



VERSION 1.0

A PRIMER ON CRYPTOSECURITIES

WORKING DRAFT

WORKING GROUP ON CRYPTOGRAPHIC TOKEN

BLOCKCHAIN WORKSHOPS

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SUMMARY

The document is meant to be a primer for securities regulators and policy makers as to the current state of cryptographic tokens. These tokens, which are usually (though not always) native to particular instances of distributed databases known as blockchains, have a wide range of uses and, as a result, a wide range of characteristics. Some resemble currency, others a security or commodity, and others have no financial element at all. This paper focuses on the application of cryptographic tokens in a securities context and proceeds in the following manner: (1) a brief explanation of blockchain technology; (2) an overview of factors relevant to a securities law analysis; (3) application of relevant securities law to hypothetical fact patterns, and (4) a discussion highlighting the factors to be considered in a securities analysis, and related concerns for regulators and policy makers.

1. WHAT IS A BLOCKCHAIN?

The blockchain is a distributed database that records transaction information. It is a novel solution that accomplishes consensus without a single, central authority. Instead, the ledger is maintained by a network of communicating nodes running the same software. Often times, each node also validates transactions, adding them to their copy of the ledger, and then broadcasting the updates to other nodes.

While a conventional ledger usually requires a central party to administer and record transactions and be the source of truth should dispute arise, the blockchain instead relies upon a majority-based consensus among the different nodes to decide its state. This gives the blockchain a number of advantages that are unparalleled by traditional technology.

2. WHAT IS A CRYPTOGRAPHIC TOKEN?

A cryptographic token is the unit of account on a blockchain. The function of a blockchain dictates the characteristics of the corresponding tokens. If a blockchain's primary function is a system for value transfer, the token will likely have some monetary value. If on the other hand, the blockchain is being used primarily as a recording mechanism, the token may have no monetary value at all. The characteristics of a cryptographic token are as numerous as the applications for blockchain technology, and the list is always growing.

3. EARLY USE OF CRYPTOGRAPHIC TOKENS - BITCOIN

The initial and most recognizable use for cryptographic tokens was as virtual currency, most notably, Bitcoin. In the virtual currency context, the value of the token is largely determined by supply and demand and subject to an exchange rate (e.g. \$400/BTC). The tokens can be spent like digital cash at select merchants.

4. EVOLUTION OF CRYPTOGRAPHIC TOKEN – EXAMPLES

Due in large part to the utility and proliferation of blockchain technology, cryptographic tokens are now being used to represent a wide range of assets and value. One of the most promising applications for blockchains and cryptographic tokens relates to the securities markets, specifically settling and recording securities transactions. In some instances, the token is the security (e.g. share of stock, bond); in others the token is a tool, used to add a layer of transparency to transactions for example. These applications can be loosely sorted into three groups:

1. Tokens intended to be securities

- In July 2015, Overstock, a Utah-based online retailer, announced it sold a \$5 million “cryptobond” to FNY Managed Accounts. The cryptobond, represented by a cryptographic token and transferred on Overstock’s proprietary tO blockchain, will pay 7% interest over a five-year period.
- “JI777hodl” is a crypto token that represents a basket of 20 or so high performing digital assets.
- Nasdaq’s Linq project will allow private companies to issue stock in the form of cryptographic tokens to founders and investors. Issuance and transfer of the tokens will be managed using the Linq dashboard.

2. Tokens as tools or mechanisms for processes that involve securities

- Overstock’s tO platform uses the blockchain to attach a digital token to a borrowed share of stock. The use of cryptographic token to track the activity of the underlying share of stock gives the stock holder the ability to closely track each transaction involving their loaned share of stock.

3. Cryptographic tokens that *may* be securities

- There are a number of cryptographic tokens that are not explicitly bonds or shares of stock and do not fall squarely in the “securities” box, but may nevertheless have characteristics that resemble securities. These tokens may be purchased as an investment, traded on secondary exchanges for profit, or entitle its holder to vote or receive a dividend.

