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CRYPTO CONUNDRUM PART I: NAVIGATING SINGAPORE'S REGULATORY REGIME

[2020] SAL Prac 3

As the Payment Services Act 2019 (Act 2 of 2019) comes into force, this article observes that there is a disparate legislative framework applicable to cryptocurrencies in Singapore, which presents a regulatory conundrum for companies, regulators and retail consumers. This article highlights two issues: (a) is the current regulatory framework an unnecessary regulatory cost for cryptocurrency businesses? and (b) does the current regulatory framework restrict Singapore's regulatory authorities from safeguarding the interests of retail consumers? This article proposes potential reforms and argues that regulatory simplification could be achieved.

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I. Introduction

1 In recent years, financial markets have focused their attentions on cryptocurrencies.[1] There have been numerous fundraising efforts in the offer and sale of cryptocurrencies through initial coin offerings ("ICOs"), initial exchange offerings ("IEOs"), or more recently, security token offerings ("STOs"). The regulatory approaches taken in various jurisdictions on such offerings have not been uniform.

1 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.

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2 For example, while the chairman of America's Security and Exchange Commission ("SEC"), Jay Clayton, testified during a Senate hearing that "I believe every ICO I've seen is a security",[2] the chairman of the Monetary Authority of Singapore ("MAS"), Tharman Shanmugaratnam, expressly stated that the focus of MAS is on securitised interests in assets (such as shares in companies), and that the MAS "does not and cannot regulate all products that people put their money in thinking that they will appreciate in value".[3]

3 In the light of the above, local practitioners have often adopted the starting position that generally, cryptocurrency trading, exchange and brokerage services are not regulated activities. This article argues that such a starting position is confusing and misguided as three separate legislative acts may apply to cryptocurrencies – namely the Securities and Futures Act[4] ("SFA"), the Commodity Trading Act[5] ("CTA"), and the recently

2 See "Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission and the U.S. Commodity Futures Trading Commission" *United States Senate Committee on Banking, Housing, and Urban Affairs* (6 February 2018) <https://www.banking.senate.gov/hearings/virtual-currencies-the-oversight-role-of-the-us-securities-and-exchange-commission-and-the-us-commodity-futures-trading-commission> (accessed 1 October 2019).

The US Security and Exchange Commission views virtually all tokens besides bitcoin and ether to be securities. See William Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)" *US Security and Exchange Commission* (14 June 2018); Jay Clayton, "Statement on Cryptocurrencies and Initial Coin Offerings" *US Security and Exchange Commission* (11 December 2017); Jay Clayton & J Christopher Giancarlo, "Statement by SEC Chairman Jay Clayton and CFTC Chairman J. Christopher Giancarlo: Regulators are Looking at Cryptocurrency" *US Securities and Exchange Commission* (25 January 2018); "Staff Letter: Engaging on Fund Innovation and Cryptocurrency-related Holdings" *US Securities and Exchange Commission* (18 January 2018) <https://www.sec.gov/divisions/investment/noaction/2018/cryptocurrency-011818.htm> (accessed 1 October 2019); "Statement on Digital Asset Securities Issuance and Trading" *US Securities and Exchange Commission* (16 November 2018); and Hester M Peirce, "How We Howey" *US Securities and Exchange Commission* (9 May 2019).

3 See Tharman Shanmugaratnam, "Reply to Parliamentary Question on the prevalence use of cryptocurrency in Singapore and measures to regulate cryptocurrency and Initial Coin Offerings" *Monetary Authority of Singapore* (2 October 2017).

4 Cap 289, 2006 Rev Ed.

5 Cap 48A, 2009 Rev Ed.

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enacted Payment Services Act 2019[6] ("PS Act"), which came into force in January 2020.[7]

4 Against this backdrop, this article seeks to provide an analytical framework for examining cryptocurrencies under the current regulatory framework in Singapore. This article proposes three considerations – namely whether cryptocurrencies may be considered (a) a capital markets product, (b) a commodity or (c) a payment service.

5 Then this article will discuss potential reforms. Two issues stand out: (a) is the regulatory framework an unnecessary regulatory cost for cryptocurrency businesses? and (b) does the current regulatory framework restrict Singapore's regulatory authorities from safeguarding the interests of retail consumers? This author argues that regulatory simplification is warranted in the interests of both cryptocurrency businesses and retail consumers.

6 A sequel to this article ("Crypto Conundrum Part II: A Multi-Jurisdictional Uncertainty",[8] also by this author) seeks to provide an analytical framework of various regulatory approaches taken towards cryptocurrencies.

