisements.

### (iii) Regulatory approach of various jurisdictions

- In 2018, the Library of Congress conducted a cryptocurrency regulation survey on 130 different countries from various regions globally.[8] It showed that the countries had taken various approaches for cryptocurrency regulation. Many nations are fearful of an outright ban due to the potential to lead to offshore trading and a grey market, which may not be desirable for many nations and can be difficult to monitor and regulate. Additionally, by enabling the usage of cryptocurrency for trade purposes, nations can impose taxes on proceeds or transactions which is beneficial as a source of income for governments.

- Countries that took a more restrictive approach towards investment in cryptocurrency applied varied levels of restrictions. Restrictions range from an absolute ban on any activity involving cryptocurrency (Algeria, Bolivia, Morocco, Nepal, Pakistan, and Vietnam), banning citizens from investing locally (Qatar and Bahrain), to barring local based financial institutions from facilitating transactions involving cryptocurrency (Bangladesh, Iran, Thailand, Lithuania, Lesotho, China, and Colombia).[9]

- As of 2018 China, Macau and Pakistan completely banned the issuance of tokens and called for companies offering such services to cease operating. In China, for instance, 85 ICO platforms and 88 cryptocurrency trading platforms were identified and closed between September 2017 to July 2018. This led to a significant decline in Bitcoin trading with the Chinese Yuan (from 90% to less than 1% of global trading).[10]

[8] *The Library of Congress is the main research arm of the United States Congress and is the de facto national library of the United States.*
[9] *Regulation of Cryptocurrency around the world, The Library of Congress, 2018*
[10] *Regulation of Cryptocurrency: China, Library of Congress*

- Countries that are more progressive in the way they view cryptocurrencies have different regulation based on categorization. In New Zealand, cryptocurrencies are classified as either a debt security, equity security, managed investment product or derivative. In the Netherlands, a similar approach is adopted where the category of the cryptocurrency as either a security or a unit in a collective investment is determined on a case-by-case basis. Different regulations would then apply, including various tax treatments.

- As cryptocurrencies are relatively new, countries who are uncertain on the ways in which to regulate this emerging technology generally follow the Financial Action Task Force's (FATF)[11] recommendations in terms of updating their regulations. In 2018, FATF adopted changes to its Recommendations and Glossary to include financial activities related to "virtual assets" and "virtual asset service providers".

- The Recommendations provide an overall guideline for regulators who may not be fully adopting cryptocurrencies as a new asset class but sees the risks of cryptocurrency arising from their speed and anonymity as a means of financing in attracting unsavoury activities. The FATF Recommendations cover seven major areas as follows: -

    i. Anti–Money Laundering / Counter Financing of Terrorism policies and coordination
    ii. Money laundering and confiscation
    iii. Terrorist financing and financing of proliferation
    iv. Preventive measures
    v. Transparency and beneficial ownership of legal persons and arrangements
    vi. Powers and responsibilities of competent authorities and other institutional measures
    vii. International cooperation

- The FATF Recommendations were updated in June 2019 to include an interpretive note on the application of the Recommendations to virtual asset activities and service providers. According to the update, virtual assets should be considered as "property", "funds", "funds or other assets", or other "corresponding value". It was recommended that countries take a risk-based approach towards virtual assets and their service providers with the following recommendations made: -

    i. At minimum, virtual assets service providers (VASPs) should be licensed or registered in the jurisdiction where they are created. If the VASP is a natural person, they should be licensed or registered in the jurisdiction where their business is located.

    ii. A country need not impose a separate licensing registration system to natural or legal persons already licensed or registered as financial institutions (as defined by the FATF Recommendations) within that country.

    iii. Countries should ensure that VASPs are subject to adequate regulation and supervision or monitoring for AML/CFT and are effectively implementing the relevant FATF Recommendations, to mitigate money laundering and terrorist financing risks emerging from virtual assets.

[11] *The Financial Action Task Force (FATF) is a global money laundering and terrorist financing watchdog. The inter-governmental body sets international standards that aim to prevent these illegal activities and the harm they cause to society.*

iv. Countries should ensure that there is a range of effective, proportionate and dissuasive sanctions, whether criminal, civil or administrative, available to deal with VASPs that fail to comply with AML/CFT requirements.[12]

## (iv) Malaysia's approach

- Malaysia's approach to digital assets has broadly been in line with FATF recommendations. The years of 2016 to 2018 saw the evolution and growth of the digital asset segment. In Malaysia, strong investor and issuer interest in this new asset class necessitated the formulation of clear regulations to govern such activities, including the offering of digital assets as an investment or fundraising instrument.

- As such, in December 2018, SC and BNM issued a joint press statement to provide clarity on the regulatory approach for the offering and trading of digital assets in Malaysia. In this regard, digital assets refer to digital currencies and digital tokens. The SC announced that it will regulate issuances of digital assets via initial coin offerings (ICO) and the trading of digital assets at digital asset exchanges (DAX) in Malaysia. BNM's stance was that digital assets are not legal tender in Malaysia.

- ICO issuers and DAX operators which are involved in the issuance or dealing of digital assets with a payment function will need to comply with relevant BNM laws and regulations relating to payments and currency matters.

- In January 2019, to enable innovation while also managing the risks associated with digital assets, regulations in the form of the Capital Markets and Services (Prescription of Securities) (Digital Currency and Digital Token) Order 2019 were put in place to bring digital assets within the remit of securities laws to promote fair and orderly trading and ensure investor protection.

- In addition, SC's Guidelines on Recognized Markets was amended to prescribe regulatory requirements for the operation of DAX. Furthermore, DAXs are subject to the SC's Guidelines on Prevention of Money Laundering and Terrorism Financing. The framework also ensures that integrity as well as fit and properness standards are met.

- By June 2019, the SC had approved three DAXs with four digital assets permitted for trading.

