Singapore's Emerging Regulatory Approach to Stablecoins

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The Monetary Authority of Singapore's vision to develop "an innovative and responsible digital asset ecosystem" has placed stablecoins firmly on the regulatory agenda. Stablecoins, as cryptoassets designed to maintain a stable value, are regarded as having the potential to serve as a tenable medium of exchange for the digital asset ecosystem — so long as they are well-regulated and securely backed. Both this vision of a flourishing digital asset ecosystem, as well as the specter of the instability wrought by the recent algorithmic stablecoin collapse, speak to the need for sound regulation of stablecoins. This article therefore seeks to critically analyze Singapore's emerging regulatory approach to stablecoins and stablecoin-related activities. First, it examines the regulatory concerns implicated by stablecoins. Second, it critically assesses the regulatory (and briefly, the legal) characterizations of stablecoins, focusing on the previous, present and proposed regulatory characterizations under the Payment Services Act 2019; and on potential alternative characterizations under banking and securities laws. Third, it discusses the current and proposed regulation of stablecoin-related activities and stablecoin arrangements, and suggests some further considerations for regulatory reform. This article aims, from a local perspective, to provide a comprehensive account of and venture suggestions for the continuing development of Singapore's regulatory approach to stablecoins; and from an international perspective, to present a case study of the regulatory approach in one jurisdiction, in the hopes of providing some insights for other jurisdictions that are similarly contending with the conundrum of how best to regulate stablecoins.

La vision de l'autorité monétaire de Singapour de l'édification d'un « [TRADUCTION] écosystème d'actifs numériques novateur et responsable » accorde indéniablement à la cryptomonnaie stable une place dans le programme réglementaire. La cryptomonnaie stable, en tant que cryptoactif conçu pour

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conserver une valeur stable, est vue comme ayant le potentiel de servir comme instrument d'échange tenable pour les besoins de l'écosystème d'actifs numériques pour autant qu'elle soit bien réglementée et repose sur des garanties fiables. Tant cette vision d'un écosystème d'actifs numériques florissant que le spectre de l'instabilité causée par l'effondrement algorithmique récent de la cryptomonnaie stable soulignent le besoin d'une saine réglementation de cette cryptomonnaie. Le présent article propose ainsi une analyse critique de l'approche réglementaire émergente de Singapour face à la cryptomonnaie stable et aux activités qui y sont liées. Premièrement, il examine les enjeux réglementaires que soulève la cryptomonnaie stable. Deuxièmement, il procède à une évaluation critique des caractérisations réglementaires (et, brièvement, des caractérisations légales) de la cryptomonnaie stable, se concentrant sur les caractérisations réglementaires antérieures, actuelles et proposées en vertu de la loi Payment Services Act 2019, ainsi que sur d'autres caractérisations possibles en vertu des lois bancaires et des lois sur les valeurs mobilières. Troisièmement, il traite de la réglementation actuelle et proposée des activités liées à la cryptomonnaie stable et des ententes portant sur la cryptomonnaie stable, et il propose quelques autres considérations en vue d'une réforme réglementaire. Cet article cherche, d'un point de vue local, à donner un compte-rendu exhaustif de l'approche réglementaire de Singapour face à la cryptomonnaie stable et à hasarder des suggestions visant à faire progresser cette approche. Il cherche en outre, d'un point de vue international, à présenter une étude de cas de l'approche réglementaire adoptée dans un territoire, dans l'espoir d'offrir un éclairage à d'autres territoires qui font également face au dilemme de comment réglementer au mieux la cryptomonnaie stable.

Note: This article was completed prior to the Monetary Authority of Singapore's finalization of its stablecoin regulatory framework on 15 August 2023.¹ The finalized framework is substantially similar to the proposed framework discussed in this article, but includes certain adjustments² and clarifications.³

¹ MAS, "Response to Public Consultation on Proposed Regulatory Approach for Stablecoin-related Activities", P009-2022-15 August 2023 (Singapore: MAS, 2023).

² See e.g. *ibid.* at para. 2.18 (on the adoption of the label "MAS-regulated stablecoin"); para. 2.14 read with para. 2.18 (on the exclusion of tokenized bank liabilities from the scope of the new framework, and therefore, presumably, from classification under the label of "MAS-regulated stablecoin"); para. 3.8 (on holding of reserve assets by overseas-based custodians); para. 3.16 (on requiring independent audits in relation to the solvency requirement); para. 5.4 (on requiring MAS-regulated stablecoins to be issued solely out of Singapore); and para. 6.11 (on permitting the commingling of customers' MAS-regulated SCS in an aggregated pool).

³ See e.g. *ibid.* at para. 4.3 (clarifying that the timely redemption requirement applies only when redeeming directly from the issuer) and para. 8.2 (confirming that MAS-regulated stablecoins will not qualify for deposit insurance coverage).

1. INTRODUCTION

The Monetary Authority of Singapore (MAS)'s vision to develop "an innovative and responsible digital asset ecosystem"⁴ has placed stablecoins firmly on the regulatory agenda.⁵ Stablecoins are typically understood as referring to cryptoassets that are designed to maintain a stable value, in contrast with the volatility of so-called first-generation cryptocurrencies.⁶ As such, MAS has expressed that it regards stablecoins as having the potential to serve as a tenable medium of exchange for the digital asset ecosystem — so long as they are well-regulated and securely backed.⁷ Indeed, the collapse in value of TerraUSD, the purported algorithmic stablecoin offered by Singapore-based Terraform Labs, was a potent example illustrating the importance of that proviso, especially with the effects of that collapse cascading across the digital asset ecosystem and precipitating the "crypto winter" of 2022.⁸ Both this vision of a flourishing digital asset ecosystem, as well as the specter of the instability wrought by the recent algorithmic stablecoin collapse, speak to the need for sound regulation of stablecoins.

The existing literature has extensively addressed these key issues of the regulation⁹ and more recently, the private law¹⁰ of stablecoins. This article seeks to contribute to the literature and the policy discussion by homing in on and critically analyzing the experience and regulatory approach of one particular jurisdiction: Singapore. Singapore presents an especially interesting case study because of the vibrancy of its digital asset landscape, its position as a global

⁴ See e.g. Parliamentary Debates Singapore: Official Report, vol. 95 (1 August 2022) (Tharman Shanmugaratnam, Senior Minister and Coordinating Minister for Social Policies); MAS, "Financial Services Industry Transformation Map 2025", (20 September 2022), online: < https://www.mas.gov.sg/development/financial-servicesindustry-transformation-map-2025 > .

⁵ MAS, "Consultation Paper on Proposed Regulatory Approach for Stablecoin-Related Activities", P009-2022 (Singapore: MAS, 2022) at para. 2.1 [MAS, Stablecoin-Related Activities].

⁶ MAS, "Consultation on the Payment Services Act 2019: Scope of E-money and Digital Payment Tokens", P016-2019 (Singapore: MAS, 2019) at para. 2.2 [MAS, Scope of Emoney].

⁷ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 2.3.

⁸ Antonio Briola et al., "Anatomy of a Stablecoin's Failure: The Terra-Luna Case" (2023) 51 Finance Res. Lett.; Calvin Yang, "Crypto Winter is Here: Prices Tumbling, Investors Quitting as Major Players Collapse", CNA (21 December 2022), online: < https://www.channelnewsasia.com/business/crypto-winter-prices-tumble-investors-quit-companies-collapse-3159521 > .

⁹ Douglas Arner, Raphael Auer & Jon Frost, "Stablecoins: Risks, Potential and Regulation" (2020) Bank for International Settlements Working Paper No. 905; Dirk A Zetzsche, Ross P Buckley & Douglas W Arner, "Regulating Libra" (2021) 41:1 Oxford J. Leg. Stud. 80.

¹⁰ Kara Bruce, Christopher K Odinet & Andrea Tosato, "The Private Law of Stablecoins" (2022) 54:4 Ariz. St. L.J. 1073.

financial center and the regulator's relatively dynamic approach. This article therefore has two principal aims. From a local perspective, with respect to potential readers in Singapore, it seeks to proffer a comprehensive account of and to critically assess Singapore's regulatory approach so far, and to venture, as appropriate, certain suggestions for its further development and reform. From an international perspective, with respect to potential readers outside Singapore, this article seeks to present a case study of how the regulatory approach to stablecoins has developed, and is continuing to develop, in one particular jurisdiction; and to thereby hopefully provide some insights — whether as to policies to consider or pitfalls to avoid — for other jurisdictions that are similarly contending with the conundrum of how best to regulate stablecoins. This article also seeks to contribute to the wider discussion on global regulatory developments pertaining to stablecoins. In its analysis, it identifies some local factors that may help explain current regulatory heterogeneities, but also highlights considerations and practices that may be of common relevance across all jurisdictions.

To give a roadmap, Part 2 provides a brief overview of stablecoins, to contextualize the discussion that follows. Part 3 then examines the regulatory concerns implicated by stablecoins. Next, Part 4 critically assesses the regulatory (and briefly, the legal) characterizations of stablecoins — focusing on the previous, present and proposed characterizations under the Payment Services Act 2019; as well as potential alternative characterizations under banking and securities laws. Part 5 then discusses the current and proposed regulation of stablecoin-related activities and stablecoin arrangements, and suggests some further considerations for regulatory reform.

2. OVERVIEW OF STABLECOINS

To begin, it is apposite to briefly define a "stablecoin," particularly as the term has no universally agreed definition. Indeed, the label is often regarded as a misnomer or merely a marketing term, an aspirational rather than an actual description — with various international bodies referring to these as "so-called "stablecoins,"¹¹ and economist Paul Krugman memorably describing a purported algorithmic stablecoin as "neither stable nor a coin."¹² For present purposes, however, this article uses a working definition adapted from the Financial Stability Board (FSB),¹³ and which has been cited by MAS, of

¹¹ FSB, "Regulation, Supervision and Oversight of "Global Stablecoin" Arrangements — Final Report and High-Level Recommendations" (2020) FSB at 1 [FSB, Final Report]; FATF, "Updated Guidance for a Risk-Based Approach — Virtual Assets and Virtual Asset Service Providers" (2021) FATF at para. 18 [FATF, Updated Guidance].

¹² Paul Krugman, "From the Big Short to the Big Scam", N. Y. Times (6 June 2022), online: < https://www.nytimes.com/2022/06/06/opinion/cryptocurrency-bubblefraud.html > .

¹³ FSB, Regulatory Issues of Stablecoins (2019) at 1 [FSB, Reguatory Issues].

stablecoins as cryptoassets that are "designed to maintain a stable value relative to another asset . . . or a basket of assets," and that may be collateralized by assets (such as currencies, commodities or other cryptoassets) or supported by algorithmic means.¹⁴

Several taxonomies of stablecoins have been proposed.¹⁵ This article, again adapting FSB's approach,¹⁶ differentiates primarily between two types of stablecoins: (a) asset-linked stablecoins, which purportedly link stablecoins to financial or physical assets; and (b) algorithmic stablecoins, which attempt to achieve price stability by algorithmically adjusting supply depending on changes in demand. Asset-linked stablecoins can be further differentiated on the basis of the type of asset(s) to which they are linked. These include: (i) currency-linked stablecoins, encompassing single-currency stablecoins (such as Tether, Pax Dollar or USD Coin, with issuers of the latter two stablecoins or their related corporations being licensed or holding in-principle licensing approval in Singapore¹⁷) or multi-currency stablecoins (such as an iteration of Facebook's Libra¹⁸); (ii) commodity-linked stablecoins (such as the defunct Singapore-based gold-linked Digix¹⁹); and (iii) cryptoasset-collateralized stablecoins (such as Dai, which was initially backed only by Ethereum²⁰). Moreover, a notable label is "global stablecoins," referring to widely-adopted stablecoins with potential for cross-border reach and use across several jurisdictions (of which Facebook/ Meta's proposed Libra/Diem was perhaps the quintessential example).²¹

The first stablecoins emerged in 2014, by some accounts, in response to the evolutionary pressures of a need for more reliable means of payment,

¹⁴ MAS, Scope of E-money, *supra* note 6 at para. 2.2.

¹⁵ See e.g. FSB, Final Report, *supra* note 11 at 9-10; Alexander Lipton, "Toward a Stable Tokenized Medium of Exchange" in Chris Brummer, ed., *Cryptoassets: Legal, Regulatory, and Monetary Perspectives* (USA: Oxford University Press, 2019) at 100—107.

¹⁶ FSB, Final Report, *supra* note 11 at 9-10.

¹⁷ MAS, "Financial Institutions Directory — Paxos Global Pte. Ltd.", online: < https:// eservices.mas.gov.sg/fid/institution/detail/408012-PAXOS-GLOBAL-PTE-LTD>; Hui Ting Yong, "Circle Internet Financial Gets In-Principle Approval to Offer Digital Payment Token Products", *Business Times [of Singapore]* (2 November 2022), online: < https://www.businesstimes.com.sg/startups-tech/garage/circle-internet-financialgets-principle-approval-offer-digital-payment-token>.