II. Is a cryptocurrency a capital markets product?

7 At the outset, the SFA, its regulations, and related notices issued by MAS collectively regulate the offer and sale of "capital markets products",[9] and cryptocurrencies might fall within the ambit of one of the following three classes of capital markets

6 Act 2 of 2019.

7 See Monetary Authority of Singapore, "Frequently Asked Questions (FAQs) On The Payment Services Act" (18 February 2020) <https://www.mas.gov.sg/-/media/MAS/Fintech/Payment-Services-Act/Payment-Services-Act-FAQ-18-February-2020.pdf> (accessed 17 March 2020).

8 [2020] SAL Prac 4.

9 "Capital markets products" has been defined to mean "any securities, units in a collective investment scheme, derivatives contracts, spot foreign exchange contracts for the purposes of leveraged foreign exchange trading, and such other products as the Authority may prescribe as capital markets products": s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed).

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products: (a) securities; (b) units in a collective investment scheme ("CIS"); or (c) derivatives contracts.

A. Security

8 Companies that choose to raise capital by selling cryptocurrencies that constitute "securities" under Singapore law must comply with certain requirements and restrictions on various aspects of the offer and sale of those securities.[10] "Securities" are defined as interests or holdings in any instrument that confers or represents a legal or beneficial ownership interest in a corporation, partnership, limited liability partnership or debenture.[11]

9 For illustration purposes, if cryptocurrencies confer upon the holder of such cryptocurrency rights akin to a share, it may be considered a security. Alternatively, if a company which sells cryptocurrencies has an obligation to buy back the cryptocurrency or pay back the holder (*eg*, $1 or applicable currency to which the cryptocurrency is pegged), it may be considered a "debenture"[12] and consequently, a security under the SFA.

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10 Generally an offer of securities is required to be made in or accompanied by a prospectus which is prepared in accordance with Part XIII of the Securities and Futures Act (Cap 289, 2006 Rev Ed) and is registered with the Monetary Authority of Singapore ("IPO Rules"), unless the offer is otherwise exempted from such requirements. Exemptions from the IPO Rules include:
   (a) the offer is a small (personal) offer that does not exceed $5m (or its equivalent in a foreign currency) within any 12-month period, subject to certain conditions;
   (b) the offer is a private placement offer made to no more than 50 persons within any 12-month period, subject to certain conditions;
   (c) the offer is made to institutional investors only; or
   (d) the offer is made to accredited investors, subject to certain conditions.

11 See s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed). The Monetary Authority of Singapore has also clarified in *A Guide to Digital Token Offerings* (last revised 23 December 2019) at para 2.3 that cryptocurrencies may be considered a share if it "confers or represents ownership interest in a corporation" or as a debenture if it "constitutes or evidences the indebtedness of the issuer of the digital token in respect of any money that is or may be lent to the issuer by a token holder". See also Tian Sion Yoong, "A Guide to Digital Token Offerings" [2019] SAL Prac 16.

12 A "debenture" has been defined in s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed) to include "any debenture stock, bond, note and any other debt securities issued by or proposed to be issued by a corporation or any other entity, whether constituting a charge or not, on the assets of the issuer".

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B. Units in a collective investment scheme

10 The SFA also defines CIS to be arrangements in respect of any property that have all of the following characteristics:[13]

(a) participants lack day-to-day control over the management of the property;

(b) the property is managed as a whole by or on behalf of a manager, or the participants' contributions and the income out of which payments are to be made to them are pooled; and

(c) the arrangement enables participants to participate in or receive payments or returns arising from the management of any right, interest, title, or benefit in the property or part thereof, or to receive sums paid out of such payments or returns.

11 Further, the SFA expressly notes that an arrangement will still be regarded as a CIS even if it provides for the participants to receive any benefit other than those set out in para 10(c) above in the event that the purpose, purported purpose or effect is not realised.

12 The definition of CIS is substantially similar to the US Supreme Court's test in *SEC v W J Howey Co*[14] ("*Howey*"), which held that an "investment contract" exists when there is the investment of money in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others. While the definition of "securities" and CIS, and terms related to CIS such as "right", "interest", and "benefit" have not been tested locally or as vigorously as in American case law, it could be argued that if the *Howey* test is applied in Singapore, an investment of money (or something of value) made in exchange for cryptocurrency with the expectation of receiving a distribution of profits solely or largely from the efforts of others, the cryptocurrency will constitute a collective investment scheme.

13 See s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed).
14 328 US 293 (1946).

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13 The following are some factors that may establish a common enterprise in a cryptocurrency offering: (a) horizontal commonality between investors;[15] (b) vertical commonality between investors and fundraisers;[16] or (c) the individual investor's fortunes depend on the fundraiser's expertise.[17] To the extent that investors lack day-to-day control over the management of the cryptocurrency scheme, and the investors may expect to receive a distribution of profits,[18] and may be found to profit based largely or solely on the efforts of others where the efforts of third parties are significant to the success or failure of the enterprise, a cryptocurrency offering may be considered a CIS.

