



HONG KONG MONETARY AUTHORITY
香港金融管理局

Discussion Paper on Crypto-assets and Stablecoins

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1. Executive summary

The increased use of technology in the financial system, such as the use of distributed ledger technology (“DLT”), has potential benefits in improving the accessibility to and efficiency of the system, as well as unlocking new business opportunities to its users. One form of use of DLT in the financial system is crypto-assets. According to the Financial Stability Board (“FSB”), crypto-asset refers to “a type of private digital asset that depends primarily on cryptography and distributed ledger or similar technology”¹.

While acknowledging the potential benefits of financial innovation, financial regulators around the globe are also closely monitoring possible risks arising from this development amidst the growing prevalence of crypto-assets, and also having regard to their nascent but fast-growing nature. Among other things, we have witnessed significant growth in the market capitalisation of crypto-assets, as well as increasing investment in and/or usage by institutional or even retail players. The above suggests rising interconnectedness with the mainstream financial system including banks and/or other types of financial institutions.

In the face of growing adoption and ongoing evolvement of crypto-assets, and similar to other regulators across the globe, in discharging its responsibilities in, among other things, maintaining the monetary and financial stability in Hong Kong, the HKMA has been reviewing the regulatory treatment of crypto-assets locally. In particular, we place emphasis on issues that may affect the public’s confidence in, and the safety, efficiency, and soundness of, our payment systems, and accord appropriate priority to the protection of users. With this backdrop and having regard to the HKMA’s communication with market players and participation in the relevant international discussions, we have identified two key areas for deliberation at this stage, namely (i) our regulatory approaches regarding the Authorized Institutions (“AIs”)’ interface with and provision of intermediary services to customers related to crypto-assets; and (ii) the adequacy of the existing regulatory framework in response to the challenges arising from the growing use of stablecoins and other types of crypto-assets in financial markets. The HKMA will soon provide AIs with more detailed regulatory guidance in relation to AIs’ business interface with and provision of intermediary services to customers related to crypto-assets. This Discussion Paper mainly addresses issue (ii), in particular sets out the HKMA’s views on how to expand the regulatory framework for crypto-assets.

On stablecoins, it is generally considered as a sub-set of crypto-assets, and has been a focus of discussion across international regulatory fora. Due to its “pegging” characteristic, users and/or market players may differentiate it from other types of crypto-assets, with the perception or expectation that some stablecoins may be more readily developing into a commonly acceptable means to store value and/or make payments, thus having a higher potential for being incorporated into the mainstream financial system across the globe. Noting such characteristics and perception of stablecoins, especially for those that have a higher possibility of becoming a widely accepted means of payments, i.e. “payment-related stablecoins”, thus raising broader monetary and financial implications, the HKMA sees the need to ensure that payment-related stablecoins are appropriately regulated before they operate in Hong Kong or are marketed to the public of Hong Kong.

¹ FSB (2020). While the definition of crypto-assets may slightly differ from different sources and may evolve over time, the FSB definition quoted above is a widely accepted one around the globe and hence a good starting point for the ensuing discussion in this paper.

Regarding other non-payment-related (including unbacked) crypto-assets, the HKMA will continue to monitor the development. While they have a wide range of variation in terms of structure and nature, their use case is mainly for speculative investment purposes for the time being. The key issues raised by such non-payment-related (including unbacked) crypto-assets are primarily consumer knowledge of risks, user protection as well as potential use of such assets for illicit and money laundering/terrorist financing (“ML/TF”) activities. There is a clear need to promote investor education and enhance product disclosures in relation to investor protection. The HKMA and the Securities and Futures Commission (“SFC”) are working together to set out our supervisory expectations on the investor protection aspects of AIs’ provision of intermediary services to customers related to crypto-assets.

Going forward, there is also a need to monitor the growing interconnectedness between these largely unregulated crypto-assets with the mainstream financial system and the potential risks that a severe price correction in these assets could pose to the wider financial system. We note that certain types of activities involving crypto-assets, e.g. operating an exchange of those assets, may have already been captured by the SFC’s virtual asset trading platform opt-in regime, which was announced in November 2019 and expected to be updated to be a licensing regime pursuant to proposed amendments under the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (“AMLO”), as announced by the Financial Services and the Treasury Bureau (“FSTB”) in May 2021. The HKMA will monitor the developments closely and coordinate with other stakeholders in the HKSAR Government and other financial regulators on the need for formulating appropriate regulatory responses to address evolving risks of these non-payment-related (including unbacked) crypto-assets.

The Discussion Paper is organised as follows. Section 2 provides a general background on crypto-assets and stablecoins. Section 3 sets out an overview of the regulatory recommendations of relevant international organisations in relation to crypto-assets, and regulatory landscape of major jurisdictions. Section 4 provides an overview of where we stand in Hong Kong in respect of crypto-assets and stablecoins regulations. Section 5 sets out the key risks posed by stablecoins, objectives and guiding principles of a contemplated regulatory regime, and puts forwards the HKMA’s thoughts on how to expand the regulatory framework for such assets. Section 6 concludes and invites stakeholders to provide responses to the Discussion Paper.

While the discussion questions set out in Section 5 do not represent an exhaustive list for our consideration, they will serve as a practical starting point for us to invite views on the basis of which we will further formulate our policy recommendations. Other issues may transpire as the financial system continues to proceed with its ongoing technological journey, and we will reach out to the market for feedback again as and when appropriate.

2. Introduction

2.1. Crypto-assets²

In the world of finance, we have witnessed the continued evolution of innovation in the past decades. Specifically on crypto-assets, since the launch of Bitcoin in 2009, different kinds of crypto-assets, such as stablecoins, utility tokens and non-fungible tokens, have emerged for various purposes and uses. There is no universal definition of crypto-assets and we note that crypto-assets are sometimes referred to as virtual assets (“VAs”)³. According to the FSB, crypto-asset refers to “a type of private digital asset that depends primarily on cryptography and distributed ledger or similar technology”. In other words, while crypto-assets are often underpinned by DLT, the international community does not take a restrictive, but rather a technology-neutral, interpretation in using the term crypto-assets.

As shown in the chart below, the market capitalisation of crypto-assets has generally been showing an upward trend in the past few years (in particular since the outbreak of the pandemic), notwithstanding certain periods of volatility in between.



Figure 1: Market Capitalisation of Crypto-assets⁴

Crypto-assets could be categorised in a number of ways, e.g. by way of their construct, economic features and functions. One possible taxonomy based on classification criteria considered by the Bank for International Settlements (“BIS”) is at [Annex A](#).

² Also referred to by some market players or overseas jurisdictions as “crypto-currencies”. Given that such assets are actually not currency *per se*, this paper uses the term “crypto-assets” unless situation requires otherwise, e.g. the government of another jurisdiction uses the term “crypto-currency”.

³ For example, by the Financial Action Task Force (“FATF”). In this paper, while the term “crypto-assets” will be used predominantly, the term VAs may also be used as appropriate (e.g. in making reference to the work of the FATF or regulatory regimes whose official name uses the term VA).

⁴ Source: CoinMarketCap at <https://coinmarketcap.com/>.

For example, crypto-assets can be categorised by way of whether it is “asset-linked”. For non-asset-linked crypto-assets, the value of these crypto-assets is determined by the prevailing demand and supply, and they may have no intrinsic value. This kind of crypto-assets, therefore, tends to have high volatility in value, which makes them typically unsuitable for use as means of payment. Currently, it is observed that the main use of such assets is for speculative investment. The current size and trading activity of crypto-assets⁵ may not pose an immediate threat to the stability of the global financial system from a systemic point of view, but the growing exposure of institutional investors to such assets (including hedge funds, family offices and asset managers) as an alternative to or to complement traditional asset classes for trading, lending and borrowing, and possible extension to certain segments of the retail public, indicate growing interconnectedness with the mainstream financial system. They can potentially affect financial stability through channels such as wealth effect or severe price correction in such largely unbacked assets.

Despite crypto-assets’ limited share in global financial assets and adoption by the general public of Hong Kong⁶, they are evolving rapidly. Insofar as the banking sector in Hong Kong is concerned, the HKMA notes that AIs’ activities related to crypto-assets remain limited. However, there is growing interest of banks and their customers in exploring opportunities in investing in crypto-assets. AIs are also facing increasing demand from customers for crypto-asset related products and services. The HKMA will soon provide AIs with more detailed regulatory guidance in relation to AIs’ business interface with and provision of intermediary services to customers related to crypto-assets.

