As interest continues to grow in virtual currencies, blockchain technology, and initial coin offerings ("ICOs"), governments are evaluating the benefits and potential risks of these innovations, while considering numerous regulatory issues. Recent announcements by the Monetary Authority of Singapore go some way toward clarifying its position relative to a digital token's possible designation as a security, the obligations of issuers and intermediaries, and the responsibilities required of trading platforms.

This Jones Day White Paper defines relevant terms, examines the “is it a security?” question, and summarizes the Singapore government's view of these issues.
On August 1, 2017, in the wake of a recent surge in the number of initial coin (or digital token) offerings (“ICOs”) held out of Singapore as a means of raising funds, the Monetary Authority of Singapore (“MAS”) followed the example of the United States Securities and Exchange Commission (“SEC”) by making an announcement (“MAS Announcement”) on its position with respect to digital tokens and offerings thereof in Singapore.

The MAS Announcement made the following points explicitly clear:

- As with many jurisdictions around the world, MAS does not regulate virtual currencies;
- Digital tokens are not, by virtue of their digital, decentralized, or cryptographically-secured nature (or otherwise) excluded from being able to fall within the definition of a “security” under the Securities and Futures Act (Cap. 289) (“SFA”);
- Where a digital token or type of digital token falls within the SFA’s definition of a “security,” issuers of such digital tokens (“Tokenized Securities”) would, unless exempted, be required to lodge and register a prospectus with MAS prior to the offer of such Tokenized Securities;
- Issuers and intermediaries of such Tokenized Securities would, unless exempted, also be required to be licensed under the SFA and the Financial Advisers Act (Cap. 110) (“FAA”); and
- Any platform facilitating secondary trading of such Tokenized Securities would have to be a MAS approved exchange or a MAS recognized market operator.

A consumer advisory on investment schemes involving digital tokens from MAS and the Commercial Affairs Department (“CAD”) followed the MAS Announcement highlighting what MAS and CAD see as inherent risks in investments into digital tokens and provided guidance as to what they considered to be a responsible approach for such investments.

On October 2, 2017, in his “Reply to Parliamentary Question on the prevalence use of cryptocurrency in Singapore and measures to regulate cryptocurrency and Initial Coin Offerings” (“Parliamentary Response”), Mr. Tharman Shanmugaratnam, the Deputy Prime Minister and Minister-in-Charge of the MAS, reiterated that: (i) “if a token is structured in the form of securities, the ICO must comply with existing securities laws aimed at safeguarding investors’ interest”; (ii) money laundering and terrorism financing risks are prevalent when dealing with virtual currencies; and (iii) that public awareness of potential scams needs to be highlighted.

Despite the risks involved, ICO participants have collectively invested close to US$2 billion through ICOs up to August 2017. With exponential growth in interest (including from mainstream companies) in virtual (or crypto) currencies, blockchain technology, and ICOs, consideration is required as to the interplay between innovation, the inherent risks of schemes involving digital tokens, and the current regulatory landscape in Singapore.

In this White Paper, we focus on the approach of MAS and the Singapore government to these issues, using the definitions and classifications adopted by their guidance and announcements. As this technology remains nascent, we note these definitions and classifications are not settled and not yet used consistently between jurisdictions or regulators.

WHAT IS AN ICO?

Simply put, an ICO is a fundraising method used by a project, venture, or decentralized application (“dApp”) whereby digital tokens are issued to ICO participants, typically, in exchange for other digital tokens such as Bitcoin or Ethereum’s Ether. ICOs have quickly gained popularity as a means of fundraising in the start-up technology sector, but are now becoming relevant to broader business opportunities and sectors. ICOs are comparable to both initial public offerings on a stock exchange and crowd funding initiatives in that they raise funds from the public, albeit in ICOs investors receive digital tokens as opposed to equity shares or rewards.

WHAT ARE DIGITAL TOKENS?

In the MAS Announcement, MAS broadly described digital tokens as “a cryptographically-secured representation of a token-holder’s rights to receive a benefit or to perform specified functions.”
From a technological standpoint, as MAS acknowledged, “the function of digital tokens has evolved beyond just being a virtual currency” and digital tokens can therefore be categorized into certain types that have differing functions and utilities.

**Virtual Currencies**

At one level, a virtual currency can be any kind of digital asset that need not be cryptographically secured and that can be redeemed by a user for value (frequent flyer miles are an example of this broad classification). However, in the context of the MAS Announcement, a virtual currency can be broadly defined as a cryptographically secured digital currency built on a decentralized peer-to-peer network (which is what many would otherwise describe as a cryptocurrency). In this context, while blockchain-based virtual currencies may each have their own different characteristics (e.g., robust security—Bitcoin; faster block or transaction confirmation times—Litecoin; or increased privacy options—Monero), as described by MAS in the MAS Announcement, they all “typically function as a medium of exchange, a unit of account or a store of value.”