¹⁸ Michael Engle, "Libra Developers: The Path Forward" (16 April 2020), *Diem* (blog), online: < https://www.diem.com/en-us/blog/libra-developers-the-path-forward/>.

¹⁹ Blockchain.com, "The State of Stablecoins" at 41-42, online: < https://www.blockchain.com/ru/static/pdf/StablecoinsReportFinal.pdf >; Digix, "Customer Notice", online: < https://digixglobal.io/#/ >.

²⁰ "The Maker Protocol: MakerDAO's Multi-Collateral Dai System" at 3, online: <https://makerdao.com/whitepaper/White%20Paper%20-The%20Maker%20Protocol_%20MakerDAO%E2%80%99s%20Multi-Collateral%20Dai%20(MCD)%20-System-FINAL-%20021720.pdf>.

²¹ FSB, Final Report, *supra* note 11 at 1.

unhampered by the extreme price volatility that characterized earlier cryptocurrencies.²² Stablecoins purport to have several use cases. An initial and perhaps most prominent use case is as a "crypto-assets accessory function,"²³ where stablecoins are used, for example, to trade other cryptoassets or to provide collateral for cryptocurrency lending or derivatives transactions. Another use case for stablecoins is as a payment method, especially for faster and more cost-effective cross-border payments and settlements.²⁴ Yet another, albeit presently less likely, use case for stablecoins is as an alternative store of value.²⁵ Since their introduction, stablecoins have periodically attracted intense regulatory scrutiny, notably, upon Facebook's announcement of its proposed stablecoin in 2019,²⁶ and following the collapse of TerraUSD and the temporary snapping of Tether's US dollar peg in 2022.²⁷ 2023 also saw USD Coin, the second largest stablecoin, break its peg to the US dollar due to its significant exposure to the failed Silicon Valley Bank.²⁸ Somewhat counterintuitively, in this recent upheaval, contagion originated in the traditional banking sector and spread to the crypto sphere, rather than vice versa. Yet, even so, the de-pegging raises concerning questions about the market discipline of stablecoin issuers.²⁹

Attention has in recent years shifted to Central Bank Digital Currencies (CBDCs), by some accounts, as a response to the encroachment of privatelyissued stablecoins.³⁰ The questions raised by publicly-issued CBDCs are timely and important;³¹ however, they are in many ways distinct from questions

- ²⁴ World Bank Group, "Central Bank Digital Currencies for Cross-Border Payments: A Review of Current Experiments and Ideas" (2021) World Bank Group at 31.
- ²⁵ ECB Crypto-Assets Task Force, *supra* note 23 at 3.
- ²⁶ See e.g. FSB, *Reguatory Issues*, *supra* note 13.
- ²⁷ See e.g. Adam Samson, Scott Chipolina & Eva Szalay, "Crypto Industry Shaken as Tether's Dollar Peg Snaps", *Financ. Times* (12 May 2022), online: < https://www.ft.com/ content/5887ef43-d43a-4608-a1ac-aacc99f076b9 > .
- ²⁸ Scott Chipolina, "Crypto Group Circle Admits \$3.3bn Exposure to Failed Silicon Valley Bank", *Financ. Times* (11 March 2023), online: < https://www.ft.com/content/952f0c8fef27-48a2-8b21-40b2167bb220 > .
- ²⁹ Scott Chipolina, "Crypto's Brush with Disaster after SVB Collapse", *Financ. Times* (17 March 2023), online: < https://www.ft.com/content/f48999ce-6237-48e9-aaab-3926d0c80797 > .
- ³⁰ See e.g. MAS, "A Retail Central Bank Digital Currency: Economic Considerations in the Singapore Context" (Singapore: MAS 2021) at 16—19 [MAS, Economic Considerations].

²² Johannes Ehrentraud et al., "Fintech and Payments: Regulating Digital Payment Services and E-money" (2021), Bank for International Settlements, Financial Stability Institute Insights on Policy Implementation No. 33.

²³ European Central Bank (ECB) Crypto-Assets Task Force, "Stablecoins: Implications for Monetary Policy, Financial Stability, Market Infrastructure and Payments, and Banking Supervision in the Euro Area" (2020) ECB, ECB Occasional Paper Series 247 (2020) at 3, 17.

relevant to privately-issued stablecoins, and therefore are outside the scope of this article. The present focus is therefore on privately-issued stablecoins, the sound regulation of which remains, as recent events demonstrate, a relevant and troubling concern.

Having sketched, above, this very brief and general overview of stablecoins, Parts 3 to 5 will now discuss the specific regulatory approach to stablecoins in Singapore.

3. REGULATORY CONCERNS

As an initial step before delving into the regulatory characterization of stablecoins and treatment of stablecoin-related activities and arrangements, this Part 3 first identifies the underlying regulatory concerns that arise. These include concerns raised by both MAS and the international regulatory community. The latter perspective is prompted by Singapore's membership in and commitment to these international bodies, MAS's own prior references to their standards and guidance,³² and, most importantly, the potentially cross-border nature of stablecoin arrangements and the concern therefore with minimizing regulatory arbitrage or underlaps. This section hence highlights a range of key regulatory considerations, albeit at a high level and non-exhaustively.

Certain concerns are common not only to stablecoins, but also to the wider universe of digital payment tokens (DPTs), and are targeted by current regulation. A key regulatory concern is money laundering and terrorism financing (ML/TF) risks. Notably, these are the principal risks addressed under the DPT regulatory regime, which currently governs the majority of stablecoins in Singapore; and the Financial Action Task Force (FATF) (of which Singapore recently assumed presidency) has commented and provided guidance specifically on the applicability of its international standards to stablecoins.³³ ML/TF vulnerabilities of stablecoins include their anonymity or pseudonymity; their international reach; their potential for use in the layering of funds derived from criminal conduct; and their potential for mass adoption to the extent that

³¹ See e.g. Iris Chiu & Christian Hofmann, "Unlimited Central Bank Digital Currency: The Case for a Public Good in the Euro Area and its Regulatory (and Deregulatory) Implications for Modern Finance" (2023) 48:1 N.C.J. Intl. L. & Com. Reg. 1.

³² MAS, Scope of E-money, *supra* note 6 at 5; MAS, "Frequently Asked Questions on the Payment Services Act 2019", (7 March 2022) at 17, online: < https://www.mas.gov.sg/ regulation/faqs/faqs-on-payment-services-act-2019 > [MAS, Payment Services Act FAQ].

³³ FATF, Updated Guidance, *supra* note 11 at 18, 33-35, 38-39, 46-47, 75; FATF, "FATF Report to the G20 Finance Ministers and Central Bank Governors on So-called Stablecoins" (2020) FATF at 11-15 [FATF, G20 Report]; FATF, "Money Laundering Risks from 'Stablecoins' and Other Emerging Assets" (18 October 2019) FATF, online: < https://www.fatf-gafi.org/publications/fatfgeneral/documents/statement-virtual-assets-global-stablecoins.html > ; FATF, "Targeted Update on Implementation of the FATF Standards on Virtual Assets and Virtual Asset Service Providers" (2022) FATF at para. 39.

they maintain value stability as compared with other more volatile DPTs.³⁴ Another concern is technology and cyber risks. In the context of stablecoin arrangements, concerns include whether cyber incidents might compromise the stablecoin ledger or cause disruption to wallets or trading platforms.³⁵ Together with ML/TF risks, these are the two primary categories of risks addressed by MAS's current DPT regulatory regime.³⁶

Other considerations are currently largely unaddressed by existing regulation in Singapore, but have drawn regulatory attention. Consumer protection is one such concern,³⁷ especially where retail consumers may have less access to professional advice, means to protect their own interests and ability to fully assess the risks of stablecoins.³⁸ This is especially so in the case of algorithmic stablecoins: if the stabilization mechanism is complex or not robust, and the price of such stablecoins fluctuates or even collapses (as was the case in the TerraUSD debacle), retail consumers may suffer harm from large and unexpected losses, which they may have less financial wherewithal to withstand, and which may be all the more unanticipated given the issuer's promises of value stability. MAS has proposed to address these concerns through consumer access and disclosure requirements³⁹ (though the adequacy of these proposed measures can be debated, as they will be in Part 5(a) below). Moreover, in the case of asset-linked stablecoins, user protection issues may arise if issuers choose to back these stablecoins with risky assets or to lend out these assets in hopes of achieving and retaining for themselves higher returns.⁴⁰ Such risks may be addressed, for instance, by secure reserve backing requirements, which MAS is currently considering.⁴¹ Besides the consumer and user protection concerns discussed above, investor protection is an additional and related concern of international organizations like the FSB and jurisdictions it has surveyed.⁴² This is especially a concern with respect to algorithmic stablecoins that are more prone to volatility. Yet, in this aspect, Singapore's approach somewhat departs from international trends. MAS generally frames its objectives not in terms of protecting investors, but in terms that they should be "well-informed and empowered," having primary responsibility to protect their own interests.⁴³ In framing a "basic philosophical question" for regulating cryptocurrencies, therefore, MAS's (then)

³⁴ FATF, G20 Report, *supra* note 33 at 7-9; FATF, Updated Guidance, *supra* note 11 at 17.

³⁵ FSB, Final Report, *supra* note 11 at 43-45.

³⁶ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.1.

³⁷ See e.g. FSB, Final Report, *supra* note 11 at 7.

³⁸ MAS, "Consultation Paper on Proposed Regulatory Measures for Digital Payment Token Services", P008-2022 (Singapore: MAS, 2020) at paras. 3.2-3.3 [MAS, Proposed Regulatory Measures].

³⁹ *Ibid.*, s. 3; MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 2.2, 4.12, 4.18.

⁴⁰ Arner, Auer & Frost, *supra* note 9 at 14.

⁴¹ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 4.13-4.16.

⁴² FSB, Final Report, *supra* note 11 at 7, 49.

Chairman has leaned toward having the regulator simply make extremely clear that a market is unregulated and investors enter on a "buyer beware" basis, rather than introducing regulation that potentially legitimizes inherently speculative assets.⁴⁴ This may help account for certain specificities of MAS's approach (as discussed further below).

Apart from these consumer and investor protection considerations, stablecoins also raise market integrity concerns. Though DPT transactions, in principle, involve varying degrees of decentralization, many transactions in fact take place through centralized exchanges, and DPT markets have been susceptible to unfair trading practices.⁴⁵ This may be particularly a concern with algorithmic stablecoins, whose value may be entirely premised on algorithmic adjustments to their supply. Market integrity is therefore a key consideration of the International Organization of Securities Commissions (which has devoted particular attention to the specific risks posed by stablecoins),⁴⁶ and a concern that MAS has recently begun seeking to address.⁴⁷

The foregoing regulatory considerations arise in relation to both stablecoins and DPTs (occasionally with certain nuances specific to the nature of stablecoins), but other regulatory considerations are more unique to stablecoins. One key objective is the value stability of stablecoins. The credibility of stablecoins as a medium of exchange is in large part conditional upon this quality, which purportedly distinguishes stablecoins from other more volatile DPTs.⁴⁸ Yet another concern is the risks arising from the insolvency of stablecoin issuers, and associated resolution and recovery considerations,⁴⁹ particularly where issuers hold assets intended to back asset-linked stablecoins. Issuer insolvency may, for instance, have user protection implications if holders are unable to redeem their stablecoins. MAS's recent public consultation attempts to address both these value stability and issuer solvency concerns.⁵⁰

- ⁴⁵ MAS, Proposed Regulatory Measures, *supra* note 38 at paras. 6.1-6.2.
- ⁴⁶ The Board of the International Organization of Securities Commissions (IOSCO), "Global Stablecoin Initiatives — Public Report", (2020) IOSCO Board at 18—19; IOSCO Board, "Consultation Report in Policy Recommendations for Crypto and Digital Asset Markets", (2023) IOSCO Board CR01/2023 (2023) at 41—46.
- ⁴⁷ MAS, Proposed Regulatory Measures, *supra* note 38 at paras. 6.1—6.5; MAS, "Consultation Paper on Proposed Measures on Market Integrity in Digital Payment Token Services", P008-2023 (Singapore: MAS, 2003) [MAS, Market Integrity].
- ⁴⁸ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 2.2-2.3, 3.2, 3.6, 4.13-4.18, Annex A.
- ⁴⁹ *Ibid.* at para. 4.21, Annex A; FSB, Final Report, *supra* note 11 at 33-34.
- ⁵⁰ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 4.13-4.18, 4.20-4.21.

⁴³ MAS, "Objectives and Principles of Financial Sector Oversight in Singapore", (Singapore: MAS, 2004) at para. 16.

⁴⁴ Royston Sim, "Very clear' cryptocurrencies have to be regulated to guard against money laundering: Tharman", *Straits Times* (19 January 2023), online: https://www.straitstimes.com/world/regulate-cryptocurrency-to-guard-against-money-laundering-davos-panel .