C. Derivatives contract

14 A "derivatives contract" is defined as:[19]

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15 Horizontal commonality involves "the tying of each individual investor's fortunes to the fortunes of the other investors". See *Revak v SEC Realty Corp* 18 F 3d 81 at 89 (2d Cir, 1994).

16 A strict reading of vertical commonality requires "fortunes of the investors [*sic*] be linked only to the efforts of the [fundraiser]". A broad reading of vertical commonality requires "fortunes of investors [to] be tied to the fortunes of the [fundraiser]". *See Revak v SEC Realty Corp* 18 F 3d 81 at 87–88 (2d Cir, 1994).

17 See *Revak v SEC Realty Corp* 18 F 3d 81 at 88 (2d Cir, 1994); see also *Deckebach v La Vida Charters, Inc* 867 F 2d 278 (6th Cir, 1989).

18 This may include a return on the invested amount in the form of capital appreciation, distributions (akin to dividends) or other payouts.

19 As defined in s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed) ("SFA"), a derivatives contract does not include:

(i) securities;
(ii) any unit in a collective investment scheme;
(iii) a spot contract;
(iv) a deposit as defined in section 4B of the Banking Act (Cap. 19), where the deposit is accepted by a bank licensed under that Act or a merchant bank approved as a financial institution under the Monetary Authority of Singapore Act (Cap. 186);
(v) a deposit as defined in section 2 of the Finance Companies Act (Cap. 108), where the deposit is accepted by a finance company as defined in that section of that Act;
(vi) any contract of insurance in relation to any class of insurance business specified in section 2(1) of the Insurance Act (Cap. 142); or
(vii) any contract or arrangement that is, or that belongs to a class of contracts or arrangements that is, prescribed not to be a derivatives contract.

Section 2 of the SFA also defines "underlying thing" to include:

(i) a unit in a collective investment scheme;
(ii) a commodity;
(iii) a financial instrument;

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any contract or arrangement under which —

(i) a party to the contract or arrangement is required to, or may be required to, discharge all or any of its obligations under the contract or arrangement at some future time; and

(ii) the value of the contract or arrangement is determined (whether directly or indirectly, or whether wholly or in part) by reference to, is derived from, or varies by reference to, either of the following:

(A) the value or amount of one or more underlying things;

(B) fluctuations in the values or amounts of one or more underlying things.

15 For illustration purposes, where

(a) a cryptocurrency is backed by fiat currency and/or a commodity, and such a cryptocurrency is not considered a security;[20]

(iv) the credit of any person; or

(v) an arrangement, event, index, intangible property, tangible property or transaction that is, or that belongs to a class of arrangements, events, indices, intangible properties, tangible properties or transactions ...

20 For example, where the company issuing this cryptocurrency is under no obligation to buy back the cryptocurrency and is not obligated to pay back the cryptocurrency holder the fiat currency or the commodity underlying the cryptocurrency, this cryptocurrency will not be considered a "debenture". See para 9 above. To the extent said cryptocurrency is non-refundable and the cryptocurrency does not represent the issuer's indebtedness to the purchaser or holder (or purchaser) of cryptocurrency to pay back the holder underlying amount of fiat currency of commodity, said cryptocurrency will not be considered a debenture or security. *Cf* Case study 10 in Monetary Authority of Singapore, *A Guide to Digital Token Offerings* (last revised 23 December 2019).

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(b) the said cryptocurrency is not a "spot contract"[21] (*ie*, delivery of the underlying thing is not pursuant to market convention);[22]

(c) the said cryptocurrency is not a "deposit" or "contract of insurance" as defined under s 2 of the SFA;[23] and

(d) the issuing entity of this cryptocurrency is under a "contract or arrangement" to discharge all or any of its obligations to deliver the fiat currency or commodity underlying the cryptocurrency at some future time, and that the value of the contract is determined by the prevailing fiat currency or commodity value at that point in time,[24]

such a cryptocurrency may be considered a derivatives contract.

16 To the extent that a cryptocurrency falls within the SFA definitions of security, unit in a CIS or a derivatives contract, companies that deal in such cryptocurrencies will require a Capital Markets Services Licence since "dealing in capital markets

21 A "spot contract" is excluded from the definition of a derivatives contract under s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed) ("SFA"). Section 2 of the SFA further defines a "spot contract" to mean a contract or arrangement for the sale or purchase of any underlying thing at the spot price, where it is intended for a party to the contract or arrangement to take delivery of the underlying thing immediately or within a period which must not be longer than the period determined by the market convention for delivery of the underlying thing.

22 For example, delivery of the underlying fiat currency of commodity does not take place immediately or within a period determined by market convention for delivery of the underlying fiat currency or commodity; if delivery of the fiat currency underlying the cryptocurrency does not take place immediately or within a period of T+2 days (where T represents the horizon date, the date on which the trade originates), or if the delivery of the commodity underlying the cryptocurrency does not take place immediately or within a period of T+28 days.

