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CRYPTO CONUNDRUM PART II: A MULTI-JURISDICTIONAL UNCERTAINTY

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As a sequel to "Crypto Conundrum Part I: Navigating Singapore's Regulatory Regime" [2020] SAL Prac 3, this article surveys various regulatory attitudes towards cryptocurrencies, and contrasts various regulatory enforcement actions against cryptocurrency businesses. This article provides a multi-jurisdictional framework and urges local authorities to consider a flexible and broad regulatory approach in order to increase investor protection and facilitate capital formation for cryptocurrency businesses.

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I. Introduction

1 Following "Crypto Conundrum Part I: Navigating Singapore's Regulatory Regime",[1] which provides an analytical framework for examining cryptocurrencies[2] under the current regulatory framework in Singapore, and in the light of a proliferation of cryptocurrencies across multiple jurisdictions,[3]

1 See Jonas Koh Lei, "Crypto Conundrum Part I: Navigating Singapore's Regulatory Regime" [2020] SAL Prac 3.

2 The terms "cryptocurrency", "digital currency" and "virtual currency" are often used synonymously or interchangeably. The use of "currency" is not necessarily accurate since cryptocurrencies share few attributes with other currencies. More accurate terms would include "crypto-asset", "digital asset" or "digital token". Nevertheless, this article shall use the popular term "cryptocurrencies". This article also assumes that cryptocurrencies are issued and transferred using distributed ledger or blockchain technology.

3 See, *eg*, Chloe Cornish, "Growing Number of Cryptocurrencies Spark Concerns" (9 January 2018); "J.P.Morgan Creates Digital Coin for Payments" *JP Morgan* (14 February 2019) (JPM Coin is a digital coin representing US dollars held in designated accounts at JPMorgan Chase NA, and may be redeemable in fiat

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this article seeks to survey foreign regulatory attitudes towards cryptocurrencies,[4] provide a comparative multi-jurisdictional framework, outline the implications of varying regulatory attitudes for cryptocurrency businesses, and provide recommendations for improving Singapore's framework for regulating cryptocurrencies.

II. Developments in the US

A. Common law developments since SEC v W J Howey Co

2 This author has previously argued that application of the test in *SEC v W J Howey Co*[5] ("*Howey*") could provide regulatory simplification and enable more effective regulation of cryptocurrencies in Singapore.[6] Common law developments in the US since *Howey* could be also imported into Singapore's laws and this section provides an overview of these developments.

3 Since *Howey* was decided in 1946, in determining whether a possible investment scheme has been established, the US courts and US Securities Exchange Commission ("SEC") have focused closely on the nature of the underlying commercial arrangements, enforcing violations of the Securities Act whenever the factors enumerated in *Howey* are present.

currency held by JP Morgan.); Libra Association Members, "An Introduction to Libra" *libra.org*. The development of blockchain and distributed ledger technology has enabled many companies to tokenise a variety of assets, including but not limited to, art works, commodities, or real property. See, *eg*, Scott Macy, "Art Tokenization: What Is It? How Does It Work?" *Medium* (6 May 2019); Justina Vasquez, "Gold-Backed Cryptocurrency Aims to Tap Stablecoin Appeal" *Bloomberg* (6 November 2019) <https://www.bloomberg.com/news/articles/2019-11-05/gold-backed-cryptocurrency-aims-to-tap-stablecoin-appeal> (accessed 2 January 2020); Tim Fries, "Luxury US Real Estate Tokenized on Ethereum in $20 Million Offering" *The Tokenist* (15 September 2019).

4 This article will focus on the regulatory frameworks adopted by the US and Germany.

5 328 US 293 (1946).

6 While this author has previously argued that the current disparate and narrow regulatory framework confuses rather than guides companies, it also permits instances of regulatory avoidance.

4 In *SEC v Glen-Arden Commodities, Inc*[7] ("*SEC v GAC*"), the SEC sought permanent injunctive relief against the defendant's alleged violations of the securities laws (for offering and selling unregistered securities in the form of Scotch whisky warehouse receipts). The District Court found that Scotch whisky warehouse receipts[8] were considered a security as customers were promised profits from the investment.[9] Applying *Howey* and *SEC v GAC*, a commodity-backed cryptocurrency (*eg*, one token being exchangeable for one bottle of wine or wine futures) should on the same footing be considered a security.

5 The *Howey* test was further refined in *United Housing Foundation, Inc v Forman*[10] ("*Forman*"). In *Forman*, United Foundation, Inc ("UHF"), a non-profit organisation, developed a co-operative housing project in New York City ("Co-op City"). UHF subsequently organised Riverbay, a corporation that owned and operated the land and buildings and issued stock. In order to acquire a Co-op City apartment, a prospective purchaser would have to buy a certain number of shares of Riverbay stock for each room desired.[11] "The shares are explicitly tied to the apartment: they cannot be transferred to a nontenant; nor can they be pledged or encumbered; and they descend, along with the apartment,

7 368 F Supp 1386 (EDNY, 1974) The District Court's decision was subsequently affirmed in *Glen-Arden Commodities, Inc v Costantino* 493 F 2d 1027 (2d Cir, 1974).