In addition to the above, there is a broader issue that some crypto-assets may exist and change hands anonymously. Taken together with the ease of transfer of such crypto-assets electronically and possibly also across borders, they may be susceptible for uses in illicit and ML/TF activities.

There is thus a need to continue monitoring the various risks that may be posed by crypto-assets and take actions as necessary. The HKSAR Government announced in the relevant public consultation conclusion⁷ in May 2021 that a virtual asset service provider (“VASP”) licensing regime would be implemented by amending the existing AMLO. Certain types of VA activities will be brought under such licensing regime.

As for the HKMA, in discharging its functions of maintaining monetary, financial and banking stability of Hong Kong, we will continue to monitor the development of crypto-assets closely and maintain a close dialogue with other stakeholders in the HKSAR Government and other financial regulators as well as the relevant international standard-setting bodies on the need to expand the regulation of such assets as needed in light of relevant international regulatory developments. Close alignment of Hong Kong’s regulatory and supervisory framework and

⁵ The estimated size of global crypto-asset market of USD 2.6 trillion (source: CoinMarketCap at <https://coinmarketcap.com/>) in October 2021 accounts for around 1% of global financial assets, which is estimated to be USD 250 trillion (source: BCG Global Wealth 2021 Report). The 24-hour trading volume and market capitalisation of crypto-assets have increased by ~50% and ~500% respectively during the period of 28 October 2020 to 28 October 2021 (source: CoinMarketCap at <https://coinmarketcap.com/>).

⁶ There is a lack of comprehensive analysis for Hong Kong market. Some market players have made attempts estimating the crypto-asset adoption ratio. Among these players, TripleA estimated that 3.27% of Hong Kong population own crypto-assets.

⁷ See the consultation conclusions at https://www.fstb.gov.hk/fsb/en/publication/consult/doc/consult_conclu_amlo_e.pdf.

approach with those recommended by relevant international bodies is necessary to avoid any regulatory arbitrage in these activities.

2.2. Stablecoins

Characteristics of stablecoins

Crypto-assets whose values are linked or referenced to an underlying asset, e.g. securities or fiat currencies, are commonly referred to as stablecoins. According to the FSB and the BIS, stablecoins are defined as “a crypto-asset that aims to maintain a stable value relative to a specified asset, or a pool or basket of assets” and “cryptocurrencies with values tied to fiat currencies or other assets” respectively.

Stablecoins, as a sub-set of crypto-assets, are gaining traction. Depending on the assets being referenced to, such stablecoins may be used for investment (e.g. if the underlying value is linked to a security) or payment purposes (e.g. if the underlying value is linked to a fiat currency). When compared with other crypto-assets, stablecoins are often advertised as being “pegged to” or supported by a single or a basket of fiat currencies and/or other assets. Due to the above characteristic, users and/or market players may differentiate it from other types of crypto-assets, with the perception or expectation that it may be more readily developing into a widely acceptable means of payment and/or store of value, thus having a higher potential for being incorporated into the mainstream financial system across the globe. In particular, for those stablecoins that may be used or have the potential for use in payments, the possibility of incorporation into the mainstream financial system or even day-to-day commercial and economic activities is higher, i.e. more direct impact on the monetary and financial systems. Hence, the FSB has urged financial regulators to get prepared for regulation of stablecoins, in particular those with potential for wider application for payments across jurisdictions, i.e. the global stablecoins (“GSCs”).

The aforesaid perception may be part of the reason fuelling the rapid growth of market capitalisation of major stablecoins in the past few years, as shown in the chart below. The global market capitalisation stood at about USD 150 billion in December 2021, representing about 5%⁸ of the overall crypto-asset market.

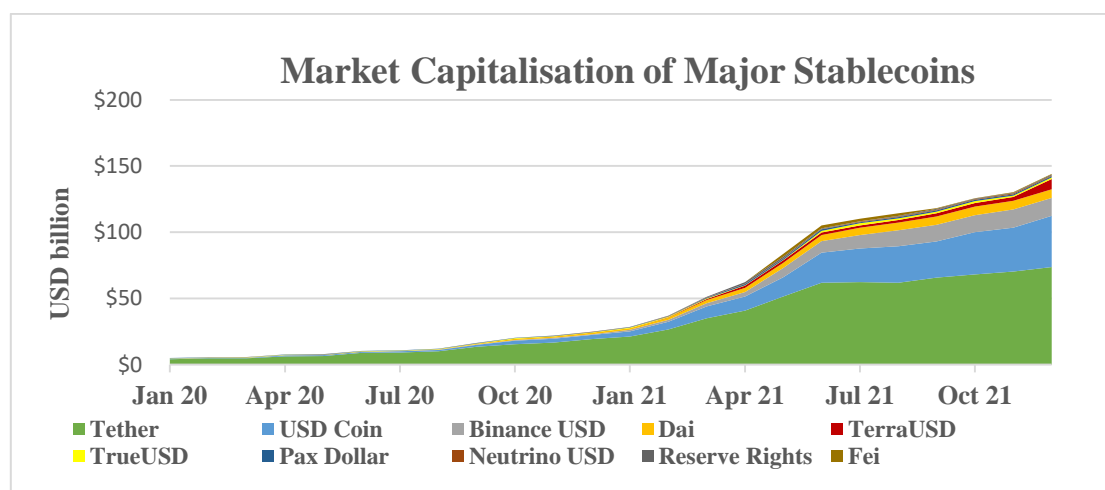


Figure 2: Market Capitalisation of Major Stablecoins⁹

⁸ Source: CoinMarketCap at <https://coinmarketcap.com/>.

⁹ Source: CoinMarketCap at <https://coinmarketcap.com/>.

Common categorisation of stablecoins

Stablecoins could have different designs. For example, depending on its backing arrangement, it could be broadly categorised as (i) asset-linked stablecoins; or (ii) algorithm-based stablecoins. Common backing assets of asset-linked stablecoins are fiat currency/currencies, commodities (e.g. gold), or other financial assets (e.g. securities). On the other hand, algorithm-based stablecoins use other means in an attempt to maintain a stable value (usually via protocols that provide for changes in supply of stablecoins in response to changes in demand). It is worth noting that there is currently no consensus in respect of the standards that should be applied to the backing or redemption arrangements for the stablecoin holders, and hence a general lack of transparency in these important arrangements.

GSCs

Similar to other crypto-assets, the market has been projecting the continued growth of stablecoins in the next few years, regarding which the possible cross-jurisdictional circulation and usages could be one of the contributing factors. Due to technology developments, it would be technically feasible for stablecoins originated in one jurisdiction to be used in other jurisdictions. In this regard, the FSB has pointed out that a stablecoin with a potential reach and adoption across multiple jurisdictions and the potential to achieve substantial volume could be considered as a GSC regarding which international coordination on regulatory work is required.

3. Regulatory stance or recommendations of international community

3.1. Overview of regulatory policy options

Having regard to international experience and practice, an indicative list of regulatory policy options (see *Figure 3* below) in relation to crypto-assets is set out as below:






Policy Options	Characteristics	Possible Downside
 No action	<ul style="list-style-type: none"> ◆ Market driven 	<ul style="list-style-type: none"> ◆ Key risks remain and may grow to negatively impact on the financial system ◆ Unable to meet international standards
 Opt-in / pilot regime	<ul style="list-style-type: none"> ◆ Relatively easy to administer ◆ Could test market demand 	<ul style="list-style-type: none"> ◆ Key risks remain and may grow to negatively impact on the financial system ◆ Possibly unable to meet international standards
 Risk-based regime (e.g. focus on regulation of payment-related stablecoins)	<ul style="list-style-type: none"> ◆ Wider regulatory coverage to address risks in a more targeted manner 	<ul style="list-style-type: none"> ◆ Regulatory and supervisory costs ◆ Pockets of risks may still exist
 Catch-all regime (cover all crypto-assets & crypto-related activities)	<ul style="list-style-type: none"> ◆ Wider regulatory coverage to address risks in a broader manner 	<ul style="list-style-type: none"> ◆ Higher regulatory and supervisory costs ◆ Potential regulatory overlaps ◆ May take longer time to implement
 Blanket ban	<ul style="list-style-type: none"> ◆ Eliminate new risks to the maximum extent possible 	<ul style="list-style-type: none"> ◆ Possible challenges to financial innovation

Figure 3: Possible policy options for regulating crypto-assets

3.2. Major international organisations

While the work of relevant standard-setting bodies on crypto-assets and stablecoins is still ongoing, below is a summary of the progress made so far by selected organisations.