**Protocol Coins**

The term “protocol,” in the context of blockchain technology typically refers to the set of cryptoeconomic rules used to maintain consensus across an individual blockchain (or peer-to-peer network). Sometimes these are referred to as cryptoeconomic protocols to distinguish them from “network protocols,” which facilitate communication between nodes on a distributed ledger.

Each blockchain protocol generally has its own native (cryptoeconomic) coin (“Protocol Coin”), and these coins not only facilitate transactions on the protocol, but also act as a financial incentive for those who maintain the protocol. For example, Bitcoin’s economic rational is based on a proof-of-work model: Bitcoin miners are responsible for securing (or validating) the entire network and their incentive for doing this correctly is receipt of Bitcoin through block rewards and transaction fees. For incorrect miner validations, however, miners will not receive their Bitcoin reward despite having potentially utilized a significant amount of electricity and money running their miners during this process. Two other Protocol Coins, Decred and Tezos (both still in development), also provide coin holders with an ability to vote or participate in decisions as to software upgrades and project development. Other examples of Protocol Coins are Ethereum’s Ether, Waves, and Bitshares.

**Application Tokens**

Decentralized applications usually do not require a native coin to function and instead draw value from charging (via the sale and purchase of a scarce access-token) for access or use of the protocols. Developers of dApps create or incorporate Application Tokens so that: (i) they can distribute these Application Tokens to users (often by way of an ICO) to raise capital; and (ii) retain some amount of the Application Tokens for themselves so that, if the platform or dApps proves popular, the Application Token (and the developers’ interest) will increase in value.

An Application Token can resemble a type of digital share, sold to investors in exchange for a portion of future profits, where the payout is governed by either a ‘smart contract’ or a legally binding written agreement (or both). Recently, we have seen these types of digital tokens also being referred to and structured in a way that is more synonymous with a membership token (such that you buy the tokens and receive a membership to the dApp’s access platform). One may subdivide Application Tokens into two distinct categories in this regard: “security tokens” on the one hand and “utility” or “membership tokens” on the other. However as highlighted by decisions taken by the SEC (see below), such a distinction (including when made by the token issuers themselves) may, at times, be somewhat misleading.

**Asset or Currency Backed Tokens**

Asset Backed Tokens are digital tokens that actually represent some or all of an underlying asset, essentially acting as a cryptographically-secured “IOU” for the underlying asset. Some Asset Based Tokens are designed to be permanently pegged to and are one-to-one backed by a traditional currency, while others are backed by a minimum amount of the underlying asset (e.g., gold), but are designed with the intention of increasing in value over time. Proponents of blockchain and its ability to create a trustless system have expressed concerns over these types of tokens as, their asset or currency backed nature requires a third party (such as an auditor) to verify that the digital token is, in fact, backed by the same value of assets or currency as is purported. There are also separate issues when assessing the ability to hold and transfer legal title to certain assets through the use of digital tokens. Examples of Asset Backed Tokens include Digix and REAL.
offering and its fundamental nature, including the economic realities of the transaction, and not on labels that are applied to such coins or digital tokens.

The SEC then followed the SEC DAO Report by charging the promoters of the REcoin and Diamond Reserve Club (“DRC”) ICOs in late September 2017 with defrauding investors (“REcoin DRC Ruling”), marking the first time the SEC has brought an enforcement action related to ICOs. In the REcoin DRC Ruling, the SEC alleged that the defendants illegally offered unregistered securities (despite their attempt at structuring the tokens as membership tokens) and made fraudulent misstatements that were designed to deceive investors in connection with the ICOs. For more details on the REcoin DRC Ruling, please refer to our October 2017 Commentary, “SEC Brings First Enforcement Action Related to Initial Coin Offerings”.

MAS has, however, stopped short of considering any specific ICO or digital token, or the characteristics thereof, to confirm whether or not it constitutes a “security” under the SFA. Unlike the Howey Test applied by the SEC, which takes a subjective case-by-case approach to determining whether or not something is a security, the definition of “securities” under the SFA refers to traditional common law forms of security interests (such as debentures, shares, collective investment schemes, and business trusts). A digital token, therefore, would need to fall within the definition of an existing type of security like a debenture or a share. Determining this may be difficult in instances where a digital token has certain characteristics, for example as one of a limited number of tokens that together form the value of an enterprise (appearing to be more like a security), and at the same time usable only to purchase services in such enterprise and not exchangeable for fiat currencies (e.g., USD or SGD).