23 Under s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed), "deposit" means "deposit as defined in section 4B of the Banking Act (Cap. 19), where the deposit is accepted by a bank licensed under that Act or a merchant bank approved as a financial institution under the Monetary Authority of Singapore Act (Cap. 186)" or "a deposit as defined in section 2 of the Finance Companies Act (Cap. 108), where the deposit is accepted by a finance company". A "contract of insurance" refers to a contract "in relation to any class of insurance business specified in section 2(1) of the Insurance Act (Cap. 142)": s 2 of the SFA.

24 See para 14 above.

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products" is a regulated activity.[25] For companies that wish to operate an exchange wherein such cryptocurrencies are offered for purchase, exchange and sale, they may also require a recognised market operator licence.[26]

III. Is a cryptocurrency a commodity?

17 Apart from considering whether a cryptocurrency is regulated as a capital markets product under the SFA, the next question to consider is whether a cryptocurrency is a "commodity".[27] The CTA, its regulations and related notices issued by Enterprise Singapore ("ESG") collectively regulate and impose certain restrictions on trading of commodities in Singapore and may be applicable to cryptocurrencies backed by commodities.

18 The CTA regulates "spot commodity trading" which has been defined as "the purchase or sale of a commodity at its current market or spot price, where it is intended that such transition results in the physical delivery of the commodity".[28] While trading of asset-backed cryptocurrencies does not necessarily result in the actual delivery of the underlying asset,[29] physical delivery does not require the actual delivery of the underlying commodity from the seller to the purchaser and it is generally accepted that the

25 "[D]ealing in capital markets products" means (whether as principal or agent) making or offering to make with any person, or inducing or attempting to induce any person to enter into or to offer to enter into any agreement for or with a view to acquiring, disposing of, entering into, effecting, arranging, subscribing for, or underwriting any capital markets products. See s 2 of the Securities and Futures Act (Cap 289, 2006 Rev Ed).

26 An organised market may be a platform by means of which "offers or invitations to exchange, sell or purchase derivatives contracts, securities or units in collective investment schemes" are made. See para 1 of the First Schedule of the Securities and Futures Act (Cap 289, 2006 Rev Ed).

27 A "commodity" refers to any produce, item, good, or article that is the subject of any: (a) commodity forward contract; (b) leveraged commodity trading; (c) contract made pursuant to trading in differences; or (d) spot commodity trading. An index, a right, or an interest in a commodity would also constitute a commodity under the Commodity Trading Act (Cap 48A, 2009 Rev Ed) ("CTA"). See s 2 of the CTA.

28 See s 2 of the Commodity Trading Act (Cap 48A, 2009 Rev Ed).

29 Black's Law Dictionary (West Group, 10th Ed, 2014) defines "actual delivery" as the "act of giving real and immediate possession to the buyer or the buyer's agent".

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transfer of title to the commodity from the seller to the purchaser is sufficient.[30]

19 For illustration purposes, it is submitted that trading of asset-backed cryptocurrencies (*eg*, gold, platinum, silver or precious metals-backed tokens) will generally fall within the ambit of the CTA, specifically "spot commodity trading"; where a company offers a platinum-backed cryptocurrency for sale at its current market or spot price, and title of the underlying commodity transfers from the company to the buyer, there may be "spot commodity trading" as defined under the CTA. To the extent a company conducts spot commodity trading in relation to commodities as defined above, it may require a licence from ESG unless it can rely on a licensing exemption under the CTA.[31]

IV. Is a cryptocurrency a payment service?

20 After considering whether a cryptocurrency is a capital markets product and/or a commodity, with the PS Act coming into force in January 2020, companies should also consider whether offering of or dealing in cryptocurrency is a payment service. If offering of or dealing in cryptocurrencies falls within one of the seven regulated activities under the PS Act,[32] companies might

30 See James Chen, "Physical Delivery Defined" *Investopedia* (14 March 2018) ("When delivery takes place, a warrant or bearer receipt that represents a certain quantity and quality of a commodity in a specific location changes hands from the seller to the buyer who then makes full payment. The buyer has the right to remove the commodity from the warehouse or has the option of leaving the commodity at the storage facility for a periodic fee.").

31 See ss 12 and 13A of the Commodity Trading Act (Cap 48A, 2009 Rev Ed) ("CTA"). The CTA provides for several licensing exemptions for persons that carry on spot commodity trading on their own account and do not solicit funds from any member or any section of the public in connection therewith; or solicit or accept orders for the purchase or sale of any commodity by way of spot commodity trading for customers where such persons: (a) are not party to any contract for the purchase or sale of the commodity; (b) do not carry the customers' position, margin, or account in their own books; and (c) do not accept money or assets from customers as settlement of, a margin for, or to guarantee or secure any contract for the purchase or sale of any commodity." See para 1(*f*) of The Schedule Exemption of the CTA.