*The Basel Committee on Banking Supervision (“BCBS”)*¹⁰

The BCBS’ work on crypto-assets comprises three broad elements, namely:

- (i) monitoring of market and regulatory developments related to crypto-assets, and assessing the impact of such developments on the banking system;
- (ii) quantifying banks’ exposures to crypto-assets via periodic data collection exercises; and
- (iii) developing prudential treatment for banks’ exposures to crypto-assets.

In June 2021, the BCBS published a consultative document¹¹ that sets out its proposed prudential treatment of banks’ exposures to crypto-assets. Under the proposal, crypto-assets are screened on an ongoing basis and classified into two groups:

- Group 1 crypto-assets refer to crypto-assets that fulfil a set of classification conditions. They will be subject to at least equivalent risk-based capital requirements based on the risk weights of underlying exposures as set out in the existing Basel capital framework.
- Group 2 crypto-assets refer to crypto-assets that fail to meet any of the classification conditions. Hence, they pose additional and higher risks when compared with Group 1 crypto-assets and will be subject to a newly prescribed conservative capital treatment based on a 1250% risk weight.

The classification conditions relate to the nature of crypto-assets, issue of legal certainty, reliability of the design of the crypto-asset arrangement, and regulation and supervision of entities performing significant functions. Group 1 crypto-assets include tokenised traditional assets (“Group 1a”), as well as crypto-assets with effective stabilisation mechanisms (“Group 1b”). Stablecoins can only be included in Group 1b if they are redeemable for underlying traditional asset(s) (e.g. cash, bonds, commodities, equities) and their stabilisation mechanism is assessed to be effective.

Stablecoin arrangements may be designed in various ways. As such, the consultation document considers two stylised structures as illustrative examples and examines how capital rules would be applied in these cases.

In addition to the capital requirements for credit and market risks, the consultation document provides additional guidance on the application of other aspects of Basel Framework to crypto-assets, including liquidity requirements, operational risk, leverage ratio and large exposures. It also sets out various issues that should be considered by banks and supervisors as part of the supervisory review process, and proposes new requirements for banks to disclose information regarding their crypto-asset exposure on a regular basis.

Given the rapidly evolving nature of crypto-assets, the BCBS noted that policy development for banks’ exposures is likely to be an iterative process, involving more than one consultation. As such, it has decided to proceed with the public consultation to enable further work to continue with the additional benefit of incorporating feedback from external stakeholders. Meanwhile, it will continue to coordinate with other international organisations that are developing their regulatory approaches to crypto-assets.

¹⁰ BCBS’s progress in reviewing standards is sourced from FSB (2021).

¹¹ BCBS (2021)

The FATF

Since the release of its report to G20, the FATF has continued its work on “so-called stablecoins” as part of its broader focus on VAs and VASPs. The FATF has progressively revised its Standards to make clear that they apply to VAs and VASPs. The FATF also recognises that jurisdictions may permit and regulate VAs/VASPs or prohibit or limit VA activities or VASPs. In the latter case, authorities should take measures to mitigate the risks of such activities taking place illegally in their jurisdictions. The FATF Guidance states that “at a minimum, VASPs should be required to be licensed or registered in the jurisdiction(s) where they are created” (i.e. incorporated or established). Where a VASP is a natural person, it should be required to be licensed or registered in the jurisdiction where its place of business is located.

In July 2021, the FATF released a report on its second 12-month review of the revised standards on VAs and VASPs. This review looks into how jurisdictions and the private sector have implemented the revised Standards since the FATF’s first 12-month review. It also looks at changes in the typologies, risks, and the market structure of the VA sector. It is noted that “most jurisdictions and most VASPs are not complying with the travel rule¹². This is a major obstacle to effective global anti-money laundering/counter-terrorist financing (“AML/CFT”) mitigation and is undermining the impact of the revised FATF Standards.”

The FATF updated the Guidance for a Risk-Based Approach to VAs and VASPs in October 2021. The revisions focused on (i) providing guidance on how the FATF Standards apply to so-called stablecoins and clarifying that a range of entities involved in stablecoin arrangements could qualify as VASPs under the FATF Standards; (ii) clarifying the definitions of VA and VASP to make it clear that these definitions are expansive; (iii) providing additional guidance on the risks and the tools available to countries to address the ML/TF risks for peer-to-peer transactions; (iv) providing updated guidance on the licensing and registration of VASPs; (v) providing additional guidance for the public and private sectors on the implementation of the travel rule; and (vi) including Principles of Information-Sharing and Co-operation Amongst VASP Supervisors.

The FSB

In June 2019, the G20 mandated the FSB to examine regulatory, supervisory and oversight issues raised by GSCs and to advise on multilateral responses as appropriate, considering the perspective of emerging markets and developing economies. In October 2020, the FSB issued a report with ten high-level recommendations¹³ on the regulation, supervision and oversight of GSCs. Member jurisdictions are expected to consider establishing/amending their regulatory framework, in line with FSB recommendations, by July 2022.

In October 2021, the FSB published a progress report on the implementation of the FSB high-level recommendations. The report notes that while the current generation of stablecoins are not being used for mainstream payments on a significant scale, vulnerabilities in this space have continued to grow over the course of 2020-21. Through a comprehensive stock-take

¹² A key AML/CFT measure, which mandates that VASPs obtain, hold and exchange information about the originators and beneficiaries of VA transfers.

¹³ Please refer to **Annex B** for the ten high-level recommendations set out in FSB (2020).

conducted by the FSB, it was found that, overall, the implementation across jurisdictions is still at an early stage. As jurisdictions are using the FSB high-level recommendations in developing their own domestic regulatory approaches, authorities have identified several issues relating to the implementation of the recommendations that may warrant further consideration and where further work at international level could be useful.

The report also highlights that standard-setting bodies are continuing to assess whether and how existing international standards may apply to stablecoin arrangements and, where appropriate, adjust the standards in light of the FSB high-level recommendations.

Committee on Payments and Market Infrastructures (“CPMI”) and International Organization of Securities Commissions (“IOSCO”)

In October 2021, CPMI and IOSCO published for public consultation preliminary guidance that confirms and clarifies that stablecoin arrangements should observe international standards for payment, clearing and settlement systems¹⁴. Consultation closed on 1 December 2021.

The report provides guidance on the application of the Principles for Financial Market Infrastructures (“PFMI”) to systemically important stablecoin arrangements, including the entities integral to such arrangements. The report proposes additional guidance on how certain aspects of the PFMI apply to the novel features of stablecoin arrangements.

In particular, a stablecoin arrangement’s “transfer function” enables the transfer of coins between users and typically entails the operation of the system, a set of rules for the transfer of coins between or among participants, and a mechanism for validating transactions. This transfer function is comparable to the transfer function performed by other types of financial market infrastructure. As a result, a stablecoin arrangement that performs this transfer function is considered a financial market infrastructure for the purpose of applying the PFMI and, if determined by relevant authorities to be systemically important, the stablecoin arrangement as a whole would be expected to observe all relevant principles in the PFMI.

CPMI and IOSCO may further examine regulatory, supervisory and oversight issues associated with stablecoin arrangements and coordinate with other standard-setting bodies.

¹⁴ Source: CPMI, IOSCO – Consultative report – Application of the Principles for Financial Market Infrastructures to stablecoin arrangements (October 2021) at <https://www.bis.org/cpmi/publ/d198.pdf>.

3.3. Major jurisdictions

Jurisdictions are at different stages of formulating their regulatory stance and framework on crypto-assets (including stablecoins¹⁵) (see *Figure 4* below). In general, it is noted that those jurisdictions that have chosen to regulate activities related to VAs adhere to the FATF approach that all FATF Standards should apply with minor modifications (e.g. “travel rule” requirements for technical reasons). Latest developments in Mainland China, the European Union (“EU”), Singapore, the United Kingdom (“UK”) and the United States (“US”) are summarised below.