8 In *SEC v Glen-Arden Commodities, Inc* 368 F Supp 1386 (EDNY, 1974), salesmen were instructed to make the following representation when offering Scotch warehouse receipts for sale:

(1) [The Defendant] would utilize its expertise in selecting the type and quality of Scotch whisky and casks to be purchased;

(2) Customers could call [the Defendant] and obtain current information about the Scotch whisky market;

(3) [The Defendant] would provide the cooperage of the whisky;

(4) [The Defendant] would provide two insurance policies to protect the investments;

(5) When the customers wished to sell their whisky, [the Defendant] would assist them in making a sale at the current pricing schedule, charging no fee or commission;

(6) [The Defendant] would handle all administrative details of the transaction; and

(7) Customers could expect a doubling of the value of their investment within three to four years and further increments after that.

9 See *SEC v Glen-Arden Commodities, Inc* 368 F Supp 1386 at 1390 (EDNY, 1974).

10 421 US 837 (1975).

11 See *United Housing Foundation, Inc v Forman* 421 US 837 at 842 (1975).

only to a surviving spouse. No voting rights attach to the shares as such: participation in the affairs of the cooperative appertains to the apartment, with the residents of each apartment being entitled to one vote irrespective of the number of shares owned."[12] On termination of occupancy, a tenant must offer his stock to Riverbay, and in the event that Riverbay does not repurchase, the tenant cannot sell his shares for more than their original price, plus a fraction of the mortgage amortisation that he has paid during his tenancy.[13] Further, the tenant is required to make monthly rental payments.[14] At issue was whether Riverbay stock was considered a "security", and the Supreme Court (citing *Howey* at 299) held that "the shares purchased by [the] respondents do not represent the 'countless and variable scheme devised by those who seek the use of the money of others on the promise of profits,' and therefore do not fall within 'the ordinary concept of a security'".[15] In other words, purchasers were not investing in stock with a view to making profits and merely acquiring the right to occupy housing. Parallels can be drawn with typical cryptocurrency labelled and function as "utility tokens" today, wherein users purchase certain utility tokens so that they may access a platform of services, and this author posits that to the extent an apartment complex develops an application to access the gym and wellness facilities and requires residents to purchase cryptocurrencies, or exchange cryptocurrencies in order to access these areas, such cryptocurrencies (or utility tokens) would not on the *Howey* test constitute investment contracts or securities.

6 In *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc*[16] ("*Gary Plastic*"), the Second Circuit held that when a certificate of deposit ("CD") is sold as a part of a programme organised by a broker who offers retail investors promises of liquidity and the potential to profit from changes in interest rates, the instrument can be part of an investment contract that is a security. The *Gary Plastic* court stated that "[t]he definitions of 'security' are broad and ambiguous; they allow courts to use

12 See *United Housing Foundation, Inc v Forman* 421 US 837 at 842 (1975).
13 See *United Housing Foundation, Inc v Forman* 421 US 837 at 845 (1975).
14 See *United Housing Foundation, Inc v Forman* 421 US 837 at 845 (1975).
15 See *United Housing Foundation, Inc v Forman* 421 US 837 at 848 (1975).
16 756 F 2d 230 (2d Cir, 1985).

a flexible approach 'to meet the countless and variable schemes devised by those who seek the use of money of others on the promise of profits'".[17] While a CD, sold separately, is exempt from being treated as a security under the Securities Act, the *Gary Plastic* court held that "the test is 'what character the instrument is given in commerce by the terms of the offer, the plan of distribution, and the economic inducements held out to the prospect'".[18] Since customers who purchase CDs have the "security of knowing that they may liquidate at a moment's notice free from concern as to loss of income or capital",[19] the CDs are considered securities. The adoption of the *Gary Plastic* test in Singapore could enable regulatory authorities to regulate a cryptocurrency when it is not pegged to a single fiat currency or single commodity. To the extent a cryptocurrency is weighed against a basket of assets,[20] this author argues that adoption of *Howey* and *Gary Plastic* enables the Monetary Authority of Singapore ("MAS") to employ a flexible approach when examining cryptocurrencies instead of seeking to regulate by examining if they fall within the statutory definitions of, *eg*, "debenture", "derivatives contracts", "e-money" or "digital payment token" ("DPT").[21]

17 See *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 at 238 (2d Cir, 1985) ("*Gary Plastic*") (citing *SEC v W J Howey Co* 328 US 293 at 299 (1946) ("*Howey*")); see also *Gary Plastic* at 240, where the court held that the certificate of deposit ("CD") offered satisfied the *Howey* test since "[b]y investigating issuers, marketing the CDs, and creating a secondary market, Merrill Lynch was engaged in a common enterprise within the meaning of *Howey*. Finally, investors such as Gary Plastic expect profits derived solely from the efforts of Merrill Lynch and the banks. Plaintiff's investment in the CD Program was motivated by the expectation of a return of cash investment, the potential for price appreciation due to interest rate fluctuations, and the liquidity of these highly negotiable instruments".