  (a) Luno Malaysia Sdn. Bhd. - Bitcoin, Ethereum, XRP and Litecoin
  (b) Tokenize Technology (M) Sdn. Bhd. - Bitcoin, Ethereum, XRP
  (c) SINEGY Technologies (M) Sdn. Bhd. - Bitcoin, Ethereum

- Entities which have not been approved by the SC, including those which have previously been operating under the transitional period, are required to cease all activities immediately and return all monies and assets collected from investors.

- In July 2020, the SC Shariah Advisory Council has resolved that it is permissible to invest and trade in digital currencies and tokens on registered digital asset exchanges. This is a ground-breaking resolution that could spur greater development and investment in digital assets.

[12] *International standards on combatting money laundering and the financing of terrorism and proliferations, FATF, updated October 2020*

# Section 3: Digital assets as an alternative fundraising mechanism

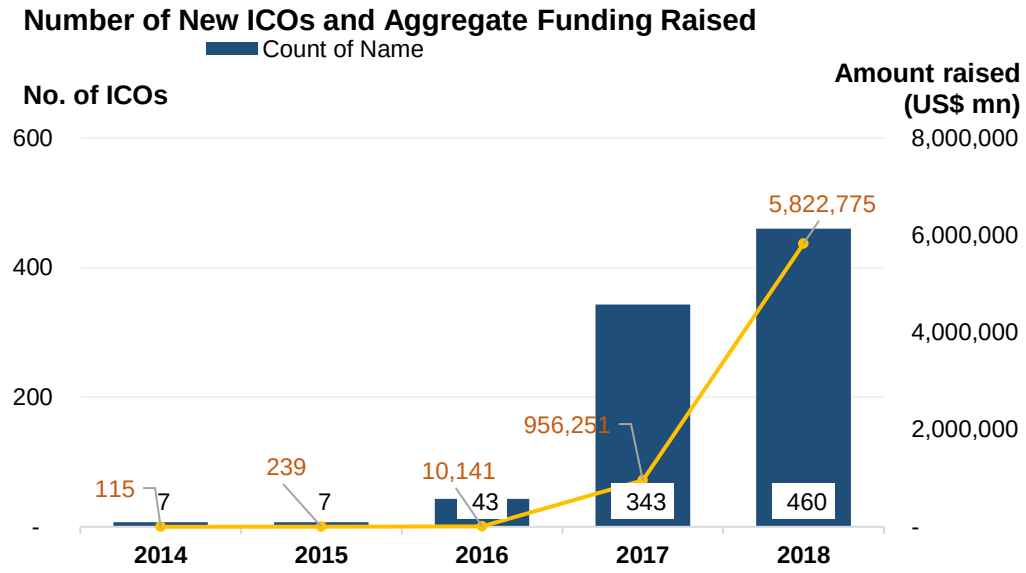
## (i) State of play

- Digital assets can also be used as an alternative fundraising mechanism, with the most common being Initial Coin Offering (ICO). An ICO is a fundraising tool similar to a crowdfunding campaign that is centred around cryptocurrency. Unlike IPOs, which are heavily regulated, ICOs currently have little regulatory oversight. ICOs are used mainly to fund projects that only exist on paper, while well-established companies use IPOs to raise capital. Most issuers will provide online access to a white paper describing the project and key terms of the ICO (such as its economic terms, subscription details, timeline, etc.), and providing information on the status of the project as well as the key team members involved.

| | Initial Public Offering (IPO) | Initial Coin Offering (ICO) |
|---|---|---|
| **Type of financing** | • Post series D/ Potential PE exit | • Early stage financing |
| **Type of SME** | • Business-based<br>• Mature business proposition<br>• Operating & financial track record | • Project-based & Concept-stage<br>• No operations & financial track record<br>• Blockchain-enabled products |
| **Regulatory oversight** | • Regulated offerings<br>• Extensive listing requirements on registration, marketing of offering, disclosure | • No specific regulatory framework |
| **Rights assigned** | • Ownership rights<br>• Dividends<br>• Governance rights | • Dual function of tokens possible<br>• Participation/voting/ usage & utility value |
| **Valuation** | • Based on financials<br>• Lock-up periods<br>• Organized trading | • Unstructured valuation model<br>• No lock-up periods<br>• Extreme volatility |
| **Disclosure obligations** | • Prospectus & other documentations<br>• Regular reporting requirements | • Only concept paper upon initial offering |
| **Secondary markets** | • Regulated market<br>• Fixed trading session<br>• Market trading rules | • No regulated trading<br>• 24/7 trading<br>• High counterparty risks |

- In a typical ICO, a company receives cryptocurrencies in exchange for certain rights embodied in "tokens", whose nature, treatment and implications resemble a stock issuance by a corporation. In the subscription process, the participant is generally required to transfer cryptocurrency to the issuer – typically to one or more designated addresses (an online reference for cryptocurrencies similar to an account number) or online wallets of the issuer. Subscriptions can be completed in minutes.

- Along with the increase of crowdfunding in recent years, the use of ICOs has emerged more recently as a new form of raising capital for technology start-up companies. Global ICOs are reported to have raised almost $10 billion collectively since the beginning of 2017. In 2018 alone, ICOs have raised more than $5 billion through the launch of 460 ICOs— a steep increase of over 500% compared to 2017. The sector's rapid rise has been touted as a major success for innovation and a new era for the financial sector.




*Source: ICO Coin Tracker*

- The initial aim of ICOs was to pioneer a new model of fundraising for early stage projects or businesses through this decentralised model, with some parallels drawn with equity IPOs and the crowdfunding approach, but more targeted for very early stage blockchain-technology based projects. Investors would receive "utility tokens" to pay for the services being developed by the issuing firm. These "utility tokens" are not theoretically designed as investments.

- However, with growing public awareness, but lack of understanding on the speculative nature of ICOs, they very quickly turned into speculative "hype" investments. The number of scams flourished, exploiting the initial uncertainty in terms of how ICOs would be regulated. According to research from Satis Group, an ICO advisory firm, 81% of the ICOs they analysed in 2017 were found to be fraudulent.