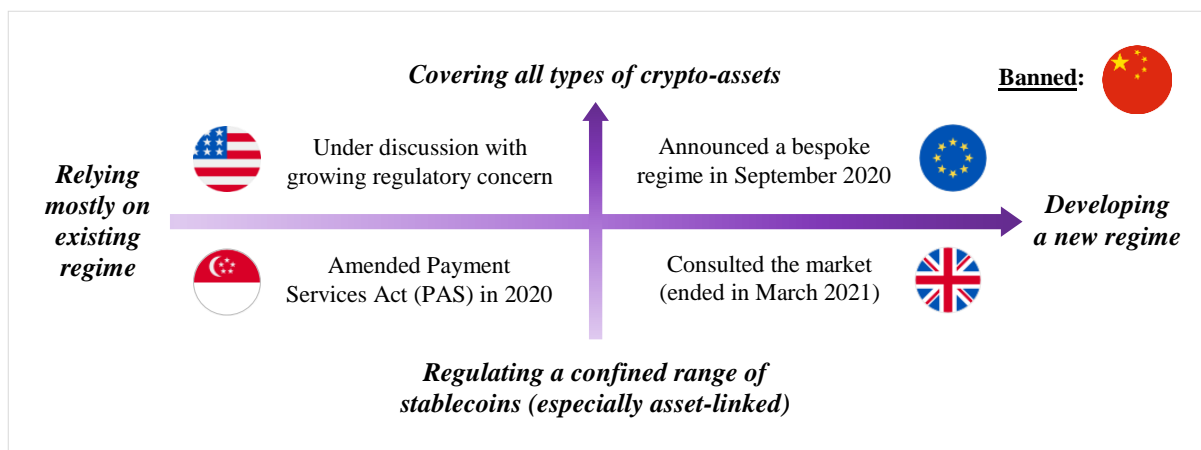


Figure 4: Major jurisdictions' regulatory stance towards stablecoins

Mainland China

In December 2013, the People’s Bank of China (“PBoC”) started disallowing financial institutions from providing Bitcoin-related services to customers¹⁶.

In June 2021, the PBoC had a regulatory dialogue with some banks and payment institutions to launch crackdowns on crypto-currency trading¹⁷. Among other things, institutions (i) are not allowed to offer crypto-related products or services, including account opening, registration, transaction, clearing and settlement for related activities; and (ii) are required to screen accounts opened with them, identify those of virtual currency exchanges or over-the-counter dealers, and cut off their payment channels for trading funds. This is in line with the decisions and arrangements of the State Council and the Guidelines of the 51st meeting of the Financial Stability and Development Committee under the State Council.

¹⁵ Major regulatory initiatives of Singapore and UK regarding stablecoins are sourced from FSB (2021).

¹⁶ Source: <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/2804576/index.html>.

¹⁷ See the relevant press release in Chinese at <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4273265/index.html>. The English version is available at <http://www.pbc.gov.cn/en/3688110/3688172/4157443/4274885/index.html>.

More specifically on stablecoins, the PBoC mentioned in a policy briefing in July 2021¹⁸ that stablecoins issued by some commercial organisations, especially GSCs, could bring risks and challenges to, among other things, the international monetary system as well as the payment and settlement system.

Further in September 2021, the Mainland authorities jointly issued a “Notice on Further Preventing and Resolving the Risks of Virtual Currency Trading and Speculation”¹⁹, stating that virtual currency-related activities are illegal financial activities and provision of services by overseas virtual currency exchanges to residents in the Mainland via the internet is also considered to be an illegal financial activity.

EU

In September 2020, the European Commission proposed a regulation on Markets in Crypto-assets (“MiCA”)²⁰. In gist, MiCA sets out a broad regulatory framework bringing issuers and service providers of all crypto-assets not covered elsewhere in financial services legislation, including e-money tokens and asset-referenced tokens, into its regulatory scope.

Key objectives of the proposal are to (i) provide legal certainty; (ii) support innovation; (iii) instil appropriate levels of consumer and investor protection and market integrity; and (iv) ensure financial stability. Feedback period for commission adoption of MiCA closed in January 2021 and the proposal is now under discussion by the EU Council.

Singapore

The Monetary Authority of Singapore (“MAS”) has repeatedly cautioned that investing in cryptocurrencies is risky and not suitable for retail investors. The prices of most cryptocurrencies are subject to speculative swings²¹. Cryptocurrency funds are also not authorised for sale to retail investors²². In January 2021, Singapore expanded the scope of digital payment token services²³ under Payment Services Act 2019, with a view to aligning with the applicable enhanced FATF Standards.

On the other hand, the MAS issued a public consultation in December 2019, seeking views on the interactions between money, e-money, and cryptocurrencies, including stablecoins, and the appropriate regulatory treatment for cryptocurrencies, particularly stablecoins.

¹⁸ Source: <http://www.gov.cn/xinwen/2021zccfh/27/index.htm>.

¹⁹ Source: <http://www.pbc.gov.cn/goutongjiaoliu/113456/113469/4348521/index.html>.

²⁰ See the full text of MiCA at https://eur-lex.europa.eu/resource.html?uri=cellar:f69f89bb-fe54-11ea-b44f-01aa75ed71a1.0001.02/DOC_1&format=PDF.

²¹ Source: <https://www.mas.gov.sg/news/parliamentary-replies/2021/reply-to-parliamentary-question-on-trading-and-investments-in-crypto-assets>.

²² Source: <https://www.mas.gov.sg/news/parliamentary-replies/2021/reply-to-parliamentary-question-on-crypto-asset-market>.

²³ See the definitions of digital payment token and digital payment token service provider at <https://sso.agc.gov.sg/Acts-Supp/1-2021/Published/20210301?DocDate=20210301> and <https://sso.agc.gov.sg/Bills-Supp/41-2020/Published/20201102?DocDate=20201102>.

The consultation sought views on the defining characteristics of e-money and cryptocurrency, considered the potential ability of stablecoins to function as money, and discussed its relevance in the regulatory class of e-money or cryptocurrency. The differing regulatory priorities for e-money and cryptocurrency services have different implications for how stablecoins would be regulated if placed in either of these categories: e-money services are regulated for the safeguarding of customers' money; whereas cryptocurrency services are regulated for ML/TF risk, with a disclosure requirement to warn customers of the risk of loss. Other issues were also touched on, such as whether a global stablecoin should be regulated differently from other stablecoins and how the stabilisation mechanism should be regulated.

Mixed feedback was received from the consultation, with different views hinging on whether a stablecoin was a single-currency or multi-currency stablecoin, whether there was a claim on the issuer of the stablecoin, etc. There were also varying views regarding whether stablecoins should be treated as a payment instrument or an investment product, depending on the assets backing the stablecoins.

The MAS will continue its work on reviewing the appropriate regulatory treatment for stablecoins, such as the treatment under different legislation, taking into consideration its practical use and risks, and informed by ongoing work of the international standard-setting bodies.

UK

In January 2021, the HM Treasury launched a public consultation²⁴ on the UK's regulatory approach to crypto-assets and stablecoins. The consultation sought public views on, among other things, the classification of crypto-assets (including stablecoins), government's proposed objectives and principles for regulating crypto-assets, proposed regulatory approach and initial regulatory scope. Consultation closed in March 2021, with feedback currently under review.

It was proposed that stablecoins which could be reliably used for retail or wholesale payment transactions be subject to minimum requirements and protections as part of a UK authorisation regime. Algorithmic stablecoins would be excluded from this regime because they more closely resemble unbacked exchange tokens and may pose similar risks in relation to their ability to maintain stability of value, so may not be suitable for retail or wholesale payment transactions.

The consultation document notes that stablecoin arrangements that play a similar function to existing payments systems may be regulated by the UK Payment Systems Regulator, which regulates payment systems designated by HM Treasury. Where stablecoin arrangements reach systemic scale, they should be subject to existing systemic payments regulation. Stablecoin system operators, issuers and service providers that reach systemic scale would be subject to regulation by the Bank of England and enhanced requirements grounded in the PFMI.