Finally, certain regulatory concerns are only more likely to arise if any stablecoins increase in scale and systemic importance to become true "global stablecoins." One such concern is the potential financial stability risks that such a stablecoin may pose to the financial system. For example, the FSB considered that if a global stablecoin were widely used as a store of value, then fluctuation in its value could significantly impact users' wealth; or if it were widely used as a medium of payment, then a disruption in the stablecoin arrangement could have adverse effects on economic activity or the functioning of the financial system.⁵¹ Systemic implications could also arise if stablecoin arrangements were to remove a notable proportion of the money supply and safe assets from the banking system.⁵² A related concern is monetary sovereignty, such as if global stablecoins interfere with central banks' abilities to effectively use monetary policy⁵³ or result in currency substitution. MAS has, for example, contemplated the vulnerability of the Singapore dollar to displacement by global digital currencies, envisioning a digital Singapore dollar as a potential way to mitigate this risk, albeit one MAS considers a "tail risk" at present.⁵⁴ Yet another concern is competition among market participants, and whether a global stablecoin arrangement might take advantage of its market dominance to deny access or otherwise cause harm to consumers and businesses.⁵⁵ These and other regulatory issues associated with the potential emergence of such "global stablecoins" gained particular priority on the regulatory agendas of national and international bodies 56 – MAS among them⁵⁷ — following Facebook's announcement of its proposed stablecoin Libra (later renamed Diem) in 2019.58 Since the cancellation of the Diem project in January 2022,⁵⁹ these concerns have diminished in immediacy. However, they do continue to have relevance, especially insofar as the potential remains for Big Tech or incumbent financial institutions to pivot into this space, together with their existing user and customer bases.

⁵¹ FSB, Final Report, *supra* note 11 at 13-14.

⁵² Arner, Auer & Frost, *supra* note 9 at 16.

⁵³ Emilios Avgouleas & William Blair, "The Concept of Money in the 4th Industrial Revolution — A Legal and Economic Analysis" (2020) 1 Sing. J.L.S. 4 at 20.

⁵⁴ MAS, Economic Considerations, *supra* note 30 at 4, 16–17; MAS, "The Future of Money, Finance and the Internet" (9 November 2021), online: https://www.mas.gov.sg/news/speeches/2021/the-future-of-money-finance-and-the-internet [MAS, The Future of Money].

⁵⁵ FSB, Final Report, *supra* note 11 at 19.

⁵⁶ See e.g. FSB, *Reguatory Issues*, *supra* note 13 at 1, 3; FSB, Final Report, *supra* note 11 at 7.

⁵⁷ MAS, Scope of E-money, *supra* note 6 at paras. 2.3-2.4.

⁵⁸ Diem Association, "Introducing Libra" (18 June 2019), online: < https://www.diem.com/en-us/updates/introducing-libra/>.

⁵⁹ Diem Association, "Statement by Diem CEO Stuart Levey on the Sale of the Diem Group's Assets to Silvergate" (31 January 2022), online: < https://www.diem.com/enus/updates/stuart-levey-statement-diem-asset-sale/>.

4. REGULATORY AND LEGAL CHARACTERIZATIONS OF STABLECOINS

Having surveyed the pertinent underlying regulatory concerns, the discussion now turns to the characterization of stablecoins under Singapore law. Specifically, this Part assesses the previous, present and prospective regulatory characterizations of stablecoins under the Payment Services Act (in Part 4(a)), as well as potential alternative regulatory characterizations under the Banking Act⁶⁰ and the Securities and Futures Act⁶¹ (in Part 4(b)). The determination of a stablecoin's regulatory characterization is foundational, because it is from here that the next inquiry flows as to the applicable and appropriate regulatory treatment of stablecoin-related activities and stablecoin arrangements. At the same time, this determination is not straightforward, with regulators across different jurisdictions having arrived at an entire range of different regulatory classifications of stablecoins.⁶² MAS's own stance has shifted over the short span of the last five years, in line with product and market developments. Instead of solely and simply stating the current position, this section takes the time to trace these shifts — in part to give a comprehensive account of the journey so far, and in part to illustrate why it is that regulatory characterizations of stablecoins might vary so, not only across but also within jurisdictions. This Part then concludes by considering the legal characterizations of stablecoins as objects of property rights and as money (in Part 4(c)), focusing on their potential implications for the regulatory approach.

Preliminarily, two observations should be made, lest the mistakes be made of either an overly general or overly technical approach. The first observation is that although this article discusses the general approach to the regulatory characterization of stablecoins (as such term is understood and defined herein), "stablecoin" is not a legal term of art. The regulatory characterization of a given stablecoin therefore depends on its particular features and must be assessed on a case-by-case basis;⁶³ it is invariably a matter of substance, rather than of labeling. Another observation is that in addition to technical interpretation of the statutory language, other fundamental questions must also guide the present assessment of these regulatory characterizations. Notably, do stablecoins have a functional equivalence to and/or give rise to the same underlying regulatory concerns as any existing categories of regulated financial products, and if so, is it to such a degree as to justify similar regulatory treatment?⁶⁴ These considerations of functional equivalence and underlying policy therefore ultimately and necessarily guide this discussion.

⁶⁰ Banking Act 1970 (2020 Rev. Ed. Sing.) [BA].

⁶¹ Securities and Futures Act 2001 (2020 Rev. Ed. Sing.) [SFA].

⁶² FSB, Final Report, *supra* note 11 at 48.

⁶³ Ehrentraud et al., *supra* note 22 at para. 51.

⁶⁴ This point is owed to a conversation with Professor Gerard McMeel.

(a) Regulatory Characterizations under the Payment Services Act

At present, stablecoins are primarily regulated under the Payment Services Act, which came into operation in 2020. Even within the perimeters of the payment services regime and this relatively brief period of time, however, the regulatory characterization of stablecoins has evolved in response to changing developments. Previously, there was some indication that MAS may have regarded early currency-linked stablecoins as e-money under the payment services laws, or even as debentures under securities laws.⁶⁵ Presently, however, MAS now regards the majority of stablecoins (including currency-linked stablecoins) as "digital payment tokens" — a regulatory characterization that does not discriminate between stablecoins and other more volatile digital currencies.⁶⁶ Prospectively, moreover, MAS is considering introducing a new category of "MAS-regulated single-currency stablecoins," which would be subject to separate regulatory requirements.⁶⁷ (For a diagrammatic representation summarizing MAS's proposed approach, please refer to Diagram 1.) As this evolution suggests, the question of the appropriate regulatory characterization of stablecoins is by no means straightforward, and it is worthwhile to consider more closely the legislative interpretation and policy reasoning underlying the present and proposed regulatory positions.

(i) Previously: Single-currency stablecoins as "e-money"?

Early prominent stablecoins, such as Tether, tended to be single-currency stablecoins (abbreviated "SCS" in MAS publications), which had their value purportedly fixed by reference to a single fiat currency. Of the various types of stablecoins, MAS has acknowledged these as appearing "closest" to e-money.⁶⁸ Initially, therefore, a natural issue for consideration was whether such single-currency stablecoins should be characterized as e-money.

E-money is statutorily defined as:

"any electronically stored monetary value that — (a) is denominated in any currency, or pegged by its issuer to any currency; (b) has been paid for in advance to enable the making of payment transactions through the use of a payment account; (c) is accepted by a person other than its issuer; and (d) represents a claim on its issuer. .."⁶⁹

By this definition, e-money is distinguished — particularly from DPTs — by certain features, two of which have been highlighted by MAS. First, e-money is defined as electronically stored monetary value and described by MAS as a

⁶⁵ MAS, "A Guide to Digital Token Offerings [version updated on 30 November 2018]", (Singapore: MAS, 2018) at 19 [MAS, Guide to Digital Token Offerings (2018 Version)].

⁶⁶ MAS, Payment Services Act FAQ, *supra* note 32 at paras. 23.1-23.6.

⁶⁷ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 4.9.

⁶⁸ MAS, Payment Services Act FAQ, *supra* note 32 at para. 23.2.

⁶⁹ Payment Services Act 2019 (2020 Rev. Ed. Sing.), s. 2(1) [PS Act].

"digital representation of a single fiat currency"; it therefore is encompassed within the Act's conception of "money."⁷⁰ Correspondingly, e-money is defined as either denominated in, or pegged by its issuer to, a legal tender currency. Second, e-money represents a claim on its issuer. The statutory definition therefore clearly disqualifies from classification as e-money stablecoins that reference a basket of currencies (multi-currency stablecoins), reference other assets (commodity or other asset-linked stablecoins) or purportedly rely on algorithms for value stabilization (algorithmic stablecoins).⁷¹ However, the position regarding single-currency stablecoins was less clear. At first glance, single-currency stablecoins — often described in layperson terms as "pegged" to a single fiat currency — might appear to easily clear this definitional hurdle. Indeed, in late 2018, MAS presented an example of a "Token K," which resembles a single-currency stablecoin in that it "aims to achieve a relatively constant price . . . by pegging its value to the US dollar," is fully backed by US dollar electronic deposits and entitles holders to a right of redemption against the issuer; MAS's initial assessment, at that time, was that such a token may be considered e-money.⁷²

The regulatory position, however, has since shifted. In 2022, MAS categorically stated that it views single-currency stablecoins differently from emoney.⁷³ The regulator elaborated that there are two circumstances in which it would regard a single-currency stablecoin as not "pegged by its issuer to any currency" (as the statutory definition requires), and therefore, as not constituting e-money. The first circumstance is where the exchange rate between the stablecoin and the referenced fiat currency might fluctuate when the stablecoin is traded or offered by third-party service providers (such as exchanges or trading platforms), such that the exchange rate, in MAS's estimation, is in this sense "not fixed." The second circumstance is where holders of the stablecoin are able to use it without necessarily having a contractual relationship or account with the stablecoin issuer, such as through the use of private wallets or third-party service providers.⁷⁴ Additionally, MAS has acknowledged that stablecoins may be structured such that users' trust is secured even without users having a claim on the issuer, as the statutory definition of e-money also requires.⁷⁵ Insofar as the vast majority of single-currency stablecoins are likely to be subject to such (even if minor) price fluctuations, and be usable without a direct relationship with the stablecoin issuer, with MAS's 2022 clarification,⁷⁶ it appears very unlikely now that any stablecoin will be characterized as e-money. MAS, moreover, has

⁷⁰ *Ibid*.

⁷¹ MAS, Payment Services Act FAQ, *supra* note 32 at para. 23.5.

⁷² MAS, Guide to Digital Token Offerings (2018 Version), *supra* note 65 at 19.

⁷³ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.7.

⁷⁴ MAS, Payment Services Act FAQ, *supra* note 32 at paras. 23.2, 23.4.

⁷⁵ MAS, Scope of E-money, *supra* note 6 at para. 3.6(b).

⁷⁶ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.7.

expressly stated that it generally expects stablecoins will *not* fulfil the definition of e-money.⁷⁷ (As an aside, it bears mentioning that at the time of writing, MAS's comments on the Token K example (being last updated in 2020)⁷⁸ continue to envisage that it may be considered e-money. Given the recent shift, it is unclear whether this should continue to hold; it may be worthwhile therefore to update this very minor anachronism purely for consistency with MAS's current regulatory position.)

Still, returning to the observation on form versus substance, it bears noting that this shift in regulatory approach does not completely preclude a singlecurrency stablecoin from being treated as e-money. For example, StraitsX Singapore Dollar, a purported Singapore dollar-pegged stablecoin,⁷⁹ is described as the digital ledger technology-enabled representation of the stored value in a holder's wallet.⁸⁰ It appears to be account-based, and its issuer, correspondingly, is licensed to provide e-money issuance services (rather than DPT services).⁸¹ The crux of the matter hence is not the label, but whether the token's features in substance warrant its classification as e-money.

Buttressing the above textual perspective with a more a functional perspective, on the one hand, single-currency stablecoins and certain assetlinked stablecoins can appear functionally similar to e-money in some respects. Like e-money, such stablecoins may potentially fulfil all the conventionally accepted functions of money — functioning not only as a unit of account and a medium of exchange, but also (if their value stability is realized) as a store of value.⁸² On the other hand, however, there are also functional dissimilarities. MAS views e-money as typically an account-based instrument requiring the onboarding of customers with the issuer; by contrast, certain stablecoins can be tokenized and transferable on a peer-to-peer basis without necessitating the issuer's involvement, in which circumstance, MAS does not regard these as e-money.⁸³ Comprehensive regulation of stablecoin arrangements hence may require targeting third-party service providers that facilitate the exchange of stablecoins, whereas such providers would not feature in typical e-money arrangements.

⁷⁷ MAS, Payment Services Act FAQ, *supra* note 32 at para. 23.6.

⁷⁸ MAS, "A Guide to Digital Token Offerings [version updated on 26 May 2020]", (Singapore: MAS, 2020) at 19 [MAS, Guide to Digital Token Offerings (2020 Version)].

⁷⁹ StraitsX, "StraitsX Singapore Dollar (XSGD)", online: *StraitsX* < https://www.straitsx.com/xsgd > .

⁸⁰ Xfers Pte Ltd, "StraitsX - Payment Infrastructure for Digital Assets (Version 1.1)" (2021) at 7.