- When regulatory authorities started to impose stringent ICO sales regulations, the digital assets fundraising ecosystem evolved toward more regulatory compliant models such as the "security token offering" (STOs). STOs bring together the benefits of blockchain for financing but in a regulated environment, with the possibility of exchange based and asset backed structures increasing potential appeal.[13]

[13] *Deloitte"Security Token Offering: The next phase of financial market evolution"*

- An Initial Exchange Offering (IEO) is a form of STO, where a company creates a digital coin to raise money for its projects or operations and is backed by an exchange. The coins may represent a stake in the company or project, or can be utilised to acquire its products and services. In a public ICO, anyone can participate, but in an IEO only members of that given exchange can purchase the tokens. When buying tokens through an IEO, you buy with the knowledge that the exchange has done some due diligence and is launching a coin it believes has a future and thus has advantages over ICOs in many aspects, including greater due diligence. This is an important development in the crypto market as the promise of greater due diligence behind IEOs has facilitated a regain in trust among the investor community.

- In comparing IEOs to crowdfunding through ECF, both offerings reach a much wider investor base, allowing retail investors to participate in the financing of SMEs and start-ups. Additionally, both financing mechanisms are based on technology and online payment systems to facilitate transactions, and both are suitable for seed and early-stage financing of start-ups. In addition to raising funds, both financing mechanisms aim to incentivise early product adoption and the formation of a community around their project.

- In the case of crowdfunding, products or services tend to be in a more advanced stage of development, with at least a prototype in place when the campaign is launched, in contrast to IEOs which are mostly at concept level at the time of the offering. It can also be safely assumed that, given the nature of distributed ledger technologies, network effects of IEOs are more important than the ones present in crowdfunding campaigns.

- Another type of STO are those which are asset backed and that allow issuers to use a wider range of assets such as collectable, real estate and intellectual property as collateral. These illiquid assets can now be tokenized into fractional investments. Investors on the other hand can limit their investment risk by purchasing tokens which represent a small portion of the painting or antique – hence STOs allow an alternative opportunity for portfolio diversification, investment, trading and even hedging.

- While ICOs and STOs have usually been conceptualised from the fundraising point of view, its appeal to retail investors means that regulators had to also take into consideration demand-side perspectives to ensure increased consumer protection.

### (ii) Consumer behaviour and attitudes

- In 2019, the OECD survey found that only 12% of Malaysians owned an ICO – which is notably lower than the reported holdings Philippines (14%) and Vietnam (23%). It is important to note that this survey was conducted prior to SC's release of the guidelines on digital assets, hence Malaysian investors who owned ICOs would have invested in the unregulated space. In fact, in 2017, the SC had issued a press release cautioning investors on the emergence of ICO schemes.[14]

- It was found that in Malaysia the level awareness of ICOs (40%) was much lower than cryptocurrencies (84%) and 91% of Malaysians surveyed chose "to some extent", "not very well" or "not aware" when asked to rate their understanding of ICOs.

[14] *Media Statement on Initial Coin Offerings (2017), Securities Commission Malaysia, https://www.sc.com.my/resources/media-releases-and-announcements/media-statement-on-initial-coin-offerings.*

- Interestingly, more people in Malaysia stated that they sought advice in purchasing ICOs (76%) rather than cryptocurrency (70%). And where advice for cryptocurrency was mostly sought from family and friends, 46% of those who invested in ICOs said they sought professional advice from a financial adviser or consultant. This is a positive move, indicating that Malaysians are willing to seek advice from professionals in areas where there may be lower understanding, i.e. ICOs.

### (iii) Regulatory approach of various jurisdictions

- Countries have generally adopted a regulatory approach on monitoring fundraising activities on a case-by-case basis. This could be attributed to the complexities that lie within ICO activities, stemming from the various categorization of tokens offered. According to the Swiss Financial Market Supervisory Authority (FINMA), there are three types of tokens which can be issued through an ICO; payment tokens, utility tokens; and asset tokens. In addition to the three main types, FINMA also recognizes that a hybrid token may be introduced and that the function of a token may change after the ICO.

- The closest example of regulation of ICOs is FINMA Guidance 04/2017 – Regulatory treatment of initial coin offerings. According to the guidance, the Swiss approach to financial market regulation is principle-based, with one of the principles being technology neutrality. This means that supervisory bodies must neither facilitate nor hinder technological developments. However, due to the nature of fundraising activities, certain existing financial market regulations may be applied to fundraising depending on the structure of the ICO.

- In ASEAN, Thailand has been at the forefront of facilitating digital asset regulations and has divided ICOs into three categories: investment tokens, utility tokens and cryptocurrency. The Securities and Exchange Commission (SEC) of Thailand was the first country to approve the legal ICO Portal to issuers in September 2019. The first regulated portal by the SEC was given its license in October 2019. The ICO portal helps screen ICOs, conduct due diligence, prove smart contract source codes and verify the know-your-customer process. The portal will also provide additional services, including strategic advisory and access to secondary markets. Interested ICO issuers must first be approved by an ICO portal before applying for approval with the SEC.[15]

- Philippines is also set to deliver a promising environment in the ASEAN region for fintech and blockchain-related work. In a bid to foster a fintech ecosystem to attract international crypto and blockchain companies to set up shop in the country, the government launched the "Crypto Valley of Asia" to provide a stable and safe region for blockchain developers and crypto exchange operators. The Philippine's Securities and Exchange Commission also plans to target guidelines of ICOs as a step forward to regulate businesses using ICOs as a method of financing. The Philippines SEC sees the benefits of raising funds through ICOs, however seeks to safeguard the interest of investors whereby the issuance of these guidelines on ICOs