In the SEC DAO Report and the REcoin DRC Ruling, the Howey Test provided a starting point for those intending to deal in digital tokens from which to assess their legal standing. Conversely, MAS’s approach leaves those who have previously conducted or participated in ICOs or facilitated secondary digital token markets (or those contemplating any such activity) without guidance or any detailed indications of any potential safe harbors. It also (and perhaps more importantly) provides MAS with sufficient flexibility to both consider

Notwithstanding the different characteristics described above, a digital token can possess a number of different utilities depending on both what it is used for and the user itself. Taking the protocol coin used on the Ethereum network, Ether, as an example. Those that execute smart contracts on the Ethereum network pay the execution costs in Ether. Conversely, there are those that purchase Ether but do not intend on actually using the Ethereum network, instead either speculating on future appreciation in value or accumulating speculative tokens in the form of ERC20 tokens.

It is interesting, therefore, to note that the SEC and MAS have both expressly labelled Ether as a virtual currency without any mention of the alternative utility that a large portion of Ether holders see in its ownership (that of a stake in the total number of Ether tokens issued).

**ARE DIGITAL TOKENS SECURITIES?**

From a regulatory and legal standpoint in Singapore, the MAS’s key consideration for digital tokens appears to be whether or not such token’s characteristics and utility cause it to fall within the definition of “securities” in the SFA.

The MAS Announcement did not provide detailed guidance on the application of the definition of “securities” under the SFA to digital tokens, other than to state that (i) if the use of a digital token relates to ownership of, or a security interest over, an issuer’s assets or property, it could be considered to be an offer of shares or units in a collective investment scheme under the SFA; or (ii) if a digital token represents a debt owed by an issuer, it may be considered a debenture under the SFA, in each case being “securities” for the purposes of the SFA.

While it may appear that MAS is following the stance taken in earlier decisions by the SEC, there are some notable differences between the two approaches. In its ruling on July 25, 2017 (“SEC DAO Report”), the SEC stated that U.S. securities laws may apply to offers, sales, and trading of interests in virtual organizations and applied the test set out in SEC v. W.J. Howey Co. (“Howey Test”) to determine whether a digital token issued by a virtual organization named The DAO constituted a security under U.S. securities laws (it found that it did). This effectively means that whether a coin or a digital token is a security depends on the facts and circumstances of the offering and its fundamental nature, including the economic realities of the transaction, and not on labels that are applied to such coins or digital tokens.

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industry practices as they develop and determine how digital tokens should be treated on a case-by-case basis, pending any regulatory changes that MAS considers appropriate to deal with digital token issuances.

**CONSEQUENCES OF BEING A SECURITY; WHAT EXCEPTIONS MIGHT APPLY**

If a digital token does fall within the definition of security under the SFA, unless applicable exemptions apply, any offer of such digital tokens would be required to be accompanied by a prospectus lodged and registered with MAS, with the issuer and/or intermediaries of such digital tokens subject to licensing requirements under the SFA and the FAA, as a holder of a capital markets services license and/or a financial adviser’s license.

The SFA provides a number of exemptions from the prospectus requirements, most of which appear unsuited to ICO practices (e.g., small offers under S$5 million within a 12 month period or offers made to fewer than 50 persons within any 12 month period). Perhaps the exemption more likely to be available would be for offers made to accredited investors, whereby digital tokens could be offered to investors fulfilling the requirements of the foregoing definition in the SFA (primarily by reference to income [currently, S$300,000 or more in the preceding 12 months] and net worth [currently, in excess of S$2 million]), accompanied by an information memorandum purporting to describe the digital tokens being offered and the enterprise involved, that is prepared to assist accredited investors in making an investment decision in respect of the digital tokens being offered.

Any such offering purporting to be exempt by virtue of only being to accredited investors, and therefore SFA compliant, would, however, need to (i) provide for safeguards to ensure that investors satisfy the requisite requirements of the definition of “accredited investor,” (ii) be undertaken by a suitably licensed or exempt issuer or intermediary, and (iii) restrict offers and sales into jurisdictions where such offers and sales would fall foul of local securities laws (e.g., offerings into the United States).