18 See *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 at 239 (2d Cir, 1985) (citing *Marine Bank v Weaver* 455 US 551 at 556 (1982)).

19 See *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 at 241 (2d Cir, 1985).

20 See Jonas Koh Lei, "Crypto Conundrum Part I: Navigating Singapore's Regulatory Regime" [2020] SAL Prac 3.

21 "Debenture" and "derivatives contracts" are statutory defined terms under s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed), while "e-money" and "digital payment token" are statutory defined terms under s 2 of the Payment Services Act 2019 (Act 2 of 2019).

7 As illustrated in "Crypto Conundrum Part I", under the current regulatory framework in Singapore, a cryptocurrency might be a "security",[22] a "commodity",[23] "e-money" or a DPT at the same time and it is a conundrum to examine complex cryptocurrencies. This author argues that examining cryptocurrencies by looking at "the terms of the offer, the plan of distribution, and the economic inducements",[24] and adopting the *Gary Plastic* test allows MAS to better respond to the constantly evolving nature of cryptocurrencies; MAS could examine each smart contract underlying the cryptocurrency, the method of distribution and possible financial inducements an issuer might offer to a prospective purchaser, and address the fundamental question – whether a cryptocurrency is an "investment contract" or security.

8 In *SEC v International Loan Network, Inc*[25] ("*SEC v ILN*"), International Loan Network, Inc ("ILN") offered various programmes to prospective members, including (a) memberships, wherein members are entitled to various retail benefits, and investment advice through newsletters; (b) a Capital Fund Bonus System ("CFBS"), wherein members who participate in this pyramid sales programme will get commission for each ILN membership they sell; and (c) Property Rights Acquisition programme, wherein certain members are entitled to large cash payments or valuable real property rights.[26] The Second Circuit affirmed the District Court's finding that ILN's programmes constituted fraudulent offer or sale of unregistered securities and held that, "for the common enterprise element, the fortunes of investors are clearly linked to each other and to the success of ILN as an enterprise. The CFBS generates income for its investors, and for the appellants, only through constant expansion of membership, which depends on individual recruiting and the appeal of [ILN]'s larger marketing

22 "Security" is a defined term under s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed).

23 "Commodity" is a defined term under s 2 of the Commodity Trading Act (Cap 48A, 2009 Rev Ed).

24 See *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 at 239 (2d Cir, 1985) (citing *Marine Bank v Weaver* 455 US 551 at 556 (1982)).

25 968 F 2d 1304 (D C Cir, 1992).

26 See *SEC v International Loan Network, Inc* 968 F 2d 1304 at 1306 (D C Cir, 1992).

campaign".[27] Relying on this authority, the SEC is of the opinion that investments in digital assets have constituted investments in a common enterprise because the "fortunes of digital asset purchasers have been linked to each other or to the success of the promoter's efforts".[28] *SEC v ILN* provides a broader framework than the current statutory definition of collective investment scheme ("CIS") in Singapore when examining cryptocurrencies and permits a finding that there is a "common enterprise" with or without horizontal or vertical commonality between the investors and the issuer of the promoter of the cryptocurrency.[29] Where cryptocurrencies are operated on a permission-less framework, it is often difficult to establish commonality between the investor and the promoter and the definition of CIS under the Securities and Futures Act[30] is often inapplicable; application of *SEC v ILN* enables MAS to regulate a broader class of cryptocurrencies.

9 It is worth considering also *SEC v Edwards*[31] ("*Edwards*"), where ETS Payphones, Inc ("ETS") sold payphones to the public through sale-and-leaseback arrangements. As the payphones did not generate enough revenue, ETS depended on funds from new investors and ultimately filed for bankruptcy protection in September 2000. At issue was whether such sale-and-leaseback arrangements constituted "securities" or "investment contracts" under federal securities law. The Court of Appeals held that the arrangements did not constitute "investment contracts" on the grounds that (a) an investment contract requires capital appreciation or a participation in the earnings of the enterprise, and thus the arrangements, which offer a fixed rate of return, do not constitute "investment contracts", and (b) the requirement that returns on the investment should be derived solely from the efforts was not satisfied when the purchasers had a contractual

27 See *SEC v International Loan Network, Inc* 968 F 2d 1304 at 1308 (D C Cir, 1992).

28 See Securities and Exchange Commission, "Framework for 'Investment Contract' Analysis of Digital Assets" (3 April 2019) at fn 11 <https://www.sec.gov/files/dlt-framework.pdf> (accessed 2 January 2020).

29 Horizontal commonality establishes common enterprise where each individual investor's fortunes are linked to the fortunes of other individual investors. Vertical commonality examines the relationship between an investor and the promoter.