[15] *Finance Magnates (2019), "Thai ICO Portal SE Digitl Aims to Launch USD 98 Million Investment Token,"* https://www.google.com/amp/s/www.financemagnates.com/cryptocurrency/news/thai-ico-portal-se-digital-aiming-to-launch-98-million-investment-token/amp/

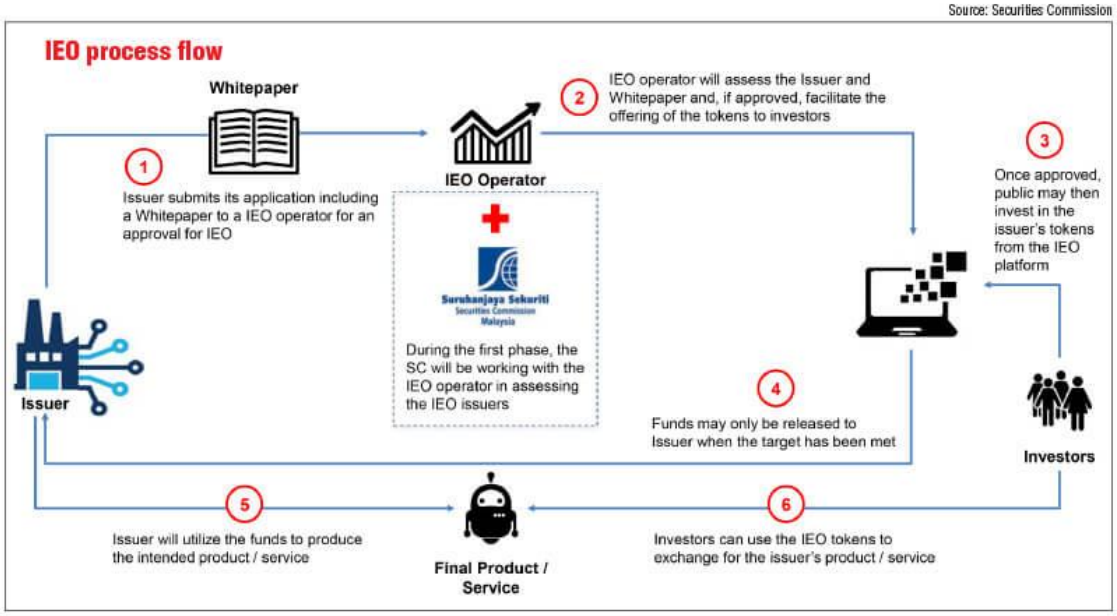
aims to prevent abuse and fraud by investment scams disguised as start-up businesses offering tokens. [16]

- While not many countries have welcomed ICOs with open arms, emerging economies in ASEAN such as Thailand and the Philippines are fast embracing the disruption from new technologies such as digital assets in terms of fundraising for companies. Despite this, in the early stages of ICO development, the regulators are significantly involved in the fundraising process to ensure that appropriate governance measures are adopted.

## (iv) Malaysia's approach

- Again, Malaysia's approach to fundraising via digital tokens is broadly in line with FATF recommendations and takes into account guidance from FINMA.
- In January 2020, SC announced a framework to enable companies to raise funds via the issuance of digital tokens in Malaysia through an Initial Exchange Offering (IEO) platform registered with the SC.
- In order to mitigate risks related to ICOs, the SC adopted a two-layer approach including authorisation for ICOs and the registration of a disclosure document (white paper), which complies with the minimum requirements. Based on such a framework, ICOs can raise a multiple of up to 10 times the shareholders' funds, subject to a ceiling of RM 100 million. ICO issuers will only be allowed to withdraw or use funds raised based on milestones disclosed in the white paper.

Source: Securities Commission




[16] *Zico Law (2019), Philippine SEC Targets to Release ICO Rules This Year,"* https://www.zicolaw.com/resources/alerts/philippine-sec-targets-to-release-ico-rules-this-year/

- Who can be an issuer?

  i. A company seeking to raise funds via an IEO has to be a locally incorporated company with a minimum paid-up capital of RM500,000, with its main business operations in Malaysia.

  ii. While public-listed companies are not allowed to issue digital tokens directly, an unlisted subsidiary or a special purpose vehicle of a public-listed company may qualify as an issuer.

  iii. Each offering must be accompanied by a white paper that has been assessed by the IEO operator, and which must be furnished to the SC. An issuer must prepare and publish on the IEO platform an annual report and semi-annual report containing necessary information to enable token holders to evaluate the performance of the issuer.

  iv. As for the fund's purpose, the issuer must demonstrate it has an "innovative solution" or a "meaningful digital value proposition for Malaysia". The project has to provide a solution or addresses an existing market need or problem, and improves the efficiency of an existing process or service undertaken by the issuer or the industry, through the application of distributed ledger technology.

  v. The fundraising limit is calculated as a multiple of 20 times the shareholders' funds, and subject to a ceiling of RM100 million.

- Who can be an IEO operator?

  i. An IEO operator must be a locally incorporated company with a minimum paid-up capital of RM5 million. If the company wishes to facilitate the trading of digital assets on its platform, it has to be a registered digital asset exchange operator under the SC's guidelines on recognised market.

  ii. Aside from vetting the issuers, the IEO operator has to ensure that the trust accounts for receiving and paying out monies is maintained in licenced institutions, and to be administered by a trustee registered with the SC.

  iii. Funds will only be released by the IEO operator to the issuer after the targeted amount sought to be raised has been met, with no material adverse change relating to the offer during the period.

  iv. If the IEO operator wishes to facilitate the trading of digital assets on its platform, the person must also be registered as a DAX operator under the Guidelines on Recognized Market.

- Who can be an investor?

  i. Retail investors will be limited to RM2,000 per offering, and a total of RM20,000 per year.

  ii. For angel investors, defined as those with gross annual income of not less than RM180,000, they are allowed a maximum investment of RM500,000 per year.

  iii. There are no restrictions on investment amount for sophisticated investors.

  iv. The currency used to purchase the digital tokens will be the ringgit.