⁸¹ XSGD is issued by StraitsX a trademark of Xfers Pte Ltd, which is licensed as a major payment institution in respect of the provision of e-money issuance services. StraitsX, *supra* note 79; MAS, "Financial Institutions Directory", online: < https://eservices.mas.gov.sg/fid/institution/detail/226546-XFERS-PTE-LTD > .

⁸² MAS, Scope of E-money, *supra* note 6 at 7-8.

⁸³ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.7.

From a policy perspective, then, there would have been compelling reasons both for and against characterizing stablecoins as e-money. On the one hand, characterizing stablecoins as e-money would robustly address important user protection risks. E-money is subject to strong user protection measures, such as e-money float safeguarding requirements applicable to issuers of e-money with high circulation;⁸⁴ the applicability of such measures, which are instrumental for upholding the promise of value stability for stablecoins, would have been perhaps one of the strongest arguments for characterizing stablecoins as emoney. On the other hand, one argument (albeit one open to debate) is that applying the existing e-money regime to stablecoins might entail a specific and limited regulatory gap with respect to ML/TF risks. Such might arise because the regulated payment services involving e-money and DPTs, respectively, do not perfectly map onto each other, entailing a possible regulatory underlap. Specifically, unlike the regulated payment services involving DPTs, those involving e-money — namely, "e-money issuance" and "account issuance" are definitionally wedded to the concept of a "payment account"85 (which could include, for example, a stablecoin wallet). An arguable gap hence might arise in the specific situation where third-party intermediaries provide dealing or exchange services involving non-account-based stablecoins, yet without issuing stablecoin wallets or providing services relating to wallet operation. It is possible that such services might fall outside the ambit of either "e-money issuance" or "account issuance," and so lead to a limited regulatory lacuna as compared to if a DPT characterization were adopted. The shift away from characterizing singlecurrency stablecoins as e-money hence closes this arguable gap, but calls for user protection risks to be addressed by some other means.

Moreover, an e-money characterization of single-currency stablecoins has the deficiency of creating an unlevel playing field. E-money is conceptualized as constituting the digital representation of a *single* fiat currency, and so excludes other asset-linked stablecoins that do not reference a single currency. Absent a re-conceptualization of e-money, applying the e-money regime to stablecoins could result in a disparity of regulatory treatment between single-currency stablecoins (which are classified as e-money) and other asset-linked stablecoins (which are not so classified). Where the stablecoins are similarly designed, but differ only in respect of their referenced assets — particularly, where such assets consist of a basket of fiat currencies or physical commodities — adopting regulatory characterizations that are completely disjunct may be unjustified and unwarranted.

Though the features of single-currency stablecoins may have appeared to lend them to characterization as e-money, there are, as illustrated above, deficiencies in this approach. These may help account for MAS's arrival at its present regulatory position, discussed further below.

⁸⁴ *PS Act, supra* note 69, ss. 6(5)(b)-(c), 23(3)-(4).

⁸⁵ *PS Act, supra* note 69, s. 2(1), First Schedule, Part 3.

(ii) Presently: Stablecoins as "digital payment tokens"

MAS's present approach characterizes the majority of stablecoins as "digital payment tokens," abbreviated "DPTs." It thereby places stablecoins in the same category, and subjects these to the same regulatory treatment, as other cryptocurrencies that are *not* designed to maintain a stable value and that may have high price volatility.

The term "digital payment token" is statutorily defined as:

"any digital representation of value $[\ldots]$ that — (a) is expressed as a unit; (b) is not denominated in any currency, and is not pegged by its issuer to any currency; (c) is, or is intended to be, a medium of exchange accepted by the public, or a section of the public, as payment for goods or services or for the discharge of a debt; (d) can be transferred, stored or traded electronically; and (e) satisfies such other characteristics as [MAS] may prescribe."⁸⁶

The defining characteristics of DPTs can be framed on similar bases as were used to distinguish e-money, above. First, a DPT is defined simply as a "digital representation of value" (as opposed to a "digital representation of fiat currency"). Its definition therefore contemplates that a DPT is neither denominated in nor pegged by its issuer to any currency. Second, unlike e-money, a DPT need not represent a claim on its issuer. Its definition also contemplates that a DPT not only may be electronically stored or transferred, but also electronically *traded*.⁸⁷

MAS's account of its present approach has involved explaining this characterization of stablecoins as DPTs by contradistinction to their potential alternative characterization as e-money.⁸⁸ Given the broad statutory definition of a DPT, it is relatively uncontroversial that a stablecoin would typically satisfy most of the definitional limbs. The one potential point of contention is whether a currency-linked stablecoin can be described as "*not* pegged by its issuer to any currency," as the statutory definition of a DPT requires. To this point, one can apply the same line of MAS's reasoning as to why a single-currency stablecoin is not e-money, namely, that it should be treated as not "pegged by its issuer to any currency" because its exchange rate may fluctuate when traded or offered by third-party service providers (as discussed in further detail above). MAS's current approach, therefore, is to treat the majority of stablecoins as DPTs. It has expressly named USD Coin and Tether, the two largest stablecoins,⁸⁹ as examples of single-currency stablecoins that it regards as DPTs.⁹⁰ The argument for a DPT characterization is all the stronger, moreover, with algorithmic

⁸⁶ *Ibid.*, s. 2(1).

⁸⁷ Ibid.

⁸⁸ MAS, Payment Services Act FAQ, *supra* note 32 at paras. 23.2-23.6.

⁸⁹ CoinMarketCap, "Top Stablecoin Tokens by Market Capitalization", (12 December 2022), online: < https://coinmarketcap.com/view/stablecoin/>.

⁹⁰ MAS, Payment Services Act FAQ, *supra* note 32 at para. 23.6.

stablecoins. As the TerraUSD collapse in 2022 evinced, such algorithmic stablecoins can be prone to extreme destabilization, and in this sense can appear to more closely resemble other volatile DPTs than asset-linked stablecoins.

From a functional perspective, the principal feature distinguishing purported stablecoins from other DPTs is their promise of stability. Unlike the "first generation" of DPTs that tend to be a poor store of value on account of their price volatility,⁹¹ stablecoin optimists see stablecoins as having the potential to function as a more reliable medium of exchange and store of value. However, as MAS has noted, realizing this promise of stability in the case of asset-linked stablecoins requires, among others, secure reserve backing and redemption rights - issues which are presently unaddressed by Singapore's DPT regulation. Characterizing a stablecoin as a DPT hence in effect leaves these key matters largely to the realm of private law. As Bruce et al. demonstrate (albeit from an American legal perspective), current stablecoin arrangements tend to leave holders vulnerable, particularly in the event of the insolvency of stablecoin issuers.⁹² While private law solutions have been suggested to address these public law deficiencies, ⁹³ it is not clear that the market will indeed bend issuers to these structures. The question, then, is whether differentiated regulatory treatment should be introduced to enable stablecoins to realize their promise of stability and fulfil their purported functions within the digital asset ecosystem — these being objectives that are not presently addressed by the classification and treatment of stablecoins as DPTs.

(iii) Prospectively: "MAS-regulated single-currency stablecoins"

In light of these considerations, in October 2022, MAS proposed the introduction of a new regulatory category of "MAS-regulated SCS [single-currency stablecoins]," which are to have a distinctive label, such as "regulated stablecoin," "qualifying stablecoin" or "securely-backed stablecoin."⁹⁴ (As the precise label has not yet been determined, this article will use the term "MAS-regulated SCS.") The proposal is that issuers of such stablecoins will be subject to additional regulatory requirements intended to address maintenance of stablecoins' value stability, lack of consumer awareness and issuer insolvency concerns.

It appears that there are four key features distinguishing a stablecoin as a proposed MAS-regulated SCS. First, with respect to the "peg" (to use the same term as in MAS's consultation paper, without taking away from MAS's interpretation of this term as it appears in the statute, as discussed in Part 4(b)(i)): this new category only includes stablecoins that are pegged to a single fiat currency. Initially, this currency may only constitute either the Singapore

⁹¹ MAS, Scope of E-money, *supra* note 6 at para. 3.5.

⁹² Bruce, Odinet & Tosato, *supra* note 10 at 33-56.

⁹³ *Ibid.* at 56-64.

⁹⁴ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 4.9.

dollar or a Group of Ten (G10) currency, with the consideration behind this restriction being the availability of high-quality liquid assets to provide a secure backing for the stablecoin.⁹⁵ Second, with respect to the stabilization mechanism, the stablecoin must be backed or collateralized fully by cash, cash equivalents or certain short-term debt securities (in the case of non-bank issued stablecoins, or bank-issued stablecoins backed by a segregated pool of reserve assets). Alternatively, bank-issued stablecoins may also take the form of tokenized bank liabilities.⁹⁶ This new category therefore excludes stablecoins backed by other assets (such as commodities or other digital assets) and unbacked stablecoins (such as algorithmic stablecoins). Third, stablecoins issued by a non-bank issuer will only fall within this new category if the amount of stablecoins in circulation exceeds or is anticipated to exceed S\$5 million; or if the issuer has voluntarily opted for this higher tier of regulation by applying for and being conferred a major payment institution license, notwithstanding that it does not meet the circulation threshold.⁹⁷ Fourth, the regulator's priority is to target stablecoins issued in Singapore.⁹⁸ It must be said that these proposals are not finalized, however, and are subject to change at MAS's discretion and given feedback received in response to MAS's consultation.

In assessing this proposed category, one minor observation is that MAS's use of the term "peg" in its recent consultation incidentally tells of a possible weakness of its interpretation of the Payment Services Act language, "pegged by its issuer to any currency."⁹⁹ MAS's interpretation that a stablecoin often cannot be accurately described as "pegged by its issuer to any currency" (discussed in detail in Part 4(b)(i) above) appears counterintuitive not only to the layperson's common use and understanding of the term, but indeed to MAS's own use of the term in the latest consultation describing stablecoins as "pegged" to reference currencies or assets.¹⁰⁰ This begs the question of whether it may be helpful to amend or clarify the statutory language should the appropriate opportunity arise; or otherwise consistently avoid describing a stablecoin as "pegged" to reference assets across MAS's publications, if that indeed is MAS's settled regulatory position.

Additionally, and more fundamentally, one striking consideration is that there may be very little to functionally distinguish a stablecoin that does fall into the proposed category of MAS-regulated SCS, from one that does not. For instance, a stablecoin may fall outside this category solely because it is pegged to a non-G10 currency, a basket of currencies (rather than a single currency) or a

⁹⁵ *Ibid.* at para. 4.14.

⁹⁶ *Ibid.* at paras. 4.5-4.7, 4.9.

⁹⁷ *Ibid.* at paras. 4.2-4.3.

⁹⁸ *Ibid.* at paras. 3.5(b)-3.6.

⁹⁹ See the definitions of "e-money" and "digital payment token." *PS Act, supra* note 69, s. 2(1).

¹⁰⁰ See e.g. MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.5(a).

commodity — though it otherwise meets the stabilization mechanism expectations and circulation threshold. The conspicuous criticism is that this potentially creates an uneven playing field as between functionally very similar stablecoins (given the regulator's proposal that MAS-regulated SCS be subject to additional regulatory requirements, discussed at Part 5(b) below, such as reserve asset, timely redemption and disclosure requirements).

Notably, from an international perspective, this proposed introduction of MAS-regulated SCS presents an interesting point of comparison and contrast with other jurisdictions that are similarly introducing bespoke regulation applicable to single-currency stablecoins. The European Union (EU), for example, has introduced the concept of an "e-money token," which is defined as a "crypto-asset that purports to maintain a stable value by referencing the value of one official currency";¹⁰¹ while the United Kingdom (UK) has introduced a new concept of "digital settlement assets,"¹⁰² which is intended to allow for the regulation of fiat-backed stablecoins that are used for payments.¹⁰³ MAS's proposal aligns with this trend of differentiated regulatory treatment for currency-linked stablecoins; however, its approach differs insofar as it (i) introduces very specific criteria for when a currency-linked stablecoin will fall within the new proposed category of MAS-regulated SCS, and (ii) does not introduce a distinct regulatory category that covers other asset-linked stablecoins (as contrasted, for example, with "asset-referenced tokens" in the EU¹⁰⁴).

Yet, it appears that the delineation of these parameters is fundamentally a policy decision. Broadly, MAS has been guided by the objectives that its regulatory approach should be sufficiently open as to accommodate different types of stablecoins, fit-for-purpose and "progressive" such that it provides for stepping up of measures as required. Accordingly, its objectives include both supporting the development of payment use cases that add value, and anchoring strong issuers as "utility service providers for the digital asset ecosystem."¹⁰⁵ Policy factors are therefore very much at play in the scoping of this new category, for instance, in pursuing the former objective by treating certain stablecoins (such as single-currency stablecoins with lower circulation) as DPTs; and in pursuing the latter objective by treating other stablecoins (namely, those of potentially "anchor" issuers) as MAS-regulated SCS. It appears that this new category is initially selectively scoped to target a limited range of characteristics that MAS has assessed are, on the whole, more likely to enable a stablecoin to

¹⁰¹ EC, Commission Regulation (EC) 2023/1114 of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 [2023] OJ, L 150/40 at art. 3, para. 1(7) [MiCA].