5. ELEMENTS OF A SECURITY

Regulators globally, including in Australia and the US, have been examining with interest the purchase and sale of bitcoins and other types of “cryptocurrencies” or “digital assets”. One particular area of interest is whether transactions in these assets may constitute the issuance, purchase or sale of securities, implicating both broad capital market concerns as well as individual consumer protection interests. Generally speaking, most endeavors in this space do not cleanly fit into a simple and clear bifurcation between those activities which constitute securities and those which do not. Every jurisdiction follows its own set of principles for guidance in this area. Therefore, it is very important for anyone intending to create a business involving the use of digital tokens to be aware that a permitted use in one country may be proscribed in another.

Each of the hypotheticals discussed below involves a use of digital assets or “tokens” that may not be obviously considered securities on their face. Nevertheless, their practical, day-to-day operations (both in the manner in which they are created and in their use) may cause them to be considered as securities, or investment contracts, subject to the rules and regulations of a particular jurisdiction’s securities laws.

As will be shown below, an analysis of digital token use involves assessing a number of facts which have been held to implicate (or not) the creation of, or transactions in, securities. This analysis is complicated by the fact that the issuance of digital tokens is often not accompanied by a legally binding document that clearly spells out the various rights of the token buyer, meaning the character of the relationship between a token issuer and a token owner may be governed in large part by disparate representations, by implication or by common usage. Additional rights, privileges, or expectations (e.g. of a return on investment or other profits), when attached or built into digital tokens may transmute them into securities. Whether this is the case with any given use of a token is, or the structure of a token itself, is a question of fact to be determined on a case-by-case basis.

For example, in the US, the seminal federal case is *Howey*, which is considered the touchstone for determining whether a particular transaction, arrangement or endeavor is a security for securities law purposes. The *Howey* case sets forth four factors, which, if all are met, will result in a determination that the transaction, arrangement or endeavor is indeed a security. These factors are: (1) an investment of money or other tangible or definable consideration used in (2) a common enterprise with (3) a reasonable expectation of profits to be (4) derived primarily from the entrepreneurial or managerial efforts of others. The *Howey* case stands for the proposition that a security is not so much defined by its form as by its function, and that the definition should embody “a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.”

Certain other federal cases have further delineated the scope of *Howey*; for example, the *Forman* case held that a transaction whose ultimate purpose was consumption of a good, rather than the making of an investment, would not be considered a security (e.g., purchase of stock in an apartment building co-operative in New York City was a purchase of an apartment as a personal residence, not a security for investment purposes). The “stock” in the *Forman* case, although facially resembling a standard equity share, hence a “security”, did not confer normal indicia of stock, such as the right to receive dividends contingent upon an apportionment of profit. In fact, the non-profit nature of the project was stressed in the selling document which focused upon the acquisition of a place to live.

Competing or overlapping jurisdictional or regulatory regimes in a given country can make matters more complicated. For instance, under state law as enunciated in the *Silver Hills Case*, a transaction that fails the *Howey* test under federal law may nonetheless be deemed a security under California law if the “risk capital” rule is triggered. This analysis holds that a security exists if (1) funds used for a business venture or enterprise (2) are raised in a transaction made broadly available to the investing public (3) where the participants are virtually powerless to effect the success of the venture and (4) the participants’ money is substantially at risk because it is inadequately secured.

The hypothetical use cases discussed below have been analyzed under US law only for the sake of brevity; many of the elements discussed can also be found in other jurisdictions' law, such as in Australia's regulations with respect to "managed investment schemes". There, if (1) a group of people is brought together to contribute money to get an "interest in the scheme" ('interests' in a scheme are a type of 'financial product' and are regulated by the Corporations Act 2001), (2) money is pooled together with other investors or used in a common enterprise (3) by a 'responsible entity' operates the scheme (i.e., the people do not have day to day control over the operation of the scheme).