- In October 2020, SC 's Guidelines on Digital Assets (Guidelines), came into force to regulate Initial Exchange Offerings (IEO) and Digital Asset Custodians (DAC). Under the Guidelines:
  - IEO platform operators will be required to assess and conduct the necessary due diligence on the issuer, review the issuer's proposal and the disclosures in the white paper, and assess the issuer's ability to comply with the requirements of the Guidelines and the SC's Guidelines on Prevention of Money Laundering and Terrorism Financing.
  - The Guidelines also include rules and regulations on DAC to facilitate interested parties who wish to provide custody services for digital assets. DACs play an important role within the digital asset ecosystem of the Malaysian capital market to safeguard digital assets of investors.
- With the issuance of the revised Guidelines, interested parties who wish to register as an IEO platform operator or DAC can start submitting their applications to the SC. The deadline for applications to be registered as an IEO platform operator is 15 February 2021. Given that the requirements are similar to ECF/ P2P and DAX, several ECF and DAX operators have expressed interest in becoming IEO platforms to widen the range of products that they are able to offer.
- While regulatory requirements on an IEO operator are similar to those imposed on ECF and P2P operators, the investment limits are lower. For both platforms, there are no restrictions on investment amount for sophisticated investors and angel investors can invest a maximum of RM500,000 per year. However, for IEO, retail investors will be limited to RM2,000 per offering, and a total of RM20,000 per year compared to ECF where retail investors are limited to RM5,000 per company and a total of RM50,000 per year.

## Section 4: Assessment of the current framework and key policy considerations moving forward

- The consensus among international securities regulators regarding digital assets is that **regulatory oversight should be balanced with the need to foster financial innovation.**

- Overall Malaysia's approach is broadly in line with FATF recommendations and takes into account guidance from FINMA. In line with this, **SC has adopted a more phased approach towards regulation of digital assets** – whereby platforms offering digital assets must be registered with the SC. In 2019, only the trading of existing digital assets was permitted and now after a year, the SC is allowing the creation of digital assets by companies on a registered platform.

- This phased approach is cognisant that **appropriate timing of policy responses is also important for development of the digital asset ecosystem,** especially in the context of new and innovative technological applications and **to ensure that the risks associated with digital assets are managed taking into account investor's level of awareness and understanding**, given Malaysian investors' low understanding of cryptocurrencies and even lower for ICOs.

    i. **The introduction of digital asset custodians (DACs) is a necessary step and plays an important role within the digital asset ecosystem of the Malaysian capital market to safeguard digital assets of investors**. It re-introduces a layer of digital asset intermediation activities in order to protect both the financial stability and consumer protection risks. In line with this, the SC has introduced specific rules and regulations for DACs to facilitate interested parties who wish to provide custody services for digital assets, **whilst ensuring security** of investors' assets.

    ii. **Further recognising that digital assets also exposes the less sophisticated investors to the vulnerabilities and risks associated with it, several additional measures have been introduced by SC to protect retail investors.** The existing limits introduced for retail investors of RM2,000 per offering (with a total of RM20,000 per year) is a step in mitigating averse losses.

    iii. In May 2020, the SC introduced the Guidelines on Advertising for Capital Market Products and Related Services, which accords greater flexibilities to capital market intermediaries to advertise on online channels, including social media and messaging apps to help intermediaries to reach out and educate consumers via their preferred channels.

- It also indicates recognition of **the potential of digital assets, as part of the broader policy initiative on digital innovation, in widening access for both investors and issuers in capital markets**. The guidelines on digital assets relating to fundraising activity through digital token offering, operationalisation of IEO platforms and the provision of digital asset custody is SC's most recent regulatory initiative in allowing for more innovative market-based financing models. As with the earlier digital initiatives for example, with the introduction of digital investment managers, online brokers, equity crowdfunding and peer-to-peer financing platforms, **the focus has been to increase participation of newer type of intermediaries, to allow for greater democratisation of finance and the broadening of fund raising avenues for the**

underserved small and medium enterprises and entrepreneurs with innovative business ideas. Overall, these developments have been very positive: -

i. Digital investment managers have attracted many first-time investors - with close to 90,000 new accounts opened this year.

ii. Demand for online brokerage services has also increased. The number of new account openings through online-only brokers, grew by more than 270% this year compared to last year. Average trading volume has also tripled this year.

iii. Growth of ECF/P2P from investors under the age of 35, that account for 60% of individual investors. The presence of retail investors – constituting 84% of participating individual investors, is evidence of the appeal of these platforms.

iv. Collectively, more than 400,000 accounts have been opened across the three digital asset exchanges and the value of trades surpassed RM 100 million in the month of August.

v. ECF and P2P platforms are more widely accepted today as a fundraising channel. Total funds raised have broken the 1 billion Ringgit mark this year, and the platforms have benefited more than 2,500 Micro, Small and Medium Enterprises (MSMEs).

vi. Allowing the issuance of digital tokens in Malaysia is expected to further facilitate fundraising for MSMEs but to manage some of the risks associated with ICOs, the SC has taken a cautious approach and is only allowing IEOs, which have to be offered through a registered platform and the limits for retail participants are lower than ECF/P2P to manage the perceived higher risks.

- Based on the results of the OECD survey as highlighted above, Malaysian investors are willing to seek professional advice if they feel they may not fully understand a certain product, in particular ICOs. Regulators and industry associations need to ensure financial advisors and financial planners are kept up to date on the rapid developments in the digital assets space and are able to give the appropriate advice to clients. At the same time, awareness programmes combined with supervisory efforts need to be in place to ensure unlicensed financial advisors are not allowed to proliferate, particularly on the online space.