Existing criteria for systemic payment systems should be extended to stablecoin arrangements performing a retail or wholesale payment system function. Furthermore, a stablecoin

²⁴ HM Treasury (2021)

arrangement with significant potential to become systemic would need to be covered by regulation as soon as it is launched. The Bank of England’s approach to systemic stablecoin arrangements incorporates the expectation that systemic stablecoin arrangements will need to provide holders with a robust legal claim, ensure stability of value and enable users to redeem tokens at par into fiat. The document also acknowledges that other service providers in a stablecoin arrangement outside of the payment system, for example wallets, have the potential to pose systemic risks and consults on whether to extend the Bank of England’s systemic regulatory perimeter to such entities. The consultation proposes an overall framework through legislation, with detailed requirements on firms to be set by the independent regulators.

Given the decentralised and cross-border nature of stablecoins, the UK government and authorities are also considering whether firms actively marketing to UK consumers should be required to have a UK establishment and be authorised in the UK.

On the front of consumer protection, the Financial Conduct Authority prohibits the sale to retail clients of derivatives and exchange traded notes that reference unregulated crypto assets²⁵.

US

In December 2020, the US President’s Working Group on Financial Markets (“PWG”) published a statement providing an initial assessment of major regulatory and supervisory considerations for participants in significant stablecoin arrangements with a US nexus that are primarily used for retail payments²⁶. While encouraging payments innovation, PWG Members emphasised that digital payments systems, including stablecoin arrangements, should be designed and operated in a responsible manner that effectively manages risks and maintains the stability of the US’ domestic and international financial and monetary systems.

Subsequently at a PWG meeting held in July 2021, Janet Yellen, Secretary of US Treasury, underscored the need for the US to act quickly to ensure that there is an appropriate regulatory framework for stablecoins given their rapid growth in recent years²⁷. In August 2021, Gary Gensler, the Chairman of US Securities and Exchange Commission (“SEC”), also called on the US Congress to offer additional plenary powers to the SEC to regulate the crypto markets, with legislative priority focused on crypto trading, lending, and decentralised finance platforms²⁸.

In November 2021, the PWG together with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency published a report on stablecoins²⁹. The report highlights that the potential for the increased use of stablecoins as a means of payments raises a range of concerns which include the potential for destabilising runs, disruptions in the payment system, and concentration of economic power. It also highlights gaps in the authority of regulators to call for reducing these risks posed by stablecoins. Among other things, it was proposed that stablecoin issuers should be required to be insured depository institutions, which

²⁵ Source: <https://www.fca.org.uk/publication/policy/ps20-10.pdf>

²⁶ Sources: <https://home.treasury.gov/news/press-releases/sm1223> and <https://home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf>

²⁷ See the relevant press release at <https://home.treasury.gov/news/press-releases/jy0281>.

²⁸ See the Gary Gensler’s remarks before the Aspen Security Forum at <https://www.sec.gov/news/public-statement/gensler-aspen-security-forum-2021-08-03>.

²⁹ See the report at https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf.

are subject to appropriate supervision and regulation at the depository institution level and the holding company level. It is recommended that Congress act promptly to enact legislation to ensure that payment stablecoins and payment stablecoin arrangements are subject to a federal framework on a consistent and comprehensive basis. Such legislation would complement existing authorities with respect to market integrity, investor protection, and illicit finance, and would address identified key concerns.

4. Current regulatory regime in Hong Kong

4.1. FSTB's proposed licensing regime for virtual asset service providers ("VASP regime")

In November 2019, the SFC issued a position paper to set out a licensing framework for platforms which offer trading of securities-type VAs or tokens ("voluntary opt-in regime"). In particular, the voluntary opt-in regime is applicable to only platforms that offer trading services of at least one VA with securities features involved. Platforms solely trading non-securities VAs are not covered.

Since the launch of the voluntary opt-in regime, the SFC has been accepting applications for review. The SFC granted the first licence to a platform operator in December 2020, while other applications are currently under consideration.

More recently, the FSTB has also completed the public consultation on the introduction of the VASP regime under the AMLO and the consultation conclusion was published in May 2021³⁰.

Under the VASP regime, it was proposed that the business of operating a VA exchange³¹ be designated as a regulated VA activity, whereby any person seeking to engage in this regulated activity needs to obtain a licence. At the initial stage, the proposed regime will only apply to exchanges dealing in VAs, but not other types of VASPs such as crypto wallet providers or custodians. Flexibility will be built in the licensing regime such that it may be expanded to cover forms of VA activities other than operating VA exchanges where the need arises in the future.

The FSTB has announced that it would commence the law drafting exercise, with a view to introducing the amendment bill into the Legislative Council in 2022. While the proposed VASP regime seeks to put VA exchanges in the regulatory remit, it is noted that certain key functions in a typical stablecoin arrangement may not be captured (as the proposed VASP regime is not primarily intended to regulate stablecoins), including (i) issuance and redemption of tokens; (ii) execution of transactions; (iii) token custody and operation; (iv) value stabilisation and reserve management; (v) validation of transactions; and (vi) fund transmission.

³⁰ See FSTB's Public Consultation on Legislative Proposals to Enhance Anti-Money Laundering and Counter-Terrorist Financing Regulation in Hong Kong at https://www.fstb.gov.hk/fsb/en/publication/consult/doc/consult_conclu_amlo_e.pdf.

³¹ Specifically, according to the aforementioned consultation conclusion, a VA exchange will be defined as any trading platform which is operated for the purpose of allowing an offer or invitation to be made to buy or sell any VA in exchange for any money or any VA, and which comes into custody, control, power or possession of, or over, any money or any VA at any point in time during its course of business.

4.2. Payment Systems and Stored Value Facilities Ordinance (“PSSVFO”)

Under the PSSVFO, the HKMA is responsible for (i) licensing and supervision of Stored Value Facilities (“SVFs”), such as e-wallets and prepaid cards; and (ii) the designation and oversight of Clearing and Settlement Systems, and Retail Payment Systems in Hong Kong. The arrangements of crypto-assets, especially those that are used for payment purposes, are somewhat akin to an SVF. Nevertheless, whether a crypto-asset constitutes an SVF as defined by the PSSVFO has to be determined on a case-by-case basis. Based on preliminary assessment, the consideration would generally depend on whether both of the following conditions are satisfied³²:

- (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 of the facility;
 - (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 of the facility.

If a crypto-asset, including stablecoin, fulfils the above parameters and constitutes the issue of an SVF in Hong Kong in accordance with the PSSVFO, it will be subject to a mandatory licensing regime administered by the HKMA, i.e. the issuer will need to comply with the PSSVFO plus other requirements (e.g. guidelines, practice notes, supervisory requirements) issued by the HKMA for licensing and ongoing supervision.

However, we note that the definition of SVF of the PSSVFO may not cover certain types of stablecoins and/or their activities as may be seen in the market. In layman terms, the two limbs of taking stored value by a facility issuer and the same issuer giving undertaking for making person-to-merchant (“P2M”) or person-to-person (“P2P”) payments using the stored value have to be met in order for a facility to be an SVF. Depending on the facts and circumstances, a stablecoin arrangement may involve different entities carrying out respective functions of stablecoin issuance and wallet operations and there may not be any undertaking by the issuer to use the stablecoin as a means of payment for any third party. This may render the stablecoin arrangement not an SVF even though when viewed in its totality, it operates in a manner similar to that of an SVF.

Due to the characteristics of stablecoins as explained in prior sections, and users and/or market players’ general differentiation of it from other types of crypto-assets, there is a perception that some stablecoins may be developing into a widely acceptable means of payment³³, i.e. payment-related stablecoins. Such payment-related stablecoins have a higher potential for being incorporated into the mainstream financial system or even day-to-day commercial and economic activities (by being a means of payment). Thus, we are considering expanding the

³² See section 2A of the PSSVFO.

³³ Be it for goods or services, general transfers, or even for purchasing another crypto-asset.

scope of the PSSVFO or introducing a new legislation to facilitate the implementation of the intended regulatory regime focusing on activities relating to such payment-related stablecoins (as further discussed in Section 5 below).

4.3. Non-backed crypto-assets such as security crypto-assets

These kinds of crypto-assets are highly speculative and volatile and many do not have any intrinsic value. They are typically used in speculative investments. There are also other risks associated with investing in crypto-assets, e.g. hacking risk, higher risks of ML/TF, and potential market manipulation.