¹⁰² Financial Services and Markets Act 2023 (UK), c 29, s. 23(2).

¹⁰³ UK, HM Treasury, Future Financial Services Regulatory Regime for Cryptoassets: Consultation and Call for Evidence (Consultation Paper) (2023) at paras. 1.15, 3.11—3.16.

¹⁰⁴ *MiCA*, *supra* note 101 at art. 3, para. 1(6).

¹⁰⁵ MAS, Stablecoin-Related Activities, *supra* note 5 at 3.3.

function as a reliable medium of exchange for digital transactions; and to ensure the stablecoin is within MAS's abilities to directly regulate.¹⁰⁶ These same policy objectives that shape the current proposed approach are likely to necessitate further subsequent adjustments to the regulatory approach in the future. It remains to be seen, then, how MAS's proposals will be adjusted prior to implementation, and how the approach will continue to evolve in time to come.

In summary, MAS's regulatory characterization of stablecoins has shifted over time. Despite early inclinations towards treating single-currency stablecoins as e-money, it is rare that such a characterization will now apply. Rather, MAS's current approach characterizes the majority of stablecoins as DPTs, hinging this characterization on (i) whether a stablecoin's exchange rate may fluctuate when traded or offered by third-party service providers, and (ii) whether the stablecoin can be tokenized and transferred on a peer-to-peer basis without a direct contractual relationship with the issuer. This effectively treats stablecoins as identical, from a regulatory perspective, to any other DPT that is vulnerable to extreme price volatility. It indeed appears to be the appropriate approach for purported stablecoins that are vulnerable to value instability, such as algorithmic stablecoins and stablecoins backed by other digital assets. However, in respect of other securely-backed asset-referenced stablecoins, the most notable of which are single-currency stablecoins, there is a case for regulating these as sui generis instruments; and, indeed, moving forwards, MAS's proposed approach identifies a subset of single-currency stablecoins and classifies these as a new category of MAS-regulated SCS. The question remains as to whether other single-currency stablecoins, as well as other types of asset-referenced stablecoins, should likewise fall under a new and distinct regulatory category, and correspondingly be subject to stricter bespoke regulation.¹⁰⁷ Nonetheless, policy factors, as well as a preference to take a "buyer beware" rather than a speculation-legitimizing approach in certain contexts (as discussed in Part 3 above),¹⁰⁸ have so far discouraged such a course of action.

The regulatory treatment of DPTs and MAS-regulated SCS is discussed in Part 5 below. Still, before delving into this discussion, it is worthwhile to briefly consider potential alternative regulatory characterizations of stablecoins under banking and securities laws, some of which may apply depending on the features of a given stablecoin.

(b) Regulatory Characterizations under the Banking and Securities Laws

Apart from the questions of characterization under the recently introduced payment services regime, stablecoins have also invited comparisons to other products regulated under the traditional banking and securities regimes.¹⁰⁹ This

¹⁰⁶ See *ibid*. at paras. 3.2, 3.5(b).

¹⁰⁷ See e.g. Wei Zhang, "Comments on MAS Crypto Regulation Consultation Papers", Comment, (2022) SMU School of Law Research Paper at 6.

¹⁰⁸ See e.g. Sim, *supra* note 44.

section therefore considers potential alternative characterizations of stablecoins under these laws: (i) as deposits, and (ii) as capital markets products, specifically, debentures or units in collective investment schemes (particularly, money market funds).

(i) Alternatively: Stablecoins as deposits

In assessing the potential characterization of stablecoins as deposits, an initial clarificatory distinction should be drawn between tokenized bank deposits, and stablecoins that are native to and exist only on the blockchain. The former are, in the first instance, deposits, albeit with a digital "wrapper"; and it is with respect to the latter, rather, that this inquiry arises. This section posits that the position under Singapore law appears somewhat unclear, even as it is relevant to the determination of whether stablecoin issuers are in breach of deposit-taking and deposit solicitation restrictions, doing business for which only banks and other regulated institutions are authorized.¹¹⁰

On the one hand, stablecoins may resemble demand deposits in certain respects. They have been described as "from the perspective of economic incentives . . . similar to a demand deposit";¹¹¹ and MAS's Managing Director Ravi Menon, too, has acknowledged that stablecoin issuers may resemble banks "when they take money and offer to return it on demand."¹¹² At first glance, a purchase of a stablecoin from an issuer may — albeit not in every instance — appear to satisfy the statutory definition of a deposit, of:

"a sum of money paid on terms — (i) under which it will be repaid... either on demand or at a time or in circumstances agreed... and (ii) which are not referable to the provision of property or services or to the giving of security."¹¹³

On the other hand, the statutory definition still has been drawn up in such a way that it carefully delineates and limits the scope of what constitutes a "deposit."¹¹⁴ A deposit entails the payment of "money" to the issuer, ¹¹⁵ and on a technical reading, this element may not necessarily be present if payment for a stablecoin is in the form of non-money cryptoassets, for instance. Moreover, in making the comparison between stablecoin issuers and banks, MAS's Managing Director at the same time questioned if bank regulation would indeed be appropriate for issuers, if they do not intermediate credit and conduct other

¹⁰⁹ See e.g. MAS, The Future of Money, *supra* note 54.

¹¹⁰ *BA*, *supra* note 60, ss. 4A(1)-(2), (6).

¹¹¹ Gary Gorton & Jeffery Zhang, "Taming Wildcat Stablecoins" (2021) 90:3 U. Chicago L. Rev. at 920.

¹¹² MAS, The Future of Money, *supra* note 54.

¹¹³ *BA*, *supra* note 60, s. 4B(4).

 ¹¹⁴ *Ibid.*; see further *ibid.*, s. 4B(4A)—(6); *Banking Regulations* (2004 Rev. Ed. Sing.), reg. 4A-5; and MAS, "Guidelines on Definition of a 'Deposit'" (Singapore: MAS, 2021).

¹¹⁵ *BA*, *supra* note 60, s. 4B(4)(a).

banking business.¹¹⁶ The key factor there appeared to be not so much the technical determination of what constitutes a deposit, as the policy consideration of whether banking regulation is the appropriate regulatory regime — a notable and recurring line of reasoning that will be discussed further below. This policy perspective, therefore, appears not to favor a characterization of stablecoins as deposits, a conclusion with which this article agrees. Yet, there remains some ambiguity as to whether certain (particularly, currency-linked) stablecoins technically do still come within the statutory definition of a deposit. If the policy intent is not to treat the typical stablecoin as a deposit, then, strictly speaking, this might call for either regulatory clarification or legislative amendment.

(ii) Alternatively: Stablecoins as debentures or collective investment schemes

Another question is whether stablecoins should instead come within the ambit of the Securities and Futures Act, which regulates activities and institutions in the capital markets industry. This section focuses on two types of capital markets products with which stablecoins have been frequently compared: debentures and money market funds.

One obvious comparison is with debentures,¹¹⁷ a sub-category of securities, which are in turn a category of capital markets products regulated under the Securities and Futures Act. The term debenture does not itself have an intensional definition in the statute, but is defined rather by reference to a non-exhaustive list, which includes "any debenture stock, bond, note and any other debt securities. . .^{"118} Commentary and case law, which MAS has cited,¹¹⁹ likewise take a broad view, referring to a debenture as any instrument that creates or acknowledges a debt.¹²⁰ With respect to a case study of a token resembling a single-currency stablecoin, therefore, MAS has contemplated that such a token may indeed be a debenture if it represents the issuer's indebtedness to the holder. Nevertheless, if such a token also constitutes e-money under the Payment Services Act, then MAS has stated that its "general regulatory stance" is *not* to regulate the token as a debenture,¹²¹ favoring the application of the payment services regime over that of the securities regime. It stands to reason that this stance should likewise apply if such a token instead constitutes a DPT or

¹¹⁶ MAS, The Future of Money, *supra* note 54.

¹¹⁷ See e.g. the comparison to mini-bonds in Avgouleas & Blair, *supra* note 53 at 18.

¹¹⁸ SFA, supra note 61, s. 2(1).

¹¹⁹ MAS, Guide to Digital Token Offerings (2020 Version), *supra* note 78 at para. 2.3.2.

¹²⁰ Hans Tjio, Wai Yee Wan & Hon Yee Kwok, Principles and Practice of Securities Regulation in Singapore, 3rd ed. (LexisNexis, 2017) at para. 3.15; Halsbury's Laws of Singapore (online), Company Law, "Debentures and Debenture Stock" at para. 70.394 "Power to borrow"; Bensa Sdn Bhd v. Malayan Banking Bhd, [1993] 1 M.L.J. 119 (Johor Bahru HC) at 124.

¹²¹ MAS, Guide to Digital Token Offerings (2020 Version), *supra* note 78 at 19.

MAS-regulated SCS (especially insofar as the reference to e-money is a legacy reference¹²²).

The second comparison — of stablecoins with money market funds — is one that has frequently been made, both within and beyond Singapore.¹²³ The term money market fund is not statutorily defined, but is typically understood as referring to a "scheme which invests primarily in high quality debt securities and money market instruments or places eligible deposits with eligible financial institutions."¹²⁴ Such schemes are typically characterized as collective investment schemes, with units therein constituting a type of capital markets product. Certain stablecoins may indeed resemble money market funds in particular respects. This may be the case, for example, insofar as stablecoins purport to be backed primarily by high-quality debt securities and money market instruments; entitle holders to redeem stablecoins at par; and involve contractual relationships between stablecoin issuer and holders that resemble those between money market funds and investors.¹²⁵ Yet, conversely, such stablecoins may also differ notably from money market funds. For example, money market funds typically seek to provide investors with returns comparable to short-term deposits or even enhanced yields, or (in the case of short-term money market funds) serve as cash management vehicles;¹²⁶ by contrast, typically, on the basis of the contractual documentation governing a stablecoin arrangement (such as Tether), stablecoin holders should not expect any return from the issuer on the stablecoins that they hold, and it appears that any gains from reserve assets held by the issuer tend to be retained by the issuer.¹²⁷ Functionally, therefore, insofar as one is inclined to view stablecoins as a medium of payment, rather than an investment, it would appear that a Payment Services Act regulatory characterization is preferable to a Securities and Futures Act characterization.

In his speech where MAS's Managing Director briefly acknowledged the resemblance of stablecoins to money market funds, he raised the question of whether capital markets rules are sufficient to ensure that stablecoins have adequate reserve backing — concluding, at that point, "We don't know."¹²⁸ To some degree, the question of whether or not a stablecoin should constitute a

¹²² See further the discussion at Part 4(a)(i) above.

¹²³ FSB, Final Report, *supra* note 11 at 65; Arner, Auer & Frost, *supra* note 9 at 3-4, 12; Avgouleas & Blair, *supra* note 53 at 18-19; Gorton & Zhang, *supra* note 111 at 5-6, 12, 37; Zhang, *supra* note 107 at 7.

¹²⁴ MAS, "Code on Collective Investment Schemes" (Singapore: MAS, 2022) at appendix 2, para. 1.1.

¹²⁵ Gorton & Zhang, *supra* note 111 at 5-6, 12.

¹²⁶ MAS, "Consultation Paper on Amendments to the Code on Collective Investment Schemes", P009-2010 (Singapore: MAS, 2010) at para. 4.2.1; MAS, "Response to Feedback Received on Proposed Amendments to the Code on Collective Investment Schemes", (Singapore: MAS, 2011) at 29.

¹²⁷ Gorton & Zhang, *supra* note 111 at 12.

¹²⁸ MAS, The Future of Money, *supra* note 54.

capital markets product, alternatively phrased, is a question of *whether or not capital markets regulation should apply to stablecoins*.¹²⁹ In this regard, whether with respect to debentures or money market funds, it appears that MAS's present conclusion is that the appropriate regulatory regime is not the capital markets regulatory regime, but the payment services regulatory regime — seemingly reflecting a conception of stablecoins as primarily a means of payment, rather than an investment or a debt.

(c) Legal Characterizations

This Part 4 has thus far focused on the regulatory characterization of stablecoins, in line with the focus of this article being the regulatory — rather than the legal — approach to stablecoins in Singapore. Still, it is apposite at this stage to reserve some brief words for the legal characterization of stablecoins under Singapore law, particularly, to illustrate its potential relevance to the financial regulatory treatment of stablecoins. Where scholarship often focuses exclusively on one particular perspective (such as a regulatory, private law, ¹³⁰ or commercial law¹³¹ perspective), this section seeks to bridge the gap by drawing out potential regulatory implications of legal characterizations of stablecoins. Specifically, this section comments briefly on stablecoins as objects of property rights, and as money.