32 This article will only discuss and consider three of the seven regulated activities under the Payment Services Act 2019 (Act 2 of 2019) and assumes that cryptocurrency businesses do not provide the following regulated activities,

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require a Standard Payment Institution Licence ("SPIL") or a Major Payment Institution Licence ("MPIL").[33]

A. E-money

21 First, companies should consider whether their cryptocurrencies may be considered "e-money" under the PS Act.[34]

22 Where (a) the value of the cryptocurrency is backed by a single fiat currency (*eg* US dollars ("USD")); (b) in exchange for the cryptocurrency, purchasers must pay the issuer in fiat currency or deposit fiat currency into the issuer's reserve (*ie*, purchasers pay the issuer in either of the following – USD or Singapore dollars ("SGD")); (c) the cryptocurrency is accepted by third parties other than the issuer (*ie*, merchants or individuals accept this cryptocurrency as a mode for payment for goods and services); (d) users of the cryptocurrency may exercise their rights to claim from the issuer the representative value of the cryptocurrency (*ie*, the fiat currency); and (e) the cryptocurrency is not a deposit, defined as "a sum of money paid on terms — (i) under which it will be repaid, with or without interest or a premium, or with any consideration in money or money's worth, either on demand or at a time or in circumstances agreed by or on behalf of the person making the payment and the person receiving it; and (ii) which are not referable to the provision of property or services or to the

namely merchant acquisition service, domestic money transfer service, cross-border money transfer service and money-changing service.

33 This article assumes that there is little nexus between the offering of and dealing in cryptocurrencies with money-changing and will not discuss the money-changing licence under the Payment Services Act 2019 (Act 2 of 2019).

34 Section 2 of the Payment Services Act 2019 (Act 2 of 2019) has defined "e-money" to mean "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,
but does not include any deposit accepted in Singapore, from any person in Singapore.

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giving of security",[35] such cryptocurrencies may be considered "e-money" under the PS Act.[36]

23 It should be noted that as "e-money" represents a "claim on its issuer", there is evidently indebtedness owed by the issuer to the purchaser of such a cryptocurrency.[37] MAS has clarified that generally, a cryptocurrency that falls within the definition of "e-money" will not be regulated as a "debenture".[38] However, to the extent a cryptocurrency functions more like "debenture", and where the "payment service is solely incidental to or necessary solely for that person"[39] to carry on the business of offering securities under the SFA, companies who are regulated under the SFA may be exempted from getting a licence under the PS Act.

24 As cryptocurrencies share characteristics with "e-money" and "debenture", multiple legislative frameworks represent a regulatory cost for many companies, especially those which operate cryptocurrency businesses. Essentially, it is a conundrum to decide whether a cryptocurrency should be structured as (a) "e-money" or "security", (b) "e-money" and "security", or (c) neither of the above.

25 Companies may only apply for one licence – a capital markets services licence to deal in cryptocurrencies that appear to be securities, especially at the initial stages of development, when payment service might be "solely incidental" to their businesses.

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35 See s 4B(4) of the Banking Act (Cap 19, 2008 Rev Ed).

36 The Monetary Authority of Singapore ("MAS") has recently clarified that the current definition of e-money under the Payment Services Act 2019 (Act 2 of 2019) does not permit the MAS to regulate evolving and complex cryptocurrencies when (a) cryptocurrencies in the form of stablecoins may be pegged to more than one currency, and (b) stablecoin holders might not have a claim on its issuer. See Monetary Authority of Singapore, *Consultation Paper on the Payment Services Act 2019: Scope of E-Money and Digital Payment Tokens* (23 December 2019).

37 It follows that a cryptocurrency might be both a "debenture" and "e-money".

38 See Case study 11 in Monetary Authority of Singapore, *A Guide to Digital Token Offerings* (last revised 23 December 2019). It follows that companies that offer such cryptocurrencies are required to get a licence under the Payment Services Act 2019 (Act 2 of 2019) and not under the Securities and Futures Act (Cap 289, 2006 Rev Ed).

39 See para 2(*i*) of the First Schedule of the Payment Services Act 2019 (Act 2 of 2019).

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However, commercial developments might force cryptocurrency businesses to apply for a second licence under the PS Act, and it is submitted that compliance with the applicable secondary legislation represents an unnecessary cost for these companies.

26 Further, if a cryptocurrency does not represent a claim on its issuer, such a cryptocurrency may not be considered a "security" or "e-money" and the PS Act serves little purpose in supplementing the gaps currently presented by the SFA.[40] MAS has recently recognised this gap and is considering amending the definition of "e-money" to regulate cryptocurrencies that are backed by a basket of currencies and/or do not represent a claim on the issuer.[41] This author argues that even if MAS amends the definition of "e-money", the regulatory safeguards afforded to holders of "e-money" under the PS Act (*eg*, float protection)[42] are insufficient and inappropriate to protect the retail consumer. Purchasers of cryptocurrencies should be afforded the protections under securities law. Various disclosure and prospectus requirements under the SFA should be mandated upon cryptocurrency offerors so that retail consumers are equipped to make an informed decision to purchase cryptocurrencies, and the cryptocurrency issuer will be held liable for material misstatements in the offering materials.