With regard to provision of investment services in relation to VAs and VA-related investment products, there is a range of risks associated with investing in or holding of VAs by customers, and these risks are not reasonably likely to be understood by a retail investor. Hence, VA-related products are likely to be considered as complex products. Some VA-related products may be subject to various selling restrictions in Hong Kong or other jurisdictions. In any case, it would be necessary to impose additional investor protection measures to the distribution of VA-related products. In this connection, AIs are required to observe the guidance issued by the HKMA and the SFC from time to time.

For instance, in November 2018, the SFC issued a circular³⁴ to all intermediaries (including banks registered for conducting regulated activities under the Securities and Futures Ordinance (“SFO”) – registered institutions) regarding regulatory requirements and expected standards and practices in relation to the distribution of VA funds. In particular for VA funds not authorised by the SFC, intermediaries should only target clients who are professional investors as defined under the SFO; ensure suitability of the funds for the clients; assess whether the clients have knowledge of investing in VAs or related products; ensure reasonable concentration; develop an in-depth understanding of the fund, the fund manager and relevant counterparts; and provide sufficient information and prominent warning statements about VAs.

AIs intending to provide investment services related to VA are required to notify the HKMA and the SFC in advance. The HKMA and the SFC will continue to keep in view the evolving regulatory landscape globally, and the evolution of different types of investment products and investment activities in the market, in formulating investor-protection measures as and when necessary. The HKMA and the SFC are also working together to set out the supervisory expectations on the investor protection aspects of AIs’ provision of intermediary services to customers related to crypto-assets.

³⁴ See circular to intermediaries on “Distribution of virtual asset funds” at <https://apps.sfc.hk/edistributionWeb/gateway/EN/circular/intermediaries/supervision/doc?refNo=18EC77>.

5. Payment-related stablecoins

As mentioned in previous sections, some stablecoins may be perceived or have the potential to become a commonly acceptable means to make payment. However, they may not fall readily into the existing financial regulatory frameworks or the new VASP regime being proposed. This section aims to set out the HKMA's thoughts on a separate new regulatory framework on activities relating to stablecoins, along with several open-ended questions, so as to stimulate further industry discussion.

5.1. Risks posed by stablecoins and regulatory concern

Below is a list of key risks of stablecoins as commonly discussed in international fora. Noting the dynamic nature of the relevant development, the list is expected to evolve from time to time.



Figure 5: Key risk considerations in relation to stablecoins

(i) Financial stability risks

- *Payment integrity*: If stablecoins were commonly accepted as a means of payment, operational disruptions or failures in relation to these assets could have significant impacts on economic activity, normal functioning and public confidence in financial system. Indeed, given the critical role that money has been playing in day-to-day commercial and economic activities, if a stablecoin were to become a widely accepted means of payment, it is of paramount importance that such activities would not affect the public's confidence in, and the safety, efficiency, and soundness of payments in general.
- *Banking stability*: If financial institutions including banks were to increase their exposure to stablecoins, and/or play multiple roles in the relevant ecosystem (e.g. issuers, custodians), the integrity of the aforesaid ecosystem and players might have

an impact on the financial institutions' financial health, business model and stable operation. Among other things, there have been talks about having stablecoins as a substitute for bank deposits. Significant shift from bank deposits to funds held in relation to stablecoins could be an issue of concern to banking stability.

(ii) Monetary stability risks

- *Currency substitution:* Bitcoin has become a legal tender in El Salvador. While we do not envisage many other jurisdictions to adopt a similar approach, there has been ongoing discussion that stablecoins which are structured as pegging to a single or a basket of fiat currencies might in future evolve to substitute certain domestic fiat currencies particularly in jurisdictions where the value of domestic currency is unstable and payment infrastructures are not well developed.
- *Monetary policy transmission mechanism:* Stablecoins may be backed by a single or a basket of currencies, and it is possible that some may choose Hong Kong dollar as a backing currency. The issuance and redemption of such stablecoins, if sizable, may affect interbank Hong Kong dollar demand and supply. To an extreme, upon rapid and massive redemption of such stablecoins for a foreign currency, the stablecoins operators may need to sell the backed Hong Kong dollar against the foreign currency to meet the redemption requests.

(iii) Settlement risks

- *Settlement finality:* Settlement finality generally means the discharge of an obligation by a transfer of funds and transfer of securities that have become irrevocable and unconditional. Such concept is of paramount importance in any payment system as it could protect the integrity of transfer orders settled through the system. In the world of stablecoins, “forks” may reverse technical settlement and create a misalignment with legal finality. Stablecoins which are used as a payment instrument need to have measures in place to address the potential losses that stem from such misalignment.

(iv) User protection

- *Recourse:* Users might suffer losses from operation disruptions or failures of a stablecoin arrangement with no or limited recourse unless the recourse mechanism is legally and clearly stipulated.
- *Information adequacy:* Given the complexity and novelty of different stablecoins, users might not fully understand the risks associated with them. Moreover, users or investors require sufficient and understandable information and disclosures about the nature of these assets, and rights as well as risks associated with them before making an informed decision on the relevant activities.

(v) **Financial crime and cyber risks**

- *ML/TF and other illicit activities*: Similar to other crypto-assets, stablecoins may be prone to cyber threats and used as a means of payment demanded in ransomware attacks, posing risks to both users of stablecoins and the wider community. This is especially so as stablecoins may be held and changed hands anonymously and easily (even across borders) through the internet or other means.

(vi) **International compliance**

- *Compliance with relevant standards and best practices*: It is necessary for Hong Kong as an international financial centre to play our role in maintaining global financial stability. Among other things, it is necessary to comply with internationally agreed standards and best practices where applicable.

(vii) **Regulatory arbitrage**

- *Need to update our regulatory regime*: Regulatory inaction is not appropriate noting multiple risks brought about by crypto-assets as articulated above. Timely update of our regulatory regime is necessary so that Hong Kong will not be a safe haven for crypto-assets because of under-regulation.

5.2. Objectives and guiding principles

In light of the aforementioned risks, the HKMA is of the view that appropriate regulatory treatment should be applied to stablecoins, grounded in the following objectives and guiding principles.

(i) **Objectives**

- *Ensuring monetary and financial stability*: maintain appropriate safeguard and ensure strong infrastructure will be put in place to address potential monetary and financial stability risks posed by stablecoins.
- *Protection of users*: ensure users are subject to appropriate level of protection.
- *Minimising risk of regulatory arbitrage*: adopt a technology-neutral approach in our supervisory work and ensure the regulation adheres to international principles and standards that are applicable to stablecoins to address potential regulatory arbitrage across jurisdictions.

(ii) **Guiding Principles**

- *Agile regulatory approach*: stay nimble and make sure our regulatory regime could accommodate evolving market development and relevant international discussions.
- *Risk-based and proportionate*: apply regulation to tackle the key risks posed by stablecoins in a proportionate manner, in particular giving priority to attending to areas that pose higher degree of risks, while allowing room for financial innovation.

5.3. Policy direction

We set out in the above sections our views on the latest developments of stablecoins, and policy inclination to establish a regulatory regime to cover them. While the **need** to regulate is well justified, and the **tool** to regulate (which is primarily a technical question about whether a new legislation or amendments to existing legislation(s) is/are needed) could be decided at a later stage, we consider it an opportune time to gauge the feedback of the industry and the public on the **scope** of our intended regulation.

In this section, we have set out a list of relevant questions and our views, and would welcome feedback on these questions.

Discussion question 1

Should we regulate activities relating to all types of stablecoins or give priority to those payment-related stablecoins that pose higher risks to the monetary and financial systems while providing flexibility in the regime to make adjustments to the scope of stablecoins that may be subject to regulation as needed in the future?

The HKMA's views

Having balanced relevant factors, and in line with the proportionate principles identified above, we recommend a risk-based approach, under which we intend to focus on activities related to payment-related stablecoins at this stage. Among other things, our particular attention would be placed on asset-linked stablecoins (e.g. to a single fiat currency) rather than algorithm-based stablecoins at this stage, noting that (i) currently, existing stablecoins are mostly asset-linked and predominantly pegged to USD; and (ii) compared to algorithm-based stablecoins, asset-linked stablecoins appear to be more prevalent in the market and more likely to be perceived as having the potential to develop into a widely used and acceptable means of payment, thus having a higher potential for being incorporated into the mainstream financial system.