30 Cap 289, 2006 Rev Ed.

31 540 US 389 (2004).

entitlement to the return.[32] The Supreme Court reversed, holding that (i) an investment scheme promising a fixed rate of return "can be an 'investment contract' and thus a 'security' subject to the federal securities laws,"[33] and (ii) "[t]he fact that investors have bargained for a return on their investment does not mean that the return is not also expected to come solely from the efforts of others".[34]

B. US versus *Singapore*

10 The foregoing[35] can be contrasted with the narrow framework encapsulated by the SFA, CTA and the PS Act. If *Howey* and related case law are adopted in Singapore, there will be a fundamental operative question when examining cryptocurrencies – is it an "investment contract" or security?

11 For illustration purposes, consider Saga ("SGA"), a cryptocurrency that is tethered to reserves of a basket of fiat currencies held at commercial banks, and when "the price of SGA rises, all tokens are traded according to the new valuation, despite the fact that some tokens were originally issued at a lower price".[36] "The result is that the Saga reserve — the cumulative net proceeds of SGA token issuance — contains less money than SGA's market capitalisation — the value of all SGA tokens in circulation."[37] SGA could be considered a security under the *Howey* test since (a) the underlying asset of SGA consists of proceeds of SGA token issuance; (b) there is more than one fiat currency in the basket of reserves, a high degree of potential for price fluctuations, suggesting

32 See *SEC v Edwards* 540 US 389 at 393 (2004).
33 See *SEC v Edwards* 540 US 389 at 397 (2004).
34 See *SEC v Edwards* 540 US 389 at 397 (2004).
35 The Securities and Exchange Commission has taken the position that the foregoing case law will be applicable to cryptocurrencies. See Securities and Exchange Commission, "Framework for 'Investment Contract' Analysis of Digital Assets" (3 April 2019) <https://www.sec.gov/files/dlt-framework.pdf> (accessed 2 January 2020).
36 See "Saga's Whitepaper" at p 10 <https://www.saga.org/static/files/p/--752c799b-b6b6-4e0f-bce2-6b9627a0539d_saga%2Bwhitepaper.pdf> (accessed 2 January 2020).
37 See "Saga's Whitepaper" at p 10 <https://www.saga.org/static/files/p/--752c799b-b6b6-4e0f-bce2-6b9627a0539d_saga%2Bwhitepaper.pdf> (accessed 2 January 2020).

that investment in SGA is expected to yield a profit; (c) there is a common enterprise since the fortunes of SGA purchasers have been linked to each other or to the success of the promoter's efforts; and (d) profit is generated not by the efforts of SGA token holders but holders of SGA rely on the financial and managerial expertise of the creators of SGA. Instead of considering whether SGA is "e-money" or a DPT, and subjecting SGA to an analysis of whether the SFA is applicable, an overarching functional test to determine whether SGA is a security could be a more effective regulatory treatment.

12 MAS requires a broad legislative framework to adopt a flexible approach towards cryptocurrencies, and this author argues that importation of common law doctrines developed by US courts following *Howey* will enable MAS to better regulate complex, countless and variable schemes devised by cryptocurrency issuers.

C. Enforcement actions

13 Having explored common law developments since *Howey*, the following section surveys enforcement actions taken by the SEC. At the outset, the SEC staff have publicly stated the very "impetus of the Securities Act is to remove the information asymmetry between promoters and investors".[38] The same could be stated for Singapore's SFA but regulatory attitudes towards enforcing the securities law on cryptocurrencies could not be more different.

14 In 2019 alone, the SEC commenced 17 enforcement actions (as compared with 19 enforcement actions in 2018) against companies which offered cryptocurrencies.[39] The SEC focused on companies "that violated the federal securities laws through their participation in the offer, sale, or promotion of [cryptocurrencies]".[40] For example, the SEC filed a settled cease-and-desist proceeding that raised US$12.7m in an unregistered, non-exempt initial coin

38 See William Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)" *US Securities and Exchange Commission* (14 June 2018).
39 See "SEC Spotlight: Cyber Enforcement Actions" *US Securities and Exchange Commission* (6 November 2019).
40 See "SEC Enforcement Annual Report 2019" *US Securities and Exchange Commission* (6 November 2019).

offering ("ICO").[41] The SEC has taken enforcement actions against unregistered exchanges which offer cryptocurrencies for sale,[42] and against unregistered cryptocurrency brokers and dealers.[43] Further, the SEC has obtained cease-and-desist orders, imposing penalties on companies which have offered tokens, which possess the characteristics of "a medium of exchange for mobile data, physical goods, and micro lending",[44] and tokens which confer token holders the right "to buy goods or services in the future after [the creation of] an 'ecosystem'".[45]

15 In contrast, MAS has not engaged in any similar punitive enforcement actions in the cryptocurrency space. Instead, it has publicly stated that it "does not regulate cryptocurrencies",[46] found and halted one instance of security token offering,[47] and has only issued a handful of cautionary advisory warnings instead.[48]

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41 See "Company Settles Unregistered ICO Charges After Self-Reporting to SEC" *US Securities and Exchange Commission* (20 February 2019). In late 2017, Gladius Network LLC did not register its initial coin offering under the federal securities laws and raised US$12.7m to finance its plan to develop a network for renting spare computer bandwidth to defend against cyberattacks and enhance delivery speed.