40 See Monetary Authority of Singapore, *Consultation Paper on the Payment Services Act 2019: Scope of E-Money and Digital Payment Tokens* (23 December 2019). Many cryptocurrencies are structured in such a way that they are not regulated under the Securities and Futures Act (Cap 289, 2006 Rev Ed) as companies seek to demonstrate that there is no indebtedness owed by the issuer to the purchaser. It has often been argued by cryptocurrency issuers that their cryptocurrencies are merely a medium of exchange between users and that redemption of the underlying fiat currency/commodity is not possible or that the cryptocurrency issuer is not responsible for the redemption of such cryptocurrencies. Thus, to the extent a cryptocurrency is not debenture, and is denominated in a fiat currency or pegged against a basket of fiat currencies, it could be argued that the current and proposed legislative framework has little effect in serving its purpose of regulating cryptocurrency businesses or providing safeguards to retail consumers.

41 See Monetary Authority of Singapore, *Consultation Paper on the Payment Services Act 2019: Scope of E-Money and Digital Payment Tokens* (23 December 2019). The Monetary Authority of Singapore has cited Libra, an example of a cryptocurrency that does not fall within the definition of "e-money". See also Libra Association Members, "An Introduction to Libra" *libra.org*.

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

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B. Digital payment token

27 If the cryptocurrency is not backed by a fiat currency and does not represent a claim on its issuer, the next question to consider is whether the cryptocurrency is a "digital payment token"[43] ("DPT").

28 For illustration purposes, if (a) each unit of a cryptocurrency represents one gram of platinum, (b) it is offered to the public or a section of the public as a medium of exchange for payment of goods and services, and (c) such a cryptocurrency can be stored and traded electronically, it will be considered as a DPT. This definition of DPT presents another conundrum for companies which have traditionally viewed their cryptocurrencies as commodities since a platinum-backed cryptocurrency described above might also be considered a "commodity" under the CTA. It appears that the definition of "commodity" is broader and focuses on delivery while the definition of DPT focuses on whether it is a "medium of exchange". Nevertheless, where the cryptocurrency is backed by an asset (*eg*, platinum, gold, or silver), companies will have to decide whether their cryptocurrencies could be structured as (i) a DPT or "commodity", (ii) a DPT and "commodity", or (iii) neither of the above.[44]

29 If a company either deals in DPTs (*eg*, buys or sells DPTs)[45] or facilitates the exchange of DPTs (*eg*, operating a digital

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43 Section 2 of the Payment Services Act 2019 (Act 2 of 2019) defines a "digital payment token" as:

> any digital representation of value (other than an excluded digital representation of value) 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 [MAS] may prescribe.

44 To the extent a cryptocurrency is not, or is not intended to be, a medium of exchange, it will not be a digital payment token.

45 "[D]ealing in" any digital payment token refers to the "buying or selling of that digital payment token in exchange for any money or any other digital payment token". See para 3 of Part 3 of the First Schedule of the Payment Services Act 2019 (Act 2 of 2019).

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exchange where users of the exchange may buy or sell DPTs in exchange for any money and the exchange "comes into possession of any money or DPT, whether at the time that offer or invitation is made or otherwise"),[46] it will be required to obtain a licence under the PS Act. However, it should be noted that if a cryptocurrency business operates a digital platform that is "used exclusively by one person to do only either or both of the following things: (i) to make offers or invitations to buy or sell any [DPT] in exchange for any money, or any [DPT] (whether of the same or a different type); (ii) to accept any offer to buy or sell any [DPT] in exchange for any money, or any [DPT] (whether of the same or a different type)," such a digital platform will not be considered a "digital payment token exchange" ("DPT exchange") for the purposes of the PS Act.[47]

30 It would appear that if companies structure the operations of their digital exchanges in such a way that they do not come into possession of any money or any digital payment at the time of offer or invitation to buy or sell any DPTs, they would not require a licence under the PS Act. For illustration purposes, Company A operates a digital exchange wherein users of this exchange may buy or sell DPTs. However, Company A does not receive any moneys for any transaction and settlement occurs through a third-party provider (*eg*, Paypal). Instead, Company A has a service agreement with Paypal wherein Paypal pays Company A an annual licence fee for rights to be the authorised settlement provider for users of the exchange. Will such annual licence fees be considered moneys Company A "comes into possession"? This may be contrasted with another arrangement wherein Company B charges a transaction fee for every exchange of DPT made between users of the digital

46 "[F]acilitating the exchange of digital payment tokens" has been defined as "establishing or operating a digital payment token exchange … for the purposes of an offer or invitation (made or to be made on that digital payment token exchange) to buy or sell any digital payment token in exchange for any money or any digital payment token (whether of the same or a different type), comes into possession of any money or any digital payment token, whether at the time that offer or invitation is made or otherwise". See para 3 of Part 3 of the First Schedule of the Payment Services Act 2019 (Act 2 of 2019); see also s 2 of the Payment Services Act 2019 (Act 2 of 2019).