That said, we do not rule out the possibility of regulating other types of stablecoins including but not limited to algorithm-based ones in the future (e.g. having regard to the risks that they may pose to the monetary and financial stability of Hong Kong). Flexibility should therefore be built in the regime to ensure that adjustments could be made readily as needed in the future.

Discussion question 2

What types of stablecoin-related activities should fall under the regulatory ambit, e.g. issuance and redemption, custody and administration, reserves management?

The HKMA's views

By reference to a list of activities of a stablecoin arrangement and associated vulnerabilities identified by the FSB³⁵, we propose that the following activities will need to be licensed by the HKMA either by expanding the scope of the PSSVFO or introducing a new legislation. Given that it is common for more than one entity to be involved in a stablecoin arrangement, it is possible for multiple entities to be required to seek authorisation from the HKMA in a stablecoin arrangement. This is not an exhaustive list and may be further expanded in due course.

- (i) issuing, creating or destroying stablecoins
 - the activity of the issuer minting and burning of stablecoins
- (ii) managing reserve assets to ensure stabilisation of the stablecoin value
 - the activity of managing the reserve assets that are backing the value of the stablecoins and providing custody/trust for these assets
- (iii) validating transactions and records
 - the activity of authorising or verifying the validity of transactions and records
- (iv) storing the private keys providing access to stablecoins
 - the activity of safe-keeping of keys used to digitally sign transaction instructions on behalf of stablecoin holders
- (v) facilitating the redemption of stablecoins
 - the activity of facilitating the stablecoin holders to redeem stablecoins for fiat currencies or other assets
- (vi) transmission of funds
 - the activity of ensuring the correct and final settlement of transactions to minimise default risk of counterparties
- (vii) executing transactions in stablecoins
 - the activity of conducting transactions on behalf of others

Discussion question 3

What kind of authorisation and regulatory requirements would be envisaged for those entities subject to the new licensing regime?

The HKMA's views

By reference to the high-level recommendations of the FSB and the CPMI-IOSCO's proposed application of the PFMI to stablecoin arrangements, the HKMA considers that the

³⁵ As noted in the reports by the G7 Working Group on Stablecoins and the FSB, a stablecoin arrangement to be useable as a means of payment and/or store of value typically provides three core functions: (i) issuance, redemption and stabilisation of the value of the coins; (ii) transfer of coins; and (iii) interaction with coin users for storing and exchanging coins. In some cases, all three functions are conducted by a single entity, while in others, the functions are unbundled, that is, each function is managed by a different entity or person.

following high-level regulatory requirements would be necessary for stablecoin arrangements.

In the process, our intention is to apply these requirements to the relevant stablecoin-related activities using a risk-based approach, rather than in a one-size-fits-all manner. As it is common for multiple entities to be involved in different parts of a stablecoin arrangement, such entities could be subject to part or all of the requirements, depending on the actual types of services they offer.

- (i) Authorisation requirements
 - As mentioned in Q1, certain activities crucial to the operation of a stablecoin arrangement will need to be authorised by the HKMA before they can be undertaken. The HKMA will further develop these authorisation requirements in law and such requirements are expected to be complied with by the relevant licensed institution on an ongoing basis after authorisation to ensure the safety and soundness of the scheme at all times.
- (ii) Prudential requirements, including adequate financial resources and liquidity requirements
 - Requirements relating to adequacy and effective management of capital and liquidity, to protect users and financial stability.
- (iii) Fit and proper requirements on management and ownership
 - Requirements relating to the fitness and propriety of the controllers (including shareholder controllers and indirect controllers) and senior management of stablecoin arrangements.
- (iv) Maintenance and management of reserves of backing assets
 - Requirements relating to the nature and sufficiency of the stablecoin arrangement's reserve assets to support and stabilise the value of the outstanding stock of stablecoins and also requirements relating to the clarity and enforceability of the legal claims, titles, interests and other rights of holders of the stablecoin in relation to the issuer of the stablecoin and the reserve assets backing it.
- (v) Systems, controls, governance and risk management requirements
 - Requirements relating to a sound risk-management framework for comprehensive management of legal, credit, liquidity, operational, AML and other risks of the stablecoin arrangement. The stablecoin arrangement's ownership structure and operation should allow for clear and direct lines of responsibility and accountability, particularly if it is owned and operated by one or more identifiable and responsible legal entities.
- (vi) AML/CFT requirements
 - Requirements relating to the proper implementation of AML/CFT rules.
- (vii) Redemption requirements
 - The clarity, robustness, and timeliness of the process for converting the stablecoin into other liquid assets.
- (viii) Financial reporting and disclosure
 - Requirements relating to the firms' disclosures to regulator(s) and users and also requirements relating to the rights that firms should provide towards users.
- (ix) Safety, efficiency and security requirements

- Requirements relating to safeguards against cyber-security, operational and business continuity risks etc.
- (x) Settlement finality
 - A stablecoin arrangement should provide clear and final settlement regardless of the operational settlement method used.

Discussion question 4

What is the intended coverage as to who needs a licence under the intended regulatory regime?

The HKMA's views

Our view is that no person shall carry out the activities described in Q2 above in Hong Kong or actively market to the public of Hong Kong such activities as a business unless it is an entity incorporated in Hong Kong and holds a relevant licence granted by the HKMA. In other words, a foreign company/group which intends to carry out, as a business, the relevant regulated activities in Hong Kong or actively markets to the public of Hong Kong such activities will need to incorporate a company under Hong Kong law, and the Hong Kong-incorporated company would be the entity to apply to the HKMA for a licence and hold that licence if and when granted. A mere Hong Kong branch or office of a foreign corporation is regarded as not meeting the requirement of “an entity incorporated in Hong Kong”. This requirement aims to enable the HKMA to exercise effective regulation on the relevant entities.

Discussion question 5

When will this new, risk-based regime on stablecoins be established, and would there be regulatory overlap with other financial regulatory regimes in Hong Kong, including but not limited to the SFC's VASP regime, and the SVF licensing regime of the PSSVFO?

The HKMA's views

As a first step, we would like to seek feedback by way of this paper. We will take into account the feedback and consider the next steps including assessing the need to issue further documents on specific aspects of the regulatory framework in 2022/23. We aim to introduce the new regime no later than 2023/24.

It should be noted that the proposed way forward is to ensure risks that may be posed by stablecoins are properly addressed through an appropriate regulatory response. The HKMA is aware that there are multiple financial regulatory regimes in Hong Kong as administered by different financial regulators. Hence, in developing the regulatory regime for stablecoins, the HKMA will work closely with other stakeholders in the HKSAR Government, other financial regulators as well as relevant interested parties to identify possible areas for further collaboration and coordination, and to avoid regulatory arbitrage. These areas would cover possible cases which may be subject to regulation by more than one local financial authority.

Discussion question 6

Stablecoins could be subject to run and become potential substitutes of bank deposits. Should the HKMA require stablecoin issuers to be AIs under the Banking Ordinance, similar to the recommendations in the Report on Stablecoins issued by the US President's Working Group on Financial Markets?

The HKMA's views

The HKMA will draw reference from the relevant international standards and recommendations such as those put forth by the FSB and the BIS for stablecoins (e.g. those set out in Q2 and Q3). Given the payment-related nature of stablecoin arrangements, we expect that rules and requirements under the proposed regime would take relevant aspects of Hong Kong's current approach to SVF and payment regulation at a minimum to avoid regulatory arbitrage. Depending on the systemic implication of the stablecoin arrangements, under a risk-based approach, they should be required to be subject to higher prudential requirements (e.g. in terms of capital and liquidity requirements) to ensure protection of users.

Discussion question 7

Would the HKMA also have plan to regulate unbacked crypto-assets given their growing linkage with the mainstream financial system and risk to financial stability?

The HKMA's views

There is a need to continue monitoring the various risks that may be posed by them and take actions as necessary. In May 2021, the HKSAR Government announced that a VASP licensing regime would be implemented by amending the existing AMLO. Certain types of VA activities will be brought under such licensing regime.