(i) Property in stablecoins

Regarding the first issue, it is likely that stablecoins are capable of being objects of property rights under Singapore law. The Singapore High Court recently stated that Tether, which it noted is as an example of a so-called stablecoin, is a chose in action.¹³² Specifically, the court concluded that the holder of a cryptoasset (in that case, Tether) "has in principle an incorporeal right of property recognisable by the common law as a thing in action."¹³³ The court took into consideration the fact that terms of service provided for a contractual right to redeem Tether, but found that this was not necessary to its conclusion that Tether be classed as a thing in action.¹³⁴ This overall conclusion is consistent with previous decisions of the local courts, which favored the conclusion (albeit in *obiter* or in the interlocutory context) that cryptocurrencies are capable of being objects of property rights;¹³⁵ however, this most recent

¹²⁹ See Stephen Choi & Adam Pritchard, *Securities Regulation: Cases and Analysis*, 5th ed. (Foundation Press, 2019) at 112.

¹³⁰ Bruce, Odinet & Tosato, *supra* note 10.

¹³¹ Jess Cheng, "How to Build a Stablecoin: Certainty, Finality, and Stability through Commercial Law Principles" (2020) 17:2 Berkeley Bus. L. J. 320.

¹³² ByBit Fintech Ltd. v. Ho Kai Xin, [2023] SGHC 199 at paras. 1, 4 and 29-39.

¹³³ *Ibid.* at para. 36.

¹³⁴ *Ibid.* at paras. 4, 37-39.

¹³⁵ See Quoine Pte Ltd. v. B2C2 Ltd., [2020] SGCA(I) 2, [2020] 2 S.L.R. 20 at paras. 139-140

decision goes a step further in specifically characterizing a stablecoin as a chose in action.¹³⁶ There remain notable points of interest and debate regarding the appropriateness of this characterization, the court's reasoning, and the intricacies of the precise nature of property in stablecoins (and indeed cryptocurrencies generally); however, these issues are outside the scope of this article, though they have been the subject of insightful academic commentary¹³⁷ and law reform proposals elsewhere in the world.¹³⁸

This issue of property in stablecoins, while being so far the purview of the courts, nonetheless still carries relevance for the perspective of the financial regulator. One example is where, from a regulatory perspective, a stablecoin is characterized as a DPT, such that it is not subject to proposed issuer insolvency risk mitigation measures applicable to MAS-regulated SCS (discussed further at Part 5(b) below). The issue of whether the stablecoin is capable of being an object of property rights will be relevant, in the event of the issuer's insolvency, to the rights and priority of claims of the stablecoin holders — a matter that is pertinent to the regulator's user protection concerns. As another example, uncertainty as to the precise nature of property rights in stablecoins might also be an issue of regulatory concern. The regulator or legislature might find it beneficial, for instance, to introduce clarity in this regard (whether through legislation or guidance), in order to facilitate legal certainty around matters such as the perfection of security interests over stablecoins.

(ii) Stablecoins as money

Regarding the second issue — of stablecoins as money — judicial pronouncements in Singapore appear to trend in slightly different directions, albeit in different legal contexts, so that a pronouncement made in one context may not necessarily apply in all other legal contexts where the concept of "money" appears. On the one hand, a 2022 case involved an amount in an "electronic cash wallet" that was denominated in USDT (i.e., Tether). The High Court found that this amount was owed by two defendants to the plaintiff, but stated the amount as denominated in US dollars, not in USDT — noting, as an aside, that the "distinction was immaterial as 1 USDT is equivalent to US\$1" and the parties in any event did not distinguish between the two.¹³⁹ Though not

⁽noting that there "may be much to commend the view that cryptocurrencies should be capable of assimilation into the general concepts of property"); *CLM v. CLN*, [2022] SGHC 46, [2022] 5 S.L.R. 273 at paras. 44-46 (taking the view that cryptocurrencies "were capable of giving rise to proprietary rights, which could be protected via a proprietary injunction").

¹³⁶ ByBit Fintech Ltd. v. Ho Kai Xin, supra note 132 at para. 36.

¹³⁷ See e.g. Kelvin Low & Ernie Teo, "Bitcoins and Other Cryptocurrencies as Property?" (2017) 9:2 L. Innovation & Technology 235; Timothy Chan, "The Nature of Property in Cryptoassets" (2023) L.S. 1.

¹³⁸ UK, Law Commission, *Digital Assets Consultation Paper* (Consultation Paper No. 256) (2022).

definitively commenting on the point, the court's aside, interestingly, treated the stablecoin as interchangeable with fiat currency. On the other hand, a 2023 hearing reportedly involved a party whose claim was denominated in USD Coins; one issue was whether this constituted a debt that would allow the claimant to proceed with a winding-up application. According to a news report on a recent hearing, the High Court "did not accept that crypto is money."¹⁴⁰ No written judgment setting out the court's reasoning on this point is available at present, and it is unclear from current news reports if the court in arriving at this conclusion distinguished between stablecoins and other more volatile cryptocurrencies. However, this most definitive recent pronouncement appears therefore to take a negative view regarding whether a stablecoin is "money," at least for the purposes of a winding-up application. It remains to be seen whether a similar approach will be applied by the Singapore courts in other legal contexts.

Nevertheless, this article contends that asset-referenced stablecoins (excepting, possibly, cryptoasset-collateralized stablecoins) tend to present a stronger case for characterization as money, as compared with algorithmic stablecoins and other cryptocurrencies. The English courts, historically, have taken a largely commercial approach to defining money at common law.¹⁴¹ In the context of cryptocurrencies, therefore, commentators have suggested (though not without opposition¹⁴²) that in principle, if a cryptocurrency has "become a medium of exchange and . . . [is] capable of "passing in currency,"" it should be regarded, in its legal aspect, as money.¹⁴³ Going by this test, some commentators take the view that traditional cryptocurrencies are unlikely to be characterized as money, insofar as they are too volatile to function as an effective medium of exchange¹⁴⁴ and are treated as speculative assets. However, stablecoins, to the extent that they achieve the status of a tenable medium of exchange, present a stronger case for characterization as money.¹⁴⁵

From a private law perspective, one reason why this characterization might be notable is its implications with respect to the application of the *nemo dat* rule, which has been frequently discussed in relation to the private law of

¹³⁹ Dways International v. Irene Lim, [2022] SGHC 158 at para. 99.

¹⁴⁰ Sharanya Pillai & Claudia Chong, "Crypto Hearings in Singapore Throw up Quirks, Legal Novelties", *Bus Times* (10 April 2023), online: < https://www.businesstimes.com.sg/startups-tech/crypto-hearings-singapore-throw-quirks-legal-novelties > .

¹⁴¹ See e.g. *Miller v. Race* (1758), 1 Burrow 452; Avgouleas & Blair, *supra* note 53 at 29—30.

¹⁴² David Fox & Sarah Green, eds., *Cryptocurrencies in Public and Private Law* (New York: Oxford University Press, 2019) at para. 3.25.

¹⁴³ Financial Markets Law Committee, "Issues of Legal Uncertainty Arising in the Context of Virtual Currencies" (2016) Financial Markets Law Committee at 15; see also Joanna Perkins & Jennifer Enwezor, "The Legal Aspect of Virtual Currencies" (2016) 31:10 Butterworths J. International Banking & Financial L. 569 (based on the aforementioned Financial Markets Law Committee paper); and Avgouleas & Blair, *supra* note 53 at 30.

¹⁴⁴ Avgouleas & Blair, *supra* note 53 at 31.

¹⁴⁵ Chan, *supra* note 137 at 18.

cryptoassets.¹⁴⁶ This common law principle is encapsulated in the maxim *nemo dat quod non habet*, that is, no one can give what they do not have. Of the many exceptions to this principle, one common law exception applies in respect of money: its title is renewed upon receipt by, and it generally cannot be recovered from, a good faith purchaser for value without notice. Insofar as cryptocurrency is not money, this exception does not apply.¹⁴⁷ With respect to stablecoins, however, there are two alternative scenarios that may be of interest from a regulatory perspective.

- 1. One scenario is where stablecoins are *not* money, such that this exception does not apply. Assuming that no other exception applies, and the *nemo dat* rule prevails, then this may well protect proprietary rights at the expense of commercial certainty in transactions involving stablecoins impeding the ability of stablecoins to function as a reliable medium of exchange, as MAS envisions. Regulatory intervention, then, may be needed to improve commercial certainty, such as through introducing rules relating to settlement finality and adverse claims.¹⁴⁸
- 2. The alternative scenario is where a case is made out that a stablecoin is indeed properly characterized as money, such that the currency exception applies.¹⁴⁹ In a situation where no other *nemo dat* exception applies to DPTs (a conclusion that is itself a subject of debate, especially with respect to other equitable and statutory exceptions¹⁵⁰), holders of such stablecoins, then, may have different recourse available to them, as compared with holders of other DPTs. Non-uniform private law characterization and treatment of certain stablecoins vis-à-vis other DPTs may be relevant, for example, in more holistically informing the regulator's consideration of whether it is appropriate to nevertheless apply uniform regulatory characterization and treatment to stablecoins that constitute money, as to other DPTs that do not (particularly since uniform regulatory treatment is indeed the present approach, as well as

¹⁴⁶ See Financial Markets Law Committee, *supra* note 143 at 10-12; UK Law Commission, *supra* note 138 at paras. 13.23-13.40; Jelena Madi, ed., *FinTech: Law and Regulation* (UK: Edward Elgar Publishing, 2019) at paras. 5.32-5.34; Chan, *supra* note 137 at 17-19.

¹⁴⁷ UK Law Commission, *supra* note 138 at paras. 13.37-13.40; Chan, *supra* note 137 at 18.

¹⁴⁸ For a discussion of the applicability of commercial law principles to these issues, see Cheng, *supra* note 131 at 331-335.

¹⁴⁹ Chan, *supra* note 137 at 18.

¹⁵⁰ Debate surrounds the applicability of other *nemo dat* exceptions in the context of cryptocurrency transactions, notably, statutory exceptions in the context of the sale of goods, and the equitable defence of the *bona fide* purchaser for value without notice (which favors the purchaser of the legal interest as against an equitable interest, and the purchaser of the equitable interest as against a mere equity). See further UK Law Commission, *supra* note 138 at paras. 13.47-13.89; Chan, *supra* note 137 at 18-19.

the proposed approach for stablecoins that do not constitute MAS-regulated SCS).

3. (A third scenario, of course, is where another equitable and/or statutory exception to the *nemo dat* rule applies to both stablecoins and other cryptocurrencies, in which event the applicability of the currency exception may not be as material.)

As this section illustrates, the regulatory approach may be well served by also taking into consideration the private law characterizations of stablecoins, and whether these might have any implications for regulation.

5. REGULATION OF STABLECOIN ARRANGEMENTS AND ACTIVITIES

Having established the most likely and common regulatory characterizations of stablecoins, this Part 5 now addresses the regulatory treatment of stablecoin arrangements and stablecoin-related activities, which flows from the initial regulatory characterization of the stablecoin in question. MAS's present approach characterizes the majority of stablecoins as DPTs, with the proposed future introduction of a new category of MAS-regulated SCS. This Part 5 therefore focuses on the general requirements applicable to stablecoins characterized as DPTs, the specific requirements additionally proposed to apply to MAS-regulated SCS and provisions relating to systemic stablecoin arrangements.

(a) Regulation of Activities Involving Stablecoins that are DPTs

Where a stablecoin is characterized as a DPT, service providers involved in the stablecoin arrangement are subject to the relevant regulatory requirements under the Payment Services Act, and (in the future) the Financial Services and Markets Act.

From an entry regulation perspective, service providers are generally subject to licensing requirements if they carry on a business of providing any DPT service either in Singapore;¹⁵¹ or, under legislation yet to come into force, outside Singapore but from a place of business in Singapore.¹⁵² Licensable DPT services consist of dealing or exchange services (under present law),¹⁵³ and broking, transfer or custodial services (under incoming legislative amendments).¹⁵⁴ Providers of these services may be regulated as (i) holders of standard

¹⁵¹ *PS Act, supra* note 69, s. 5(1).

¹⁵² Financial Services and Markets Act 2022 (No. 18 of 2022, Sing.), s. 137(1) (not yet in force at the time of writing) [FSMA].

¹⁵³ PS Act, supra note 69, s. 2(1), First Schedule, paras. 1(f), 3.