47 See para 3 of Part 3 of the First Schedule of the Payment Services Act 2019 (Act 2 of 2019).

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exchange. While Company B is clearly operating a "DPT exchange" as defined under the PS Act, it is arguable that Company A's digital exchange is more akin to a website than a "DPT exchange".

C. Account issuance service

31 The final consideration for companies should be whether their business model includes an "account issuance service," which relates to the service of issuing or operating a "payment account",[48] which allows users to make a "payment order"[49] or a "payment transaction".[50] If companies issue e-wallets to users to purchase cryptocurrencies, this will most likely be a regulated activity under the PS Act.

D. Summary of implications of the Payment Services Act 2019

32 If a company offers for sale, deals in, or facilitates the exchange of cryptocurrencies that are considered "e-money" or "DPT(s)", or if a company issues e-wallets for users to purchase cryptocurrencies, it will require either an SPIL or MPIL pursuant to the PS Act. An MPIL is required if the company carries on the business of providing one or more of the regulated payment services, and the monthly average value of payment transactions

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48 Under s 2 of the Payment Services Act 2019 (Act 2 of 2019), a "payment account":

> (*a*) means any account, or any device or facility (whether in physical or electronic form), that —
>
> (i) is held in the name, or associated with the unique identifier, of any person, and is used by that person for the initiation of a payment order or the execution of a *payment transaction*, or both; or
>
> (ii) is held in the names, or associated with the unique identifiers, of 2 or more persons, and is used by any of those persons for the initiation of a payment order or the execution of a payment transaction, or both; and
>
> (*b*) includes a bank account, debit card, credit card or charge card.
>
> [emphasis added]

49 A "payment order" "means an instruction to a payment service provider requesting for the execution of a payment transaction" under s 2 of the Payment Services Act 2019 (Act 2 of 2019).

50 A "payment transaction" "means the placing, transfer or withdrawal of money, whether for the purpose of paying for goods or services or for any other purpose, and regardless of whether the intended recipient of the money is entitled to the money" under s 2 of the Payment Services Act 2019 (Act 2 of 2019).

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accepted, processed or executed by the company exceeds $3m for any one of the payment services or $6m for two or more of the payment services. If the company carries on the business of providing an e-money issuance service, and the average, over a calendar year, of the total value in one day of all specified e-money that is issued by the licensee exceeds $5m, it will also require an MPIL. Conversely, a holder of an SPIL must not exceed the above thresholds listed for an MPIL.

V. Further observations

A. Complex baskets

33 Suppose a cryptocurrency ("JOCOIN") is backed by a reserve which comprises the following:

Table 1

No.	Type of Asset	Percentage (%)
1	USD	20
2	Euros	8
3	SGD	2
4	Crude Oil Futures	16
5	Palladium Futures	14
6	U.S. Treasury Bonds Futures	19
7	Chateau Lafite Rothschild Futures Contracts	1
8	Gold	15
9	Waldorf Astoria New York Hotel	1
10	Apple Inc's stock (AAPL)	4

Assume that (a) holders of the JOCOIN may convert certain units of JOCOIN immediately into USD, euro, SGD, AAPL stock or into gold bars with third parties or the issuer; (b) in exchange for not selling every block of 1000 JOCOINs for two years, purchasers who own 1,000 JOCOINs may exercise an option to redeem a case of Chateau Lafite Rothschild wine in two years; (c) in exchange for not selling every block of 10,000 JOCOINs, purchasers who own a block of 10,000 JOCOINs may exercise an option to be delivered a barrel

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of crude oil, or a certain amount of palladium; (d) US Treasury Bonds are redeemable for every block of 100,000 JOCOINs in three years from the date of issue of JOCOINs; and (e) participants in the initial JOCOIN sale are issued a preferred category of JOCOIN which represents shares in Waldorf Astoria New York Hotel.

34 Based on the hypothetical above, assumption (a) provides that JOCOIN is a security, a commodity and a DPT. Since JOCOIN is not pegged to any fiat currency, it should not be considered a form of e-money. In addition, while assumptions (b), (c) and (d) seem to suggest that JOCOIN is a derivatives contract, and despite the fact that Nos 4–7 from Table 1 suggest that 50% of JOCOIN's reserves are derivatives contracts, if JOCOIN is a security, it will not be considered a derivatives contract. Further, assumption (e) suggests that JOCOIN is also a CIS. Evidently, the current legislative framework presents a conundrum if a company wishes to issue JOCOIN because this cryptocurrency may be considered as many things (including a security, a CIS, a commodity, and/or a DPT).