- Also as investors could obtain opinions on digital assets from unauthorised blogs or social media posts there is a need for more widespread and targeted financial education programmes both generally on the importance of diversified investments, and specifically on digital assets and platforms. This should be targeted to the demographic of digital asset investors (i.e. younger investors) using platforms and media that are accessible to them, which could mean collaborations with bloggers, popular websites, social media accounts and influencers to ensure accurate information is disseminated. Financial education initiatives should adopt new modes of media to enable more effective outreach, including easy-to-understand visualisation, graphics, videos and social media "stories

- Also, from a demand perspective with the fast pace of innovation and broad accessibility to technology, it is almost impossible for regulators to keep pace with investor behaviour when it comes to digital assets. Given the complexity and the evolving characteristics of digital assets, highly prescriptive regulations could become obsolete or potentially inefficient. Hence, a sandboxing approach which provides greater scope for experimentation, combined with behavioural testing may be useful for future new developments in this space, allowing

regulators to understand the behaviour of a smaller group of investors while tweaking regulations prior to a more widespread release. For example, the theory of decision points in behavioural economics suggests that external interventions can help curb excessive consumption by providing people with an opportunity to pause and think about consumption, as these decision points typically snap them from an automatic mode to a deliberative mode, returning control of the individual to the planner. In the context of digital assets where many investors may be influenced by a herd mentality and perceived high returns, increasing "decision points" within DAX or IEO platforms during the purchasing process may force investors to rationalise and deliberate on their investments. Examples of these decision points could include pop-up infographics or videos that provide financial education on digital assets that investors will have to watch before proceeding to the next step, as well as warnings on the risk levels of digital assets.

- **Regulators also need to be wary about adopting too paternalistic an approach that might drive investors to seek options in the unregulated space**. With the ubiquitous nature of technology investors, the digital asset ecosystem is generally not restricted by national boundaries. **The industry is prone to international regulatory arbitrage where investors are faced with increasing cross-border options that may flow toward markets with more favourable regulatory conditions**, and which do not fall within the purview of Malaysian regulators, especially as the lure of higher returns may incentivise customers to take on that risk. For example, online multi-asset platform eToro that allows investors to purchase US stocks, ETFs and cryptocurrencies had reported in May 2020 that Malaysians accounted for 11% of their Asia Pacific customers, with the number of Malaysians investing for the first time on eToro growing over 200% in the first four months of this year. Despite eToro not being licensed in Malaysia, it is clear that investors are seeking avenues to invest in a broader range of products that may offer high returns. **Over-regulation may thus lead to lesser investor protection, a trade-off in the long term if investors opt for unregulated options.**

- Overall, SC's regulatory approach also broadly highlights consistencies with traditional securities regulations in ensuring that regulatory key objectives such as consumer protection and financial stability continue to be fully met. However, **new regulatory developments which aim to provide the same protections as the current systems need to also ensure inadvertent barriers to innovation are not created, which may limit the use of newer technologies in the capital market space**. In the context of the global digital asset regulatory landscape, a report[17] found that jurisdictions with the most sophisticated regulatory frameworks (i.e. to further support the adoption of blockchain technologies in capital markets), the policy and **regulatory environment needs to provide greater scope for experimentation with blockchain solutions, particularly in the securities and market context**. As a precursor of the "regulatory sandbox" approach, some markets are implementing proportionate regulatory approaches and adopting a "test and learn" methodology. As with any proactive approach in responding to innovation, **regulators will need to engage in continuous dialogue with a wider group of stakeholders that influence the digital asset ecosystem, both directly or indirectly, to identify industry focal points for coordination and to evaluate how risks can be spread across stakeholders.** Stakeholders in a digital asset ecosystem often include, but are not limited to, financial institutions, incubators and accelerators, digital hubs, fintech associations, venture capitalists, technology experts, international knowledge partners, tax consultants and legal authorities.

[17] *"Global CryptoAsset Regulatory Landscape Study", Cambridge Centre for Alternative Finance*

- In terms of further harnessing the potential of digital assets to drive financial inclusion opportunities, Malaysia is well-positioned **to accelerate the transformative potential of Islamic Finance and promote key Islamic Finance principles such as transparency through technologies such as blockchain**. This needs to be further explored, where innovative and efficient use of technology such as smart contracts on blockchain could further address the key challenges with wakaf, from the lack of availability of data and poor historical records, weak transparency and improper audit and compliance practices. An example of this is the Finterra WAQF Chain platform which combines the concepts and technologies of blockchain, Wakaf, and crowdfunding to reengineer Wakaf through technology, and further contribute to socio-economic development. Further, applications of blockchain technology in Islamic finance are diverse and various, from blockchain sukuk[18], insurance, smart contracts. Relative to demand and market potential, blockchain based startups are only beginning to make headway, with 14 global start-ups identified in the Islamic finance space.

- **SC's more conservative regulatory approach may also slow down digital asset innovation, in comparison to other regulators in the region- such as Thailand, Philippines and Singapore- markets which want to quickly distinguish themselves with a more innovation-friendly stance towards regulations.** Bespoke regulatory regime or bespoke regulations are often found in smaller emerging countries with a relatively low level of domestic digital asset activity and a tendency for more flexible financial regulation with an incentive to create a "friendly" regime to attract more crypto asset activities.

- For instance in Malaysia, ECF and DAX operators who wish to widen their offerings to investors must reapply to become IEO operators. It is expected that there will only be IEO operators in Malaysia in the second quarter next year and the first IEO offering would be in the third quarter. Thailand, by contrast, a market which has been at the forefront of facilitating digital asset regulations, approved the ICO Portal to issuers in September 2019. The portal is allowed to offer cryptocurrency, investment tokens and utility tokens – i.e. investment and fundraising under one.