42 See "SEC Charges EtherDelta Founder with Operating an Unregistered Exchange" *US Securities and Exchange Commission* (8 November 2018).

43 See "SEC Charges ICO Incubator and Founder for Unregistered Offering and Unregistered Broker Activity" *US Securities and Exchange Commission* (18 September 2019).

44 See *In the Matter of CarrierEQ, Inc., d/b/a AirFox, Securities Act Release No. 10575* (16 November 2018) <https://www.sec.gov/litigation/admin/2018/33-10575.pdf> (accessed 2 January 2020).

45 See *In the Matter of Paragon Coin, Inc., Securities Act Release No. 10574* (16 November 2018) <https://www.sec.gov/litigation/admin/2018/33-10574.pdf> (accessed 2 January 2020); *In the Matter of Block.one, Securities Act Release No. 10714* (30 September 2019) <https://www.sec.gov/litigation/admin/2019/33-10714.pdf> (accessed 2 January 2020) (order imposing a cease-and desist-order and fining Block.one $24m); and *In The Matter of Block.one, Securities Act Release No. 10717* (30 September 2019) <https://www.sec.gov/rules/other/2019/33-10717.pdf> (accessed 2 January 2020) (order granting a waiver of Regulation A and Regulation D disqualification provisions).

46 See "MAS Cautions Against Investments in Cryptocurrencies" *Monetary Authority of Singapore* (20 December 2017). For the purposes of the announcement, the Monetary Authority of Singapore defined "cryptocurrencies" as "a form of digital token secured by cryptography and typically used as a medium of exchange, a unit of account or a store of value. Examples of cryptocurrencies include Bitcoin, Ether and Litecoin".

47 See "MAS Halts Securities Token Offering for Regulatory Breach" *Monetary Authority of Singapore* (24 January 2019).

48 See "Warning on Fraudulent Website Soliciting Bitcoin Investments" *Monetary Authority of Singapore* (19 September 2018); and "Warning on Fraudulent

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(1) Status of cryptocurrencies and initial coin offerings raised by Singapore-based companies

16 According to a 2018 report, "[e]leven of the 100 largest ICOs in the world, ranked by funds raised, are held by firms in Singapore".[49] While this article does not attempt to provide a quantitative analysis of the cryptocurrencies offered by Singapore-based companies, it is useful to examine the current market capitalisation of a few of these cryptocurrencies before commenting further on Singapore's regulatory approach towards cryptocurrencies. Consider the following three cryptocurrency offerings:[50]

(a) Of note, Quoine, a cryptocurrency exchange platform, raised US$105m in November 2017 through an ICO, and its token QASH had a market capitalisation of US$802m in January 2018.[51] However, the market capitalisation was around US$17m in December 2019,[52] a 98% decrease from its highest market capitalisation.

(b) Similarly, Bluzelle, another Singapore-based company, raised US$19.5m in a 24-hour campaign in February 2018,[53] and had a market capitalisation of US$130m in May 2018.[54] However, the market capitalisation for Bluzelle's cryptocurrency BLZ was around US$4m in December 2019,[55] a 97% decrease from its highest market capitalisation.

(c) Further, Electrify, a retail electricity marketplace business, raised US$30m in March 2018,[56] and had a market

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Websites Soliciting 'Cryptocurrency' Investments" *Monetary Authority of Singapore* (29 January 2019).

49 See "Why Singapore Ranks as the Third Most Favourable Country in the World for ICOs" *Singapore Business Review* (September 2018).

50 While market capitalisation does not necessarily measure the equity value of companies, there is little publicly available data to measure enterprise value of companies.

51 See <https://coinmarketcap.com/currencies/qash/> (accessed 2 January 2020).

52 See <https://coinmarketcap.com/currencies/qash/> (accessed 2 January 2020).

53 See "Why Singapore ranks as the third most favourable country in the world for ICOs" *Singapore Business Review* (September 2018).

54 See <https://coinmarketcap.com/currencies/bluzelle/> (accessed 2 January 2020).

55 See <https://coinmarketcap.com/currencies/bluzelle/> (accessed 2 January 2020).

56 See "Why Singapore Ranks as the Third Most Favourable Country in the World for ICOs" *Singapore Business Review* (September 2018).

capitalisation of US$67m in April 2018.[57] However, the market capitalisation of Electrify's cryptocurrency ELEC was slightly over US$0.3m in December 2019,[58] a 96% decrease from its highest market capitalisation.