¹⁵⁴ See, respectively, the new paragraphs (e); (c) to (d); and (f) to (i), which are to be added to the definition of "digital payment token service." *Payment Services (Amendment) Act* 2021 (No. 1 of 2021, Sing.), s. 7(e).

payment institution or major payment institution licenses under the Payment Services Act;¹⁵⁵ (ii) exempt payment service providers;¹⁵⁶ or (iii) holders of licenses under the Financial Services and Markets Act (once the relevant provisions come into force).¹⁵⁷

Currently, DPT service providers are primarily regulated only for ML/TF and technology risks.¹⁵⁸ They are also subject to light business conduct requirements. First, the particular vulnerability of DPTs to ML/TF risks was a chief regulatory concern even prior to the inception of the Payment Services Act.¹⁵⁹ Accordingly, licensed DPT service providers are subject to specific antimoney laundering / countering the financing of terrorism (AML/CFT) regulation, including requirements relating to customer due diligence, record keeping and suspicious transaction reporting.¹⁶⁰ These are in addition to the general AML/CFT obligations applicable regardless of licensing status.¹⁶¹ Second, regulated DPT service providers are subject to the same cyber hygiene requirements¹⁶² and technology risk management guidelines¹⁶³ as other payment services providers and financial institutions, respectively. Additionally, MAS is also proposing mandatory technology risk management requirements.¹⁶⁴ Finally, service providers are subject to certain business conduct requirements, notably, disclosure requirements that mandate the provision of risk warnings to customers.¹⁶⁵ The current regime is therefore fairly "light touch" insofar as it is focused almost exclusively on ML/TF and technology risks, and does not comprehensively address other regulatory concerns.

As such, MAS has recently expressed its intention to buttress the existing regime with additional consumer access, business conduct and market integrity

- ¹⁵⁷ FSMA, supra note 152, s. 138 (not yet in force at the time of writing).
- ¹⁵⁸ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 3.1.
- ¹⁵⁹ MAS, "Consultation Paper on Proposed Payment Services Bill", P021-2017 (Singapore: MAS, 2017) at para. 3.13.
- ¹⁶⁰ MAS, "Prevention of Money Laundering and Countering the Financing of Terrorism Holders of Payment Services Licence (Digital Payment Token Service)", Notice PSN02 (Singapore: MAS, 2022).

- ¹⁶² MAS, "Notice on Cyber Hygiene", Notice PSN06 (Singapore: MAS, 2019) (applicable to Payment Services Act licensees).
- ¹⁶³ MAS, "Technology Risk Management Guidelines", (Singapore: MAS, 2021).
- ¹⁶⁴ MAS, Proposed Regulatory Measures, *supra* note 38 at paras. 5.4–5.7.

¹⁵⁵ *PS Act, supra* note 69, ss. 6(2)(b)-(c).

¹⁵⁶ *Ibid.*, s. 5(1)(b), 13. These include licensed banks and other regulated financial institutions.

¹⁶¹ Corruption, Drug Trafficking and Other Serious Crimes (Confiscation of Benefits) Act 1992 (2020 Rev. Ed. Sing.); Terrorism (Suppression of Financing) Act 2002 (2020 Rev. Ed. Sing.); and regulations promulgated to give effect to United Nations sanctions under the United Nations Act 2001 (2020 Rev. Ed. Sing.).

¹⁶⁵ MAS, "Notice on Disclosures and Communications", Notice PSN08 (Singapore: MAS, 2022) at paras. 9-11, 16(d)-(e), Annexes A1-A4.

measures. One set of proposals involves the application of consumer access measures to retail customers (that is, non-accredited and non-institutional investors) who are resident, formed or incorporated in Singapore. These include mandating risk awareness assessments for retail customers, imposing restrictions on offering of incentives for retail customers to participate in DPT services, and imposing prohibitions against debt-financed and leveraged DPT transactions involving retail customers.¹⁶⁶ Another set of prospective requirements relates to the introduction of new business conduct standards. These include mandating the segregation of customers' assets from assets of the DPT service provider (including by using a separate set of blockchain addresses for customers' assets); daily reconciliation of customers' assets; safeguarding of customers' moneys; provision of statements of accounts; risk management controls; restrictions on the lending or staking of retail customers' DPTs; measures for identifying and mitigating conflicts of interests; disclosure by trading platforms of their DPT listing and governance policies; and complaints handling policies and procedures.¹⁶⁷ Yet another set of proposals relates to market integrity risks. For all DPT service providers, MAS is proposing general requirements directed at ensuring "fair, orderly, and timely" handling and execution of customers' orders, as well as preventing and detecting unfair trading practices.¹⁶⁸ For DPT trading platform operators, proposed requirements are directed at ensuring "fair, orderly, and transparent" platform operation.¹⁶⁹ Moreover, MAS has proposed additional prohibitions on unfair trading practices, to be implemented via legislative amendments, that are intended to apply to all market participants.¹⁷⁰ These proposals, though subject to change, have the potential to do much good in targeting pertinent yet currently unaddressed user protection and market integrity risks associated with DPTs generally.

One key question, however, is whether the present proposals go far enough in addressing pertinent risks, particularly, consumer protection concerns. For example, one core obligation that could be considered is a requirement for DPT issuers to issue "white papers" or information documents with mandatory disclosure requirements (akin but far from identical to prospectuses in the capital

 ¹⁶⁶ MAS, Proposed Regulatory Measures, *supra* note 38 at paras. 3.1-3.12, 3.13-3.16, 3.19-3.20, respectively.

¹⁶⁷ Certain specific measures relating to customers' moneys and assets are intended to be implemented by October 2023, via amendments to the *Payment Services Regulations* 2019 (S 810/2019 Sing.). *Ibid.* at paras. 4.4—4.28; MAS, "Response to Public Consultation on Proposed Regulatory Measures for Digital Payment Token Services (Part 1)" (Singapore: MAS, 2023) at paras. 2.5-2.6, 2.9, 2.12-2.14, 2.17, 2.22-2.28, 2.40-2.41, 3.12 [MAS, Response to Public Consultation]; MAS, "Consultation Paper on Proposed Amendments to the Payment Services Regulations", P007-2023 (Singapore: MAS, 2023) at paras. 3.1-3.4, 4.2-4.13, 5.1 and Annex B.

¹⁶⁸ MAS, Market Integrity, *supra* note 47 at paras. 3.4, 3.7-3.15.

¹⁶⁹ MAS, Proposed Regulatory Measures, *supra* note 38 at para. 6.5; MAS, Market Integrity, *supra* note 47 at paras. 3.5, 3.16-3.22.

¹⁷⁰ MAS, Market Integrity, *supra* note 47 at paras. 1.1, 4.1-4.8, 5.2.

markets context), as has been proposed in the EU, and by MAS albeit only in the context of MAS-regulated SCS.¹⁷¹ Taking guidance from the EU context, requirements could be imposed on the form and content of such white papers, and liability imposed for misstatements therein, so that the white papers address relevant matters including information about the issuer, the stablecoin's underlying technology, the rights and obligations attached to the stablecoin and risks associated with the stablecoin.¹⁷² Such should ensure greater accuracy and adequacy of issuers' disclosures, allowing users to be better empowered and well-informed (in line with MAS's overall objectives of financial sector oversight).¹⁷³ Absent such provisions, stablecoin holders alleging misstatements in issuers' disclosures need seek recourse through contractual and other private law claims — as appears to be the case in a suit that has been brought against Terraform Labs, its co-founder Do Kwon and other defendants in Singapore, involving apparent claims for fraudulent misrepresentation in relation to the collapse of the purported algorithmic stablecoin TerraUSD and its sister token Luna.¹⁷⁴

Additionally, with this approach of regulating the majority of stablecoins as DPTs, another principal issue is that there is blanket application of the same regime both to DPTs that are vulnerable to great price volatility, as well as stablecoins that are purportedly designed to maintain a stable value. The regulatory requirements therefore are not directed at concerns particular to stablecoins, notably, value stability and insolvency risks. These risks would be addressed with respect to proposed MAS-regulated SCS, only, but remain entirely unaddressed where all other stablecoins are concerned. This state of affairs can be challenging to justify — especially in the case of asset-linked stablecoins that are functionally substantially similar to MAS-regulated SCS yet fall outside this regulatory category; or in the case of algorithmic stablecoins that are more dissimilar yet perhaps most vulnerable to value instability. The best explanations, it appears, remain limited to grounds of policy and practicality (as discussed in Part 4(a)(iii) above).

(b) Additional Regulation of Activities Involving "MAS-Regulated SCS"

While the majority of purported stablecoins are and will continue to be regulated as DPTs, for the select few stablecoins that will fall within the new proposed category of MAS-regulated SCS, MAS has proposed additional

¹⁷¹ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 4.19.

¹⁷² MiCA, supra note 101 arts. 6, 19, 51 (on form and content), 15, 26 and 52 (on liability for misstatements).

¹⁷³ MAS, "Tenets of Effective Regulation", (Singapore: MAS, 2015) at 10, 13.

¹⁷⁴ Jessie Lim, "Terra Co-founder Do Kwon Faces \$79.8m Lawsuit in Singapore After Crypto Crash", *Straits Times* (9 November 2022), online: < https://www.straitstimes.com/singapore/courts-crime/terra-co-founder-do-kwon-faces-798m-lawsuit-in-singapore-after-crypto-crash > .

requirements intended to apply specifically to activities involving stablecoins that are so classified.

Regarding entry regulation, MAS is proposing a new approach for regulating the issuance of MAS-regulated SCS. Non-bank issuers of such stablecoins, under this proposal, will be required to hold a major payment institution license for providing a new regulated payment service, tentatively termed a "stablecoin issuance service."¹⁷⁵ Bank issuers, being licensed under the banking regime, will not require separate Payment Services Act licensing.¹⁷⁶ However, where non-issuance activities are concerned, the proposal is that MAS-regulated SCS will continue to be treated in the same manner as DPTs.¹⁷⁷ Hence, where intermediaries provide regulated services involving such stablecoins (namely, dealing, exchange, broking, transfer and custodial services), they will be regulated as DPT service providers (as discussed in Part 5(a) above).

(i) Regulation of non-bank issuers

The proposed differentiated regulatory requirements applicable to MASregulated SCS, therefore, are primarily targeted at issuers — particularly, issuers licensed to provide the new proposed stablecoin issuance service. Such issuers will be subject to the same AML/CFT and technology and cyber risk management measures as are currently applicable to DPT service providers. MAS has moreover identified three additional areas of concern: value stability, lack of consumer awareness and insolvency risks.¹⁷⁸

First, MAS intends to require issuers to hold "reserve assets" to back the issued stablecoins. The key proposed requirements are for reserve assets to be: (i) held in cash, cash equivalents or short-term debt securities of a restricted range of issuers; (ii) denominated in the same currency as that to which the stablecoin is pegged; (iii) at all times at least equivalent to the full par value of all outstanding stablecoins in circulation, and daily valued on a marked-to-market basis.¹⁷⁹ Another proposal is to mandate monthly independently-attested disclosures and annual audits;¹⁸⁰ these measures should, ideally, buttress holders' confidence and protect against runs on these stablecoins.¹⁸¹ Additionally, regarding the manner

¹⁷⁵ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 2.7, 3.6, 4.2.

¹⁷⁶ *Ibid.* at para. 4.4.

¹⁷⁷ *Ibid.* at para. 5.1.

¹⁷⁸ MAS, Stablecoin-Related Activities, *supra* note 5 at 17-18.

¹⁷⁹ Cash equivalents refer to (i) deposits placed with banking or deposit-taking institutions, or (ii) cheques, drafts or other items drawn on banking institutions or merchant banks, and which are either payable immediately upon presentation or in the process of collection. As for short-term debt securities, MAS has proposed that these must have no more than three months' residual maturity, and must be issued either by the central bank of the currency to which the stablecoin is pegged or by organizations of both a governmental and international character with a minimum "AA-" credit rating. *Ibid.* at para. 4.13.

¹⁸⁰ *Ibid.* at para. 4.15.

in which reserve assets are held, MAS has proposed that these assets must be segregated from the issuer's own assets, and held only with regulated custodians.¹⁸² However, it is not clear from the proposal that reserve assets will be protected in the event of the issuer's insolvency (as is the case, for example, where customers' money is required to be safeguarded in the context of the provision of e-money or money transfer services¹⁸³). It may be advisable to make such provision,¹⁸⁴ if such is not already intended. This is especially so since MAS-regulated SCS (other than tokenized bank deposits) presumably will not be subject to deposit insurance protection that applies to bank deposits¹⁸⁵ — as arguably indeed should be the case, given moral hazard concerns¹⁸⁶ that may be particularly trenchant in this still-emergent sphere.

Second, another proposed requirement is for issuers to give all holders of their stablecoins a direct legal right to redeem the stablecoins at par, in exchange for the currency to which the stablecoin is pegged (or other currencies of equivalent value). Per MAS's proposal, redemption requests may be made at any time, legitimate requests must be satisfied on a timely basis, and any redemption conditions must be reasonable and clearly disclosed.¹⁸⁷ The foregoing reserve asset and timely redemption requirements are directed at maintaining value stability. What remains unclear is the nature of this proposed right of redemption, whether it is to be contractual or of some other nature. If it is a contractual right, for instance, then it would need to be carefully drafted to be enforceable by third parties, as when the stablecoin is traded on the secondary market and not purchased directly from the issuer.¹⁸⁸

Third, to improve consumer awareness, MAS has proposed requiring each issuer to publish a white paper disclosing key information relevant to holders of the stablecoins.¹⁸⁹ In this regard, one possibility might be to consider the imposition of civil liability for false or misleading statements or omissions in such

¹⁸¹ Gorton & Zhang, *supra* note 111 at 7.