- The SC's approach also shows how a conservative but adaptive approach is possible and can keep pace with the increasing importance of the underlying technologies. However, newer types of tokens and digital assets will emerge over time, as a result on the ongoing pilot projects and experimentation by the industry players. **New business models leveraging innovative technologies and access to data and combining different forms of financial and non-financial activity will increasingly challenge the traditional approach of supervisory silos based on activities and geographic presence.**

- From a supervisory perspective, a **piecemeal-based approach can also pose challenges, from monitoring risks and having oversight of the overall digital asset ecosystem**. ICO issuers and digital asset exchanges which are involved in the issuance or dealing of digital assets with a payment function will need to comply with relevant BNM laws and regulations relating to payments and currency matters. As such, SC and BNM have entered coordination arrangements to ensure compliance with laws and regulations under the purview of both regulators. Nonetheless, for market participants, this could pose a challenge due to regulatory fragmentation. For example, with rapid evolutions of the technological applications in different

[18] *In 2019 an Indonesian microfinance institution, BMT Bina Ummah, used a platform created by startup company Blossom Finance to raise US$50,000 in what it claimed to be the first blockchain sukuk.*

contexts- such as payments and wallets, securities, and markets may be subject to different supervisors in relation to different activities, and include a combination of both financial and non-financial activities. The risks in one part of the ecosystem could impact the overall stability and confidence in the ecosystem as a whole. As a result, **the traditional approach of supervisory silos based on location and activities may be more challenging and will need a more adaptive approach with streamlined oversight coordinating mechanisms, in order to not undermine the innovative capacities to utilise these newer technologies.**

- Further adaptions to the regulatory regime may also need to be considered in the context of SC's capacity and organisational structure in regulating and supervising the FinTech ecosystem. In a special report by Alliance of Financial Inclusion[19], the **first key focus area in enabling fintech ecosystems and in adapting to financial and technological innovation is the need to evaluate the regulatory institutions' own existing organizational structures** and to assess whether the current structures can sufficiently support regulating FinTech developments. Regulators in emerging FinTech hubs have begun setting up dedicated innovation units within their respective organisations to monitor FinTech developments, with a focus on running regulatory sandboxes and innovation hubs, analyzing new innovations and activities that fall outside existing regulatory scopes; and acting as liaison between financial services providers and relevant departments within the regulatory entity. There is also a growing need for **a dedicated team to use data analytics to understand the economy and financial system in more depth than ever before, which will require regulatory bodies to be proficient with data analytics tools**.

- Going forward and with Covid-19 as a catalytic event,[20] blockchain is expected to be further deployed in the RegTech domain to solve more complex regulatory challenges and streamline regulatory activity due to the rising tide of regulatory changes and new cyber risks. Current developments caused by the crisis and the resulting regulatory, technological and behavioural shifts provide a critical inflection point for further exploration of relevant RegTech and SupTech solutions. **Suptech[21] applications, particularly in data analytics, are seen as capable of turning risk and compliance monitoring from a backward-looking into a predictive and proactive process**. Within data analytics, applications are used for market surveillance as well as microprudential and macroprudential supervision. Supervisory agencies initiate and organise their suptech activities in several ways, which include creating dedicated units, which leverage their research functions while some are partnering with academic institutions, particularly in the area of data analytics, to keep track of the latest developments and to learn how to build state-of-the art algorithms.

- **Finally, given the inherently borderless nature of blockchain and digital asset applications, it is obvious that regulatory approaches domestically need to be consistent and coordinated with global regulatory approaches**. In addition, collaboration with regional regulatory peers can encourage more uniformity in standards, greater transparency and promote further regional cooperation.

[19] *"Creating Enabling Fintech Ecosystems: The Role of Regulators", Alliance of Financial Inclusion, January 2020*
[20] *An insight article hosted by the UK, FCA calls the Covid-19 as the watershed moment for RegTech to prove its value, https://www.fca.org.uk/insight/regtech-watershed-moment*
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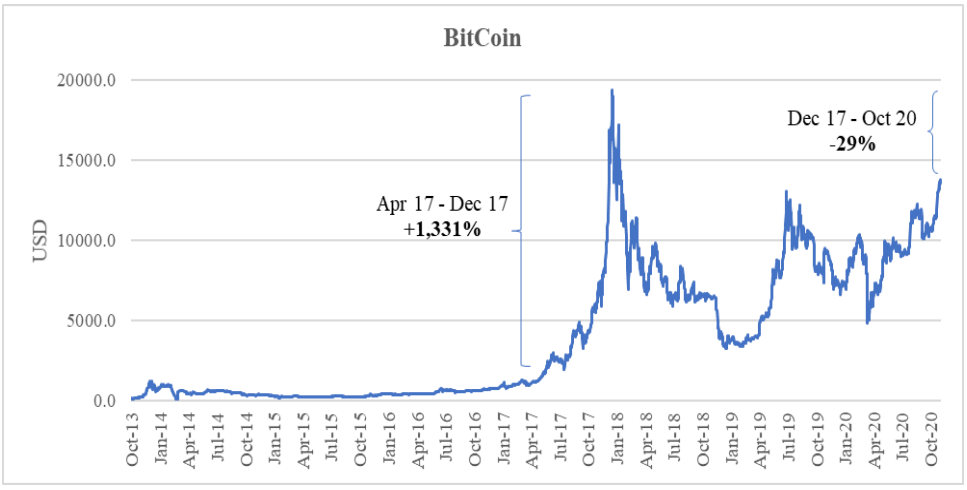
# Appendix 1: Selected Market Charts on Digital Assets

## Top 5 cryptocurrencies by Market Cap (Data as of 31st October 2020)

| Crypto | Market Cap (USD bn) |
|---|---|
| Bitcoin | 256.5 |
| Ethereum | 44.3 |
| Tether | 16.5 |
| XRP | 11.0 |
| Chainlink | 4.4 |