17 It is unclear to this author whether the QASH, BLZ or ELEC offerings were regulated as a preliminary search on MAS's financial institutions directory suggests that Quoine, Bluzelle and Electrify are not regulated entities yet these cryptocurrencies may well be considered securities under the *Howey* and *Gary Plastic* tests.[59]

18 It is submitted that the relatively low number of enforcement actions in Singapore may stem from either the inapplicability of the current regulatory framework[60] or a deliberate regulatory choice. Where it is the former, in the light of the highly volatile performance of cryptocurrencies, the current market capitalisation of the above-mentioned cryptocurrencies, and the numerous available case studies suggesting a dramatic fall in value of cryptocurrencies, amending Singapore's securities law by importing common law doctrines following *Howey* deserves serious consideration. Where it is the latter, it is a conundrum at the heart of MAS's decision not to pursue a more proactive role in protecting retail investors from highly unpredictable cryptocurrency offerings despite the

57 See <https://coinmarketcap.com/currencies/electrifyasia/> (accessed 2 January 2020).

58 See <https://coinmarketcap.com/currencies/electrifyasia/> (accessed 2 January 2020).

59 To the extent where there is the investment of money in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others, these cryptocurrencies will be considered "investment contracts" or securities. See *SEC v W J Howey Co* 328 US 293 (1946) and *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 at 238 (2d Cir, 1985); see also Securities and Exchange Commission, "Framework for 'Investment Contract' Analysis of Digital Assets" (3 April 2019) <https://www.sec.gov/files/dlt-framework.pdf> (accessed 2 January 2020).

60 As there is limited public disclosure on the characteristics of QASH, BLZ or ELEC, it is unclear if these cryptocurrencies may be regulated under the Payment Services Act 2019 (Act 2 of 2019) ("PS Act"). Even if they may be considered "e-money" or "digital payment token" right now, what happens if there is an evolution of these cryptocurrencies wherein they are pegged to more than one currency or are not "intended to be, a medium of exchange accepted by the public, or a section of the public, as a payment for goods or services or for the discharge of a debt"? See s 2 of the PS Act. In any case, an argument can be made out for retail investors to receive disclosure protections under securities laws instead.

fact that MAS chairman Tharman Shanmugaratnam once said that individuals "could lose their shirts when they invest money in cryptocurrencies".[61] If this is so, this author argues that MAS should consider adopting the SEC's approach when regulating cryptocurrencies in order to better safeguard the interests of the retail investor.

III. Developments in Europe

A. Overview

19 While most cryptocurrencies will be considered securities under federal securities law in the US, there is a certain degree of uncertainty in Europe as European authorities have adopted a substance-over-form approach, seeking to apply relevant securities or banking laws to cryptocurrencies if the cryptocurrency has the same characteristics as a security or money.[62]

20 Some clarity, however, has been provided by the European Banking Authority ("EBA"), which defined cryptocurrencies (or "virtual currency") as "a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a [fiat currency], but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically. The main actors are users, exchanges, trade platforms, inventors, and e-wallet providers".[63] The EBA

61 See Tharman Shanmugaratnam, "Reply to Parliamentary Question on Banning the Trading of Bitcoin Currency or Cryptocurrency" *Monetary Authority of Singapore* (5 February 2018).

62 There are three considerations when analysing cryptocurrency: (a) to the extent a cryptocurrency displays the same characteristics as a financial instrument, it could be regulated under the Markets in Financial Instruments Directive; (b) to the extent the cryptocurrency displays the same characteristics as a payment method, it would be regulated under the Payment Services Directive instead; and (c) to the extent the cryptocurrency is equivalent to fiat currency, it will be subject to banking laws. See also "International Securities Services Association, Crypto Assets: Moving from Theory to Practice" (15 November 2019) <https://www.issanet.org/e/pdf/2019-11_ISSA_Report_Crypto-Assets_Moving_from_Theory_to_Practice.pdf> (accessed 2 January 2020).

63 See European Banking Authority, "EBA Opinion on 'Virtual Currencies'" EBA/Op/2014/08 (4 July 2014) at p 5 <https://eba.europa.eu/sites/default/documents/files/documents/10180/657547/81409b94-4222-45d7-ba3b-

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acknowledged that potential benefits of cryptocurrencies include reduced transaction costs and faster transaction speeds, but noted that the risks involved are manifold and "[a] regulatory approach that addresses these drivers comprehensively would require a substantial body of regulation, some components of which are untested. It would need to comprise, amongst other elements, governance requirements for several market participants, the segregation of client accounts, capital requirements and, crucially, the creation of 'scheme governing authorities' that are accountable for the integrity of a [cryptocurrency] scheme and its key components, including its protocol and transaction ledge[rs]".[64]

21 The EBA also recommended European Union ("EU") legislators to consider "declaring market participants at the direct interface between conventional and virtual currencies, such as virtual currency exchanges, to become 'obliged entities' under the EU Anti Money Laundering Directive and thus subject to its anti-money laundering and counter terrorist financing requirements".[65] EU member states have since taken heed and sought to regulate cryptocurrencies.

B. Approaches taken by Germany's Federal Financial Supervisory Authority

22 Germany's Federal Financial Supervisory Authority ("BaFin") stated in November 2017 that companies that choose to raise capital by selling cryptocurrencies may be required to obtain authorisation pursuant to the German Banking Act (*Kreditwesengesetz*) ("KWG"), German Investment Code (*Kapitalanlagegesetzbuch*) ("KAGB"), the German Payment Services

7deb5863ab57/EBA-Op-2014-08%20Opinion%20on%20Virtual%20Currencies.pdf> (accessed 2 January 2020).