In the United States, a number of issuers are purporting to undertake compliant ICOs. FileCoin, a cryptocurrency issued to power a proposed decentralized storage network, has undertaken an ICO on CoinList, a platform designed to host U.S. securities law compliant ICOs through the use of a Simple Agreement for Future Tokens. Only accredited investors were able participate in the FileCoin ICO (which raised a record aggregate amount of more than US$250 million), with CoinList (through its founder partner AngelList) undertaking investor KYC checks to ensure compliance with required income and net worth thresholds under applicable securities laws. While this has not been confirmed as compliant by the SEC, an SEC approved digital token security or ICO process would represent a potential safeguard for issuers and investors to participate in this market without falling outside of applicable regulatory regimes. Many ICO and cryptocurrency proponents may, however, argue that the SAFT framework is actually a step backwards for ICOs as it goes against a major rationale for the use of ICOs to fundraise. Namely, that of democratizing capital markets and making investment opportunities available to those that would not otherwise have the same opportunity through traditional fundraising methods.

Nevertheless, if the SEC provides guidance on such a platform, it may be that MAS follows suit to legitimize compliant ICOs as a new fundraising tool for issuers.

Notwithstanding whether analysis has been undertaken as to whether an issuer’s digital tokens represent “securities” under the SFA or not, issuers on many recent ICOs in Singapore have attempted to steer clear of the application of securities laws by expressly stating that the digital tokens being offered are not and should not be treated as a form of security. It has not yet been addressed by MAS whether such express statement will exonerate such issuers from the application of securities laws or whether MAS will instead look at the actual utility of each individual digital token to an investor to make any determination.

**CONCLUSIONS**

The vast majority of ICOs up until now have typically involved fundraising for blockchain-related technology in which the concept of ownership or profit sharing, for example, and therefore the security nature of tokens, is not always clear. Despite the nascent nature and relatively insignificant size of the ICO market at present (to put ICO funding in perspective, the total amount that raised through ICO in 2017 to date is less than
ten percent of the amount raised through crowdfunding platforms in 2015 [approximately US$34 billion] and less than two percent of the amount raised through venture capital investments in 2016 [approximately US$127 billion]), with increasing interest globally, it is possible that ICOs may become a prominent method of raising funds for issuers in any type of industry.

Accordingly, it has become increasingly apparent that regulatory bodies around the world, including MAS, will need to understand the implications of digital token offerings under existing regulatory regimes, and will need to decide how to adapt (if at all) such regulatory regimes in order to ensure that adequate protections exist for investors and ICO participants, while simultaneously supporting innovation in a sector with significant potential to shape future economics and finance.

This raises some interesting questions including as to whether (i) the characteristics of digital tokens and the ICO market are sufficiently different or malleable to justify a distinct or independent body of law or new definition within an existing body of law, or (ii) a better approach would be to adapt or interpret the traditional existing body of law, in order to sufficiently address the relevant issues that regulators, issuers, and investors alike have identified when dealing with this type of technology. Simply put, will the use of digital tokens reshape law or will the law reshape the use of digital tokens?

The answer to this question may, at least in the near term, differ from jurisdiction to jurisdiction and, from a legal perspective, will largely depend on how resistant the current law that applies in a particular jurisdiction remains to technological change.

In Singapore, MAS appears to be taking a relatively measured approach in this regard.

MAS has recognized that the traditional nature of its securities laws may require amendment in the future without imposing upon itself any binding obligations to do so. As stated in the Parliamentary Response, MAS has not issued new legislation specifically for ICOs. However, it did state that it will “continue to monitor the developments of such offers, and consider more targeted legislation if necessary”. In an interesting recent development in October 2017 that may further demonstrate Singapore’s willingness to support innovation in this sector, Sopendo Mohanty, MAS’s Chief Fintech Officer, indicated that there has been some encouragement from within MAS to take ICOs into a regulatory “Sandbox”, as has been the case with some other applications of blockchain technology in Singapore to date. Such an approach, if implemented, could enable ICOs on an experimental basis within the “Sandbox’s” unregulated environment, helping regulators and third parties better understand and develop ICO-related activity while limiting consumer exposure.

In parallel, MAS has also been working on a new payment services regulatory framework that will address money laundering and terrorist financing risks in the form of a new blockchain proof-of-concept being developed with some of the major Asian banks aimed at streamlining know-your-customer processes. This shows a clear interest on the part of MAS to utilize new technology in order to address known and highlighted risks arising in the sector.

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For further information on blockchain technology and the legal issues relating thereto, Jones Day has prepared a White Paper, “Blockchain for Business,” which considers common use cases for different business sectors and focuses on the basic legal issues relevant to adoption of blockchain technology across nine major jurisdictions.
For further information, please contact your principal Firm representative or one of the lawyers listed below. General email messages may be sent using our “Contact Us” form, which can be found at www.jonesday.com/contactus/.

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