35 While MAS has recently stated that if a cryptocurrency is regulated under the PS Act, it will generally not be regulated under the SFA,[51] and in the light of the fact that certain cryptocurrencies might not be regulated under both the PS Act and SFA,[52] this author recommends MAS to expand the definition of "security" under the SFA to safeguard the interests of the retail consumer under securities law.

B. Regulatory simplification

36 This author argues that the current legislative framework in Singapore – comprising the SFA, CTA and the PS Act – poses a rather difficult cryptocurrency conundrum for companies, regulators and the financial technology industry. Rather than simplify matters, the current legislative framework presents a complex set of rules that are not necessarily designed to regulate cryptocurrencies. From the illustration of JOCOIN, it is rather

51 See Case Study 11 in Monetary Authority of Singapore, *A Guide to Digital Token Offerings* (last revised 23 December 2019).
52 See para 26 above.

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evident that the current legislative framework could be simplified; a broad, simple framework would enable MAS to regulate potential complex cryptocurrencies like JOCOIN more effectively. If offering JOCOIN for sale is a regulated activity, it is odd to label JOCOIN as a security, a commodity, a CIS, and/or a DPT at the same time.

37 This author argues that application of the *Howey* test,[53] and importation of various common law developments in the US,[54] could be a solution to resolving this cryptocurrency conundrum. Rather than having three separate legislations, this author proposes harmonisation and a test based on the fundamental question of whether cryptocurrencies are "investment contracts". As enunciated by the US Supreme Court in *Howey*, an "investment contract" essentially involves an investment of money in a common enterprise with an expectation of profit derived from the efforts of others. In *Howey*, a hotel operator sold interests in a citrus grove to its guests and claimed it was selling real estate, not securities. The transaction involved a real estate sale but also included a service contract to cultivate and harvest the oranges. The purchasers could have arranged to service the grove themselves but, in fact, most were passive and relied on the efforts of Howey-in-the-Hills Service, Inc for a return. The US Supreme Court emphasised that "[f]orm [is] disregarded for substance and the emphasis [is] placed upon economic reality".[55] Applying the illustrations above (whether a cryptocurrency is backed by a single fiat currency or by a basket of fiat currencies, a platinum-backed cryptocurrency, or the hypothetical JOCOIN), cryptocurrencies are fundamentally assets that have a use in their own right and are often advertised that they will grow in value, and a profit may be expected when such cryptocurrencies are sold at a later date. If this functions-based

53 See *SEC v W J Howey Co* 328 US 293 (1946).

54 See Jonas Koh Lei, "Crypto Conundrum Part II: A Multi-Jurisdictional Uncertainty" [2020] SAL Prac 4. See also, *eg*, *SEC v Glen-Arden Commodities, Inc* 368 F Supp 1386 (EDNY, 1974); *United Housing Foundation, Inc v Forman* 421 US 837 (1975); *Gary Plastic Packaging Corp v Merrill Lynch, Pierce, Fenner & Smith, Inc* 756 F 2d 230 (2d Cir, 1985); *SEC v International Loan Network, Inc*, 968 F 2d 1304 (D C Cir, 1992); and *SEC v Edwards* 540 US 389 (2004).

55 See *SEC v W J Howey Co* 328 US 293 at 298 (1946). In this case, the US Supreme Court held that the purported real estate purchase was found to be an investment contract, wherein investment in orange groves was an investment in a security.

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test is applied in Singapore instead, a cryptocurrency like JOCOIN would thus simply be determined as an "investment contract".

VI. Conclusion

38 While the PS Act seeks to safeguard the interests of many retail consumers who pay for goods and services with cryptocurrencies, this author argues that the current legislative framework in Singapore is not well equipped to deal with innovative advancements presented by distributed ledger technology or to regulate the constantly evolving nature of cryptocurrency offerings. Multiple labels (*eg*, security, CIS, derivatives contracts, commodity, e-money, DPT, *etc*) confuse rather than guide companies. Instead of fragmented regulations, a functions-based test could harmonise the SFA, CTA and PS Act. Retail consumers are also better served with protection under securities law as the very "impetus of [securities law] is to remove the information asymmetry between promoters and investors".[56] In the light of the above, "Crypto Conundrum Part II: A Multi-Jurisdictional Uncertainty" will continue with a critical analysis of the applicability of and developments from *Howey* in the US and provide an in-depth comparative analysis of foreign regulatory approaches towards cryptocurrencies.

56 See William Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)" *US Securities and Exchange Commission* (14 June 2018).

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