64 European Banking Authority, "EBA Opinion on 'Virtual Currencies'" EBA/Op/2014/08 (4 July 2014) at p 5 <https://eba.europa.eu/sites/default/documents/files/documents/10180/657547/81409b94-4222-45d7-ba3b-7deb5863ab57/EBA-Op-2014-08%20Opinion%20on%20Virtual%20Currencies.pdf> (accessed 2 January 2020).

65 European Banking Authority, "EBA Opinion on 'Virtual Currencies'" EBA/Op/2014/08 (4 July 2014) at p 6 <https://eba.europa.eu/sites/default/documents/files/documents/10180/657547/81409b94-4222-45d7-ba3b-7deb5863ab57/EBA-Op-2014-08%20Opinion%20on%20Virtual%20Currencies.pdf> (accessed 2 January 2020).

Supervision Act (*Zahlungsdiensteaufsichtsgesetz*) ("ZAG") or the German Insurance Supervision Act (*Versicherungsaufsichtsgesetz*) ("VAG").[66] While BaFin states that it will decide on a case-by-case basis whether cryptocurrency businesses must fulfil prospectus requirements, it stated that "[g]enerally speaking, cryptocurrency tokens constitute financial instruments (units of account) within the meaning of the KWG. Therefore, undertakings and persons that arrange the acquisition of tokens, sell or purchase tokens on a commercial basis, or operate secondary market platforms on which tokens are traded are generally required to obtain authorisation from BaFin in advance".[67]

23 BaFin's position on cryptocurrencies appears to be broader than the SEC's as it finds that "bitcoins are financial instruments" and will be regulated under the KWG.[68] It should however be noted that there is a degree of regulatory uncertainty in Germany as the Berlin Appellate Court recently disagreed with BaFin's classification of bitcoins as financial instruments.[69]

C. Europe versus *Singapore*

24 The foregoing can be contrasted with the regulatory approach taken by MAS — Europe's definition of "virtual currency" is broader than both the definitions of "e-money" and DPT under the PS Act, while MAS's greater emphasis on technical features of products may practically result in a form-over-substance regulatory outcome. For example, the definition of "e-money" restricts MAS to regulating cryptocurrencies that are (a) pegged to one currency, and (b) when holders of such cryptocurrencies have a claim on its issuer, and the definition of DPT restricts MAS

66 See "Initial coin offerings: High risks for consumers" *BaFin* (15 November 2017).
67 See "Initial Coin Offerings: High Risks for Consumers" *BaFin* (15 November 2017).
68 See "Initial Coin Offerings: High Risks for Consumers" *BaFin* (15 November 2017).
69 See the ruling of the Appellate Court of Berlin of 25 September 2018 (case no (4) 161 Ss 28/18 (35/18)) as mentioned in Jenny Gesley, "Germany: Court Holds That Bitcoin Trading Does Not Require a Banking License" *Law Library of Congress*: (19 October 2019) <https://www.loc.gov/law/foreign-news/article/germany-court-holds-that-bitcoin-trading-does-not-require-a-banking-license/> (accessed 23 March 2020).

to regulating cryptocurrencies that "are, or are intended to be, a medium of exchange accepted by the public, or a section of the public, as a payment for goods or services or for the discharge of a debt".[70] In contrast, the EBA's definition of virtual currency is broad and does not consider whether a cryptocurrency is pegged to a single currency or if a cryptocurrency represents a claim on its issuer. Further, while MAS has recently signalled an intent to amend the scope of "e-money" and DPT under the PS Act in order to respond to the evolving nature of cryptocurrencies,[71] BaFin stated that cryptocurrencies are "not legal tender and so are neither currencies nor foreign notes or coins. They are not e-money either within the meaning of [ZAG]; they do not represent any claims on an issuer, as in their case there is no issuer".[72] Having regard to the SEC and BaFin's regulatory approaches towards cryptocurrency, it is a conundrum at the heart of MAS's intention to regulate complex cryptocurrencies (that are not considered "capital markets products" under the SFA) under the PS Act rather than under securities law, or find that cryptocurrencies fall within the purview of banking laws.

25 The EBA empowers local regulatory authorities like BaFin to adopt a robust regulatory approach towards cryptocurrencies, and enables BaFin to apply banking laws under KWG on cryptocurrencies since they are generally considered financial instruments. Should MAS prefer not to regulate cryptocurrencies under securities laws like the SEC, this author argues that approaches taken by the EBA and BaFin are worthy of finer examination.