¹⁸² These refer to banks, merchant banks, finance companies or capital markets services licensees providing custodial services in Singapore. MAS, Stablecoin-Related Activities, *supra* note 5 at para. 4.16.

¹⁸³ PS Act, supra note 69, ss. 23(1)-(4), (6)-(7); Payment Services Regulations 2019 (S 810/ 2019 Sing.) reg. 14-16.

¹⁸⁴ See e.g. Asia Securities Industry & Financial Markets Association (ASIFMA), "ASIFMA Response to the MAS' Consultation Paper on the Proposed Regulatory Approach for Stablecoin-related Activities" (2023) ASIFMA at 6.

 ¹⁸⁵ Deposit Insurance and Policy Owners' Protection Schemes Act 2011 (2020 Rev. Ed. Sing.), s. 5(1).

¹⁸⁶ See e.g. Parliamentary Debates Singapore: Official Report, vol. 80 at cols. 1375-1376 (19 September 2005) [Parliamentary Debates Singapore].

¹⁸⁷ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 4.17-4.18.

¹⁸⁸ This point is owed to a discussion at the CBFL Working Paper Presentation of a draft version of this article on 9 March 2023.

¹⁸⁹ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 4.19.

disclosures (akin to that imposed for securities disclosures in Singapore,¹⁹⁰ and in line with provisions relating to cryptoasset disclosures in the EU¹⁹¹).

Fourth, proposed prudential and solvency requirements are directed at addressing insolvency risks. These consist of: (i) minimum base capital requirements, set at the higher of S\$1 million or 50% of the issuer's annual operating expenses; (ii) solvency requirements mandating the minimum value of liquid assets that an issuer must hold at all times; and (iii) business restrictions to ringfence and mitigate risks to issuers, such as prohibitions against making loans to other companies or lending or staking stablecoins.¹⁹² All these proposed requirements are primarily targeted at non-bank issuers, and are intended to address value stability, lack of consumer awareness and insolvency risks.

(ii) Regulation of bank issuers

As for bank issuers, MAS has proposed to also apply the same regime (except for the prudential requirements), if a bank issues stablecoins under a model where the stablecoins are backed by reserve assets that are segregated from the bank's other assets. Where a bank issues stablecoins as tokenized bank liabilities, however, MAS is proposing not to apply these Payment Services Act requirements, but to rely on the existing requirements under the Banking Act.¹⁹³ Given the different applicable regimes for these two models of bank-issued stablecoins, one recommendation (which the industry has raised¹⁹⁴) is to distinctively label the latter type of bank-issued stablecoins, rather than use the same label for all MAS-regulated SCS. On a more fundamental level, other questions include whether this proposal might possibly give banks an opportunity for regulatory arbitrage depending on the choice of issuance model, or hints at any degree of leniency with respect to banks engaging in cryptoasset business. These may be troubling prospects, particularly insofar it remains impossible to eradicate the possibility of fragilities and failures in the traditional banking sector.¹⁹⁵

(iii) Regulation of intermediaries

As for intermediaries providing payment services involving MAS-regulated SCS, the proposal is that they should be subject to the same requirements as are applicable to their provision of services involving DPTs. Additionally, MAS has proposed two specific requirements that are to apply where MAS-regulated SCS are concerned. One is a disclosure obligation, requiring clear labeling of MAS-regulated SCS to distinguish these from other stablecoins. The other is a timely

¹⁹⁰ SFA, supra note 61, s. 254.

¹⁹¹ *MiCA*, *supra* note 101 arts. 15, 26, 52.

¹⁹² MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 4.20-4.21.

¹⁹³ *Ibid.* at paras. 4.5-4.6.

¹⁹⁴ ASIFMA, *supra* note 184 at 6.

¹⁹⁵ See e.g. Parliamentary Debates Singapore, supra note 186 at col. 1382.

transfer obligation, applicable where intermediaries arrange for the transmission of MAS-regulated SCS between accounts, and which is in line with current requirements applicable to domestic money transfer services.¹⁹⁶

In this regard, one possible minor point of clarification is whether consumer access measures, which MAS has proposed to apply in the context of all DPT services,¹⁹⁷ will apply to intermediation services involving MAS-regulated SCS. This may not be as necessary, insofar as the consumer protection rationale for applying certain such measures (such as risk awareness assessments for retail customers) may be less pertinent to services involving MAS-regulated SCS, given the additional value stability measures applicable to these stablecoins.

Additionally, and more fundamentally, it bears highlighting that MAS's regulatory framework under the Payment Services Act is activity-based, ¹⁹⁸ imposing licensing requirements — and corresponding business conduct requirements — where persons provide a stablecoin issuance service or a DPT service (as discussed above); however, stablecoin arrangements may be structured such that an entity other than the licensed issuer or DPT service provider is responsible for carrying out functions such as value stabilization or reserve management, ¹⁹⁹ whether for technological, commercial, governance or other reasons. As the proposed regime imposes requirements primarily on issuers and intermediaries, one consideration might be whether the regime should be adapted so as to account for such arrangements and structures, or whether stablecoin issuers and arrangements should simply be expected to conform to the proposed regulatory regime as it presently stands.

Moreover, as a very general comment, one further potential consideration is whether and how stablecoins' underlying technology (i.e., the blockchain, to the extent that it is public or permissionless) or ancillary technology (e.g., surveillance tools) can be incorporated or utilized in stablecoin regulation. For example, in the context of customer asset segregation requirements, one proposal that MAS has considered is utilizing separate blockchain addresses for customers' assets and the DPT service provider's own assets, or even for each individual customer's assets — which may facilitate transparency by making it possible for customers to verify these holdings.²⁰⁰ Another possibility is to develop and employ transaction and market surveillance technology, such as onchain screening or monitoring, to address market integrity²⁰¹ or ML/TF risks.²⁰²

¹⁹⁶ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 5.2-5.4.

 ¹⁹⁷ MAS, Proposed Regulatory Measures, *supra* note 38 at paras. 3.1-3.12, 3.13-3.16, 3.19-3.20, respectively.

¹⁹⁸ See e.g. MAS, Scope of E-money, *supra* note 6 at para. 2.1.

¹⁹⁹ See e.g. UK, HM Treasury, UK Regulatory Approach to Cryptoassets and Stablecoins: Consultation and Call for Evidence (2021) at 27.

²⁰⁰ MAS, Response to Public Consultation, *supra* note 167 at paras. 2.3-2.5.

²⁰¹ MAS, Market Integrity, *supra* note 47 at para. 2.2.

²⁰² AML/CFT Industry Partnership Working Group on Digital Assets Risk Management,

It bears repeating that this proposed regime governing MAS-regulated SCS is very much subject to change following the conclusion of the consultation process, and it remains to be seen whether and how this proposed regime will be implemented. Nevertheless, the proposals provide interesting insights into the current regulatory thinking about stablecoins in Singapore, and herald potential change that will be very much necessary if stablecoins are indeed to fulfil the MAS-envisioned role of a tenable medium of exchange for the digital asset ecosystem.

(c) Systemic Stablecoin Arrangements

Finally, MAS has also introduced a proposal regarding the supervision of any stablecoin arrangements that may have systemic effects. In the first instance, MAS intends to introduce legislative amendments to bring stablecoin arrangements within the definition of a "payment system" under the Payment Services Act. This should allow the regulator to exercise information gathering powers with respect to participants, operators and settlement institutions of all stablecoin arrangements,²⁰³ which in this context, could encompass intermediaries and validators of transactions involving stablecoins. MAS anticipates this will allow it to monitor developments and make informed policy decisions.²⁰⁴

Additionally, and more importantly, if any stablecoin arrangement is regarded as having systemic effects, MAS would be empowered to designate and supervise it as a "designated payment system."²⁰⁵ Currently, the Payment Services Act licensing regime is supplemented by a designation regime. It empowers the regulator to designate a payment system if a disruption in its operations could result in further disruption to participants or systemic disruption to the financial system, or affect public confidence in Singapore's payment systems or financial system (among other considerations).²⁰⁶ MAS's powers over designated payment systems include, among others, powers to impose an access regime, approve and remove chief executive officers and directors and inspect operations.²⁰⁷ Moreover, the intention is also to apply to any designated stablecoin arrangement, provisions facilitative of transaction finality under the Payment and Settlement Systems (Finality and Netting) Act.²⁰⁸

- ²⁰⁵ *Ibid.* at paras. 6.3-6.4.
- ²⁰⁶ *PS Act, supra* note 69, s. 42(1).

[&]quot;Industry Perspectives on Best Practices — Management of Money Laundering, Terrorism Financing and Sanctions Risks from Customer Relationships with a Nexus to Digital Assets" (2023) at 17.

²⁰³ *PS Act, supra* note 69, s. 41.

²⁰⁴ MAS, Stablecoin-Related Activities, *supra* note 5 at paras. 6.1-6.2.

²⁰⁷ PS Act, supra note 69, Part 3, Division 2 to Part 5; Payment Services Regulations 2019, supra note 183, reg. 22–26; see further MAS, Supervision of Financial Market Infrastructures in Singapore (2020) at paras. 3.2-3.7.

Presently, designated payment systems include systemically important and system-wide important payment systems such as the electronic funds transfer service Fast and Secure Transfers (FAST) and the Inter-bank GIRO System;²⁰⁹ unsurprisingly, no stablecoin arrangements are currently likely to qualify for designation.²¹⁰ Nevertheless, the proposed amendments provide flexibility for the regulator to swiftly act should the need ever arise in the future.

6. CONCLUSION

This article has surveyed Singapore's emerging regulatory approach to stablecoins: identifying underlying regulatory concerns, evaluating various regulatory characterizations and examining the regulatory treatment of stablecoin arrangements and stablecoin-related activities. It is hoped that from a local perspective, this discussion might provide some food for thought for the continuing development of the regulatory approach; and from an international perspective, that it might present an interesting case study yielding some insights beyond the nation's shores, as well as contribute to the wider discussion on global regulatory developments pertaining to stablecoins.

In this regard, the present analysis of Singapore's regulatory approach to stablecoins yields some considerations which may be relevant across different jurisdictions. First, regulatory concerns that are likely to be common across various jurisdictions include (i) ML/TF, technology, consumer protection, investor protection and market integrity risks (relevant to all cryptoassets, yet also entailing additional nuances in the case of stablecoins): (ii) value stability and issuer solvency concerns (relevant particularly to stablecoins); and (iii) potentially, financial stability, monetary sovereignty and competition concerns (relevant to "global stablecoins"). Second, the Singapore case study illustrates the merits and issues associated with an approach that (a) places the majority of stablecoins (i.e., algorithmic stablecoins and most asset-linked stablecoins) in the same category as other cryptoassets not designed to maintain a stable value; and (b) introduces a new regulatory category and bespoke regulatory treatment only for single-currency stablecoins that fulfil specific criteria. The issues and tradeoffs involved in this approach may be of interest to other jurisdictions in their determinations as to the proper regulatory characterization(s) for various types of stablecoins. Third, MAS's approach demonstrates how certain specific policy tools may be employed in regulating stablecoins, including entry regulation; AML/CFT, technology risk, consumer access, business conduct and market integrity measures; reserve asset, timely redemption, disclosure, prudential and solvency requirements; as well as a designation and supervision regime for systemic stablecoin arrangements. These various policy tools, as well

²⁰⁸ (2020 Rev. Ed. Sing.); MAS, Stablecoin-Related Activities, *supra* note 5 at para. 6.5.

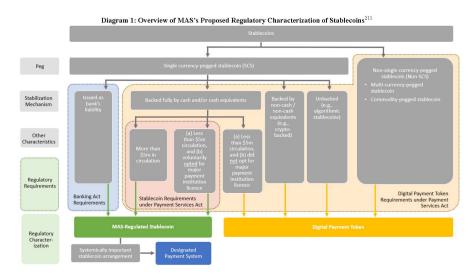
²⁰⁹ MAS, "Payment Systems" (9 March 2020), online: < https://www.mas.gov.sg/regulation/payments/payment-systems > .

²¹⁰ MAS, Stablecoin-Related Activities, *supra* note 5 at para. 6.3.

as their strengths and shortfalls, likewise may be of interest to other jurisdictions in their regulatory regime design.

Even so, this article covers but a very small part of the wider conversation on the regulation of stablecoins, generally. It would be remiss not to acknowledge that this discussion, moreover, takes place in the shadows of larger and longerrunning debates: on the history and functions of money, and the competition between private money and state money; on regulatory competition versus regulatory cooperation in stablecoin regulation, and states as laboratories of policy experiments that eventually forge a critical mass of best practices; on the wisdom of seeking and devoting resources towards nurturing a digital asset ecosystem, in the first instance; and on separating illusory and inflated expectations of financial technology from true welfare-enhancing viability. All these questions, and more, also must and do consciously or unconsciously color and inform the regulatory imagination.

Diagram 1: Overview of MAS's Proposed Regulatory Characterization of Stablecoins²¹¹



²¹¹ Adapted from MAS, Stablecoin-Related Activities, *supra* note 5 at 8.