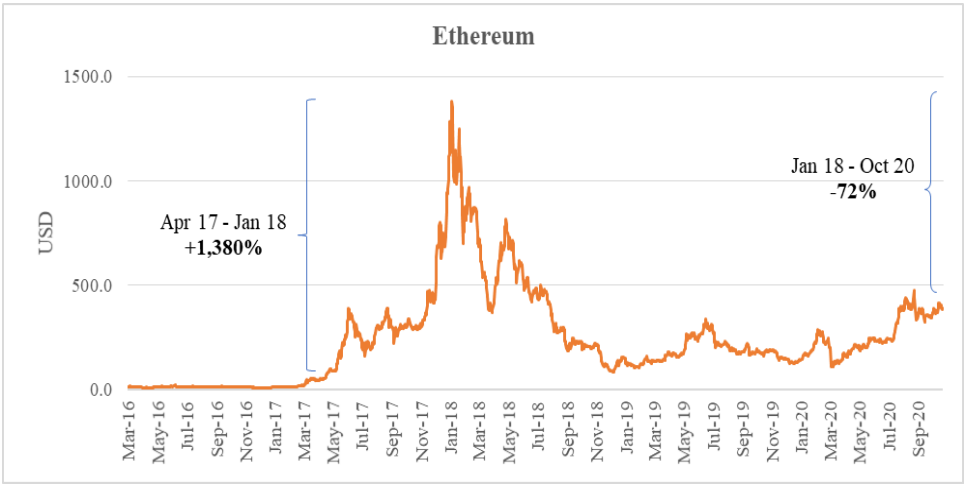
*Source: Coinmarketcap.com*

## Figure 1a: Bitcoin prices in USD ($)



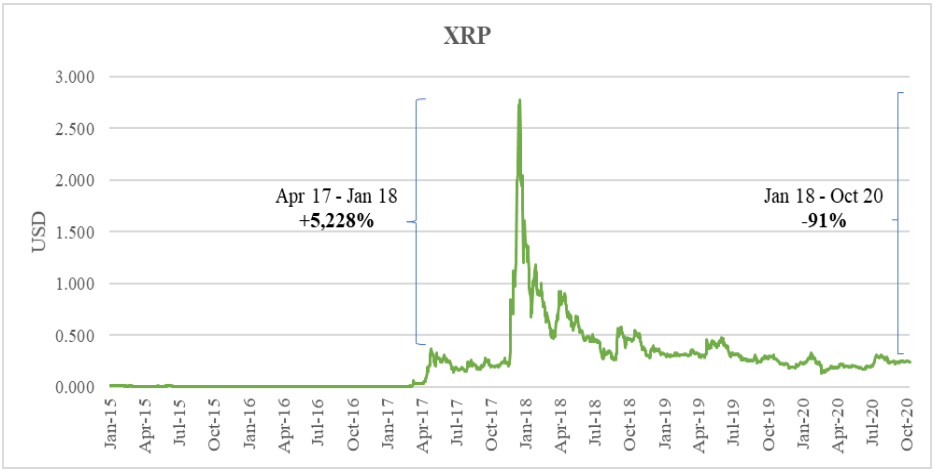

*Source: Investing.com*

## Figure 1b: Ethereum prices in USD ($)



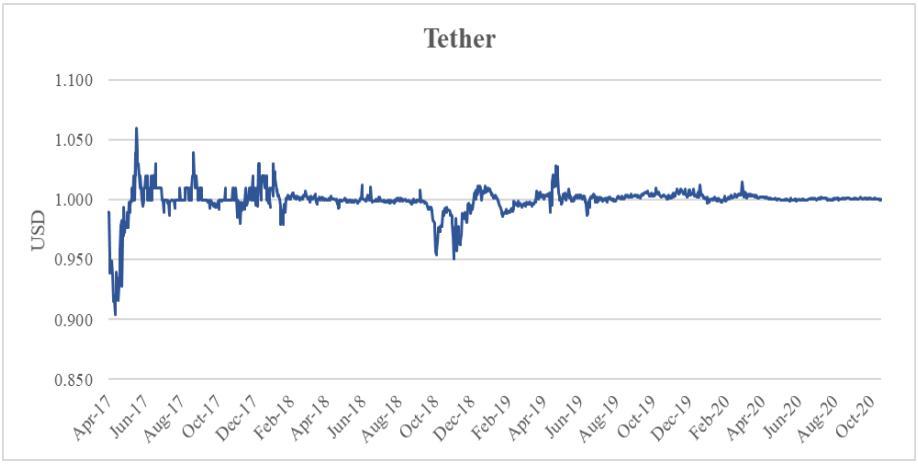

*Source: Investing.com*

Figure 1c: XRP prices in USD ($)



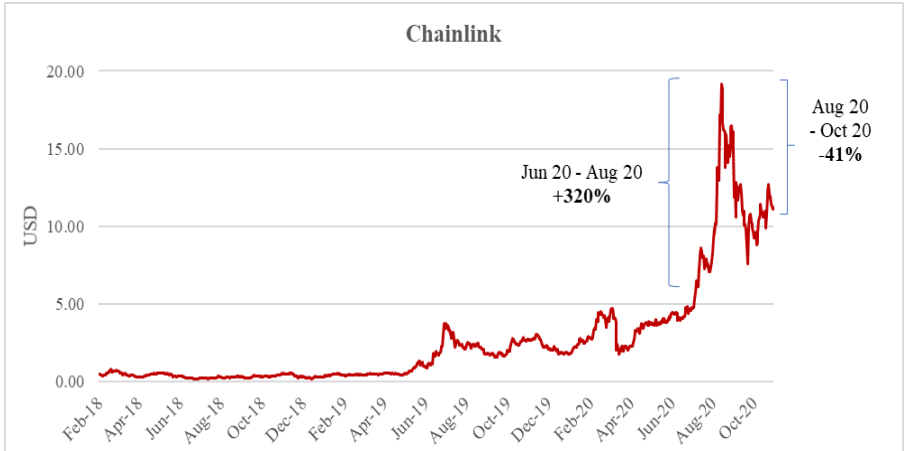

*Source: Investing.com*

Figure 1d: Tether prices in USD ($)




*Source: Investing.com*

Figure 1e: Chainlink prices in USD ($)




*Source: Investing.com*