26 The robust regulatory framework in Europe has also enabled BaFin to order the cessation and winding up of cryptocurrency trading platforms,[73] the cessation of cross-border proprietary cryptocurrency trading,[74] and the cessation of unauthorised

70 See s 2 of the Payment Services Act 2019 (Act 2 of 2019).
71 See Monetary Authority of Singapore, *Consultation on the Payment Services Act 2019: Scope of E-money and Digital Payment Tokens* (23 December 2019).
72 See "Virtual Currency (VC)" *BaFin*.
73 See, *eg*, "Goldstone Group Ltd. ("StellaMarkets"): BaFin Orders the Cessation and Winding-up of Unauthorised Business" *BaFin* (18 March 2019).
74 See, *eg*, "KLDC Technological systems LTD: BaFin Orders the Cessation of Cross-border Proprietary Trading" *BaFin* (21 May 2019; and "Hello Technology
(cont'd on the next page)

proprietary cryptocurrency trading.[75] Instead of issuing cautionary advisory warnings, MAS could engage in a more proactive role through more forceful enforcement actions, such as those taken by both the SEC and BaFin, to protect the retail investor.

IV. Implications for cryptocurrency businesses

27 In the light of the introduction of SGA, and in anticipation of Facebook Inc's Libra and JPMorgan Chase NA's JPM Coin, it is worth considering possible implications of differing regulatory approaches since cryptocurrencies are built on a distributed ledger technology ("DLT") network and transactions will often be multi-jurisdictional. As there are different regulatory treatments on the legal status of cryptocurrencies, cryptocurrency businesses might face complications in the design, delivery, and maintenance of their services. For instance, to the extent a cryptocurrency is considered a security, the cryptocurrency issuer or service provider will not necessarily be bound to ensure consumer protections mandated by banking laws or implement float protection measures.[76] Conversely, to the extent a cryptocurrency is considered a "financial instrument" (in Europe) or "e-money", cryptocurrency businesses may have various obligations to cryptocurrency holders in the case of loss of assets. For instance, SGA will most likely be regulated under federal securities laws in the US and if offered in Singapore, SGA may be considered as a DPT and will be required to comply with the PS Act; in addition to disclosure requirements mandated by US securities laws, SGA service providers might be required to safeguard a percentage of customer assets from insolvency.[77]

LTD: BaFin Orders the Cessation of Cross-border Proprietary Trading" *BaFin* (5 November 2019).

75 See, *eg*, "Gum Ltd, ('Stern Markets'): BaFin Orders the Cessation of Unauthorised Proprietary Trading" *BaFin* (7 August 2018); and "Pairs Ltd, ('Weiss Finance'): BaFin Orders the Cessation of Unauthorised Proprietary Trading" *BaFin* (7 August 2018).

76 See s 23 of the Payment Services Act 2019 (Act 2 of 2019).

77 If offered in Singapore, float protection is required under the Payment Services Act 2019 (Act 2 of 2019). See Monetary Authority of Singapore, *Consultation Paper on the Payment Services Act 2019: Proposed Amendments to the Act* (23 December 2019) at paras 3.5–3.11 and s 21A(3) of Annex B.

28 Further, unlike traditional securities or money, there is no cogency of business standards governing the custody, issuance, settlement and trades of cryptocurrencies. For example, certain cryptocurrencies might not be redeemable (or represent a claim on the issuer), and custodians of the underlying asset of the cryptocurrency might have differing responsibilities. In turn, risk management and anti-money laundering frameworks prescribed by banking laws or Singapore's PS Act might be commercially impractical or potentially resource intensive for cryptocurrency businesses. On the other hand, one could argue that disclosure requirements prescribed by securities law might be insufficient to safeguard retail investors' assets from the fluctuations of cryptocurrencies, and adopting frameworks from banking laws are essential to regulate cryptocurrencies.

29 In the light of the fact that there are no international standards for regulating cryptocurrencies, cryptocurrency businesses will be required to consider various frameworks from various jurisdictions and tailor their services to local regulatory treatments of cryptocurrencies.

V. Conclusion

30 Having previously elucidated how, in this author's view, Singapore's fragmented legislative framework is not well equipped to deal with the innovative advancements presented by DLT or to regulate the constantly evolving nature of cryptocurrencies, this author urges MAS to consider amending the SFA and importing common law doctrines developed in the US following *Howey* to build a broad legislative framework to regulate cryptocurrencies under securities laws. While the SFA is not applicable to every cryptocurrency currently, it is submitted that disclosures mandated by securities law are equally important to both the retail investor purchasing stock and the retail investor purchasing cryptocurrencies. In the alternative, MAS could consider aligning more closely with the substance-over-form approach taken by European regulatory authorities and adopt a flexible approach towards cryptocurrencies. Last, while blockchain and DLT have enabled public crowdfunding through the tokenisation and division of numerous classes of assets, cryptocurrencies should

be subject to the rigours of regulatory examination. Just as accountants, bankers and lawyers' scrutiny of a company adds value to a company's initial public offering,[78] applying regulatory scrutiny to cryptocurrency offerings will not only increase investor protection but facilitate capital formation for cryptocurrency businesses.

78 See, *eg*, Richard A Brealey, Stewart C Myers & Franklin Allen, *Principles of Corporate Finance* (McGraw-Hill Irwin, 11th Ed, 2014) at pp 371–72 and 377–78 (outlining the due diligence processes and its value to firms and investors).