As for the HKMA, in discharging its functions of maintaining the monetary, financial and banking stability of Hong Kong, we will soon provide AIs with more detailed regulatory guidance in relation to AIs' business interface with and provision of intermediary services to customers related to crypto-assets. We will continue to monitor the development of crypto-assets closely and maintain a close dialogue with other stakeholders in the HKSAR Government and other financial regulators as well as the relevant international standard-setting bodies on the need to strengthen the regulation of such assets as needed in light of relevant international regulatory developments and to avoid any regulatory arbitrage in these activities.

Discussion question 8

For current or prospective parties and entities in the stablecoins ecosystem, what should they do before the HKMA's regulatory regime is introduced?

The HKMA's views

We encourage current or prospective players in the stablecoins ecosystem to respond to this paper and submit relevant views to us, so that we could take the feedback into account when formulating the regulatory framework. With such input, we aim to finalise our next steps as soon as possible, and introduce the new regime no later than 2023/24. In the meantime, the HKMA will continue to supervise AIs' activities in relation to crypto-assets and implement the SVF licensing regime according to the prevailing supervisory powers and policies.

6. Conclusion and way forward

While crypto-assets have not yet posed material risks to financial stability, it may not be the case for very long as there is increasing linkage of such assets with traditional financial system which poses greater risks if the asset class continues to develop at pace. Hence, bringing crypto-assets within the regulatory perimeter in an appropriate manner would help address the various risks posed to users and the financial system while embracing the potential benefit of financial innovations. Many regulators around the world have begun the work. The HKMA is of the view that adopting a risk-based approach would be the most suitable way to take things forward.

We are inviting stakeholders to provide responses to the discussion questions set out above, share views on our proposed regulatory approach, or provide views on any issue relevant to the topic. Please submit your responses on or before 31 March 2022 to stablecoin_feedback@hkma.gov.hk.

The HKMA may, as appropriate, reproduce, quote, summarise and publish the written comments received, in whole or in part, in any form and use without seeking permission of the contributing parties. Names of the contributing parties and their affiliations may be referred to in other documents we publish and disseminate through different means. If any contributing parties do not wish to have their names or affiliations disclosed, please expressly state so in their written comments. Any personal data provided will only be used by the HKMA, other government departments/agencies for purposes which are related to this Discussion Paper.

7. References

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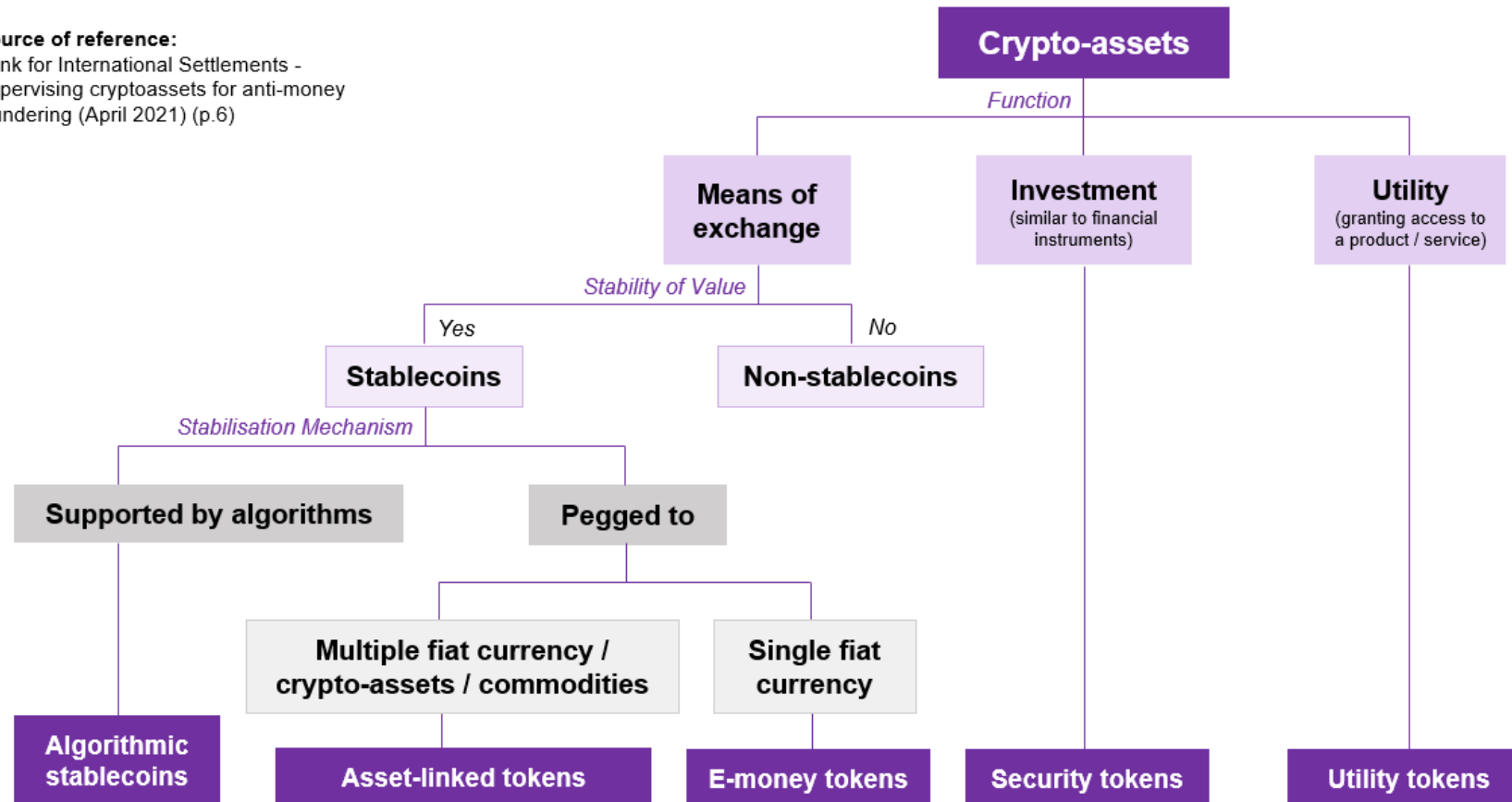
HM Treasury (2021): *UK regulatory approach to cryptoassets and stablecoins: Consultation and call for evidence*, January

8. Annexes

Classification of crypto-assets

Source of reference:

Bank for International Settlements -
Supervising cryptoassets for anti-money
laundering (April 2021) (p.6)



High-level recommendations set out by the FSB in October 2020

1. Authorities should have and utilise the necessary powers and tools, and adequate resources, to comprehensively regulate, supervise and oversee a GSC arrangement and its associated functions and activities, and enforce relevant laws and regulations effectively.
2. Authorities should apply comprehensive regulatory, supervisory and oversight requirements and relevant international standards to GSC arrangements on a functional basis and proportionately to their risks.
3. Authorities should cooperate and coordinate with each other, both domestically and internationally, to foster efficient and effective communication and consultation in order to support each other in fulfilling their respective mandates and to ensure comprehensive regulation, supervision, and oversight of a GSC arrangement across borders and sectors.
4. Authorities should ensure that GSC arrangements have in place a comprehensive governance framework with a clear allocation of accountability for the functions and activities within the GSC arrangement.
5. Authorities should ensure that GSC arrangements have effective risk management frameworks in place especially with regard to reserve management, operational resilience, cyber security safeguards and AML/CFT measures, as well as ‘fit and proper’ requirements.
6. Authorities should ensure that GSC arrangements have in place robust systems for collecting, storing and safeguarding data.
7. Authorities should ensure that GSC arrangements have appropriate recovery and resolution plans.
8. Authorities should ensure that GSC arrangements provide users and relevant stakeholders with comprehensive and transparent information necessary to understand the functioning of the GSC arrangement, including with respect to its stabilisation mechanism.
9. Authorities should ensure that GSC arrangements provide legal clarity to users on the nature and enforceability of any redemption rights and the process for redemption, where applicable.
10. Authorities should ensure that GSC arrangements meet all applicable regulatory, supervisory and oversight requirements of a particular jurisdiction before commencing any operations in that jurisdiction, and adapt to new regulatory requirements as necessary.

Source: FSB (2020)