Ironically, given the nature of digital tokens, it is not possible to create algorithms to determine whether a structure or transaction will be considered a security. At least in common law jurisdictions, the practice of law is more art than science, partly because the public policy interests relating to investor protection may cause a court to weigh certain factors discussed above more than others in any given situation. Therefore, as is made clear by the hypothetical examples discussed below, it is critical to first assess and then analyze the entire constellation of facts involved with and surrounding an endeavor or enterprise to make sure that the structure and use of tokens does not cause it to be deemed a security

6. HYPOTHETICALS

This section is intended to stimulate discussion and questions and should not be construed as legal advice. If you are planning to issue or sell a token, we encourage you to consult with competent legal counsel to determine what, if any, laws and regulations you must comply with.

Hypothetical 1: Tokens representing access to a software platform

Blockchain Project A intends to develop a new software platform for developers. The team is not capable of self-financing the project and it is too early to approach investors. To raise money, the team decides to sell a project-branded token called Project A Coin. The team ultimately raises \$1,000,000 in bitcoin from the sale of Project A Coin. Immediately after the sale, virtual currency exchanges begin trading Project A Coin and in the days that follow, many of the purchasers liquidate their holdings for a healthy profit.

Investment of Money: There is clearly money changing hands, but the intent of the purchaser is unclear. Did they intend to purchase software access, or was the purchase motivated solely by an expectation of profit? The team's intent may also be relevant. Experienced teams would know that the token will in all likelihood be added to secondary trading markets, and that a portion of participants are purchasing the token expecting to sell if/when the price increases. While the legality of these sales depends on the specific facts at hand, teams are clearly benefiting from a process that looks awfully similar to a securities issuance.

Common Enterprise: The funds raised are being used by the team to develop the technology, and will be pooled together to cover ordinary operating expenses (payroll, office lease, utilities, marketing, etc.).

Reasonable Expectation of Profit: While this is very much a situation-specific analysis, history tells us that a large percentage of people purchase tokens in crowd sales hoping that the token's value increases over time and can be sold for a profit.

Derived Mainly from the Efforts of Others: Whereas the total value of the outstanding stock of a company is determinative of the company's valuation, the total value of the tokens sold by a project are not necessarily directly tied to the valuation of the project. This means that just because the value of the company increases over time, it does not mean the token value will increase accordingly. In fact, the market value of the token is largely independent from the actions of the company, and is instead determined by supply and demand of the token on secondary trading markets.

Hypothetical 2: Token redeemable for product or service (voucher)

Project B is developing a new cloud storage platform. To raise money for development, Project B sells StorageCoin, a token that can be redeemed for 10GB of storage space when the platform is complete. Project B raises \$500,000 in bitcoin selling StorageCoin. Project B does not distribute StorageCoin to the purchasers until the platform has been completed.

Investment of Money: Money is changing hands, but the purchase of StorageCoin is not clearly an investment. Because the tokens are not distributed at the time of sale, the purchaser has no immediate expectation of profit. Project B has, for the time being, prevented a secondary trading market from developing.

Common Enterprise: The funds raised are being used by the team to develop the technology, and will be pooled together to cover ordinary operating expenses (payroll, office lease, utilities, marketing, etc.).

Reasonable Expectation of Profit: This offering resembles a traditional crowdfunding arrangements (e.g. Kickstarter, IndieGogo) where the purchaser receives some sort of reward for their contribution (or donation) to the project. In this case, the reward is storage space that was effectively "pre-bought" by the purchaser.

Derived Mainly from the Efforts of Others: In this case, without an expectation of profit, this factor will not exist. The only identifiable benefit to the purchaser is the right to access an amount of storage space.

Hypothetical 3: Token representing membership to an organization

Organization C recently formed and wants to implement a novel approach to managing membership and participation. Organization C develops a branded token that it envisions will represent membership in the organization and act as a voting mechanism for the members. The token is distributed to new members when they pay their membership dues.

Investment of Money: Money is changing hands, but the intent of the new member is likely not to profit from her involvement in the organization. In fact, other than being required to participate in certain activities, the token may have no significance to her at all.

Common Enterprise: The funds raised are being used by the organization to cover operating expenses (payroll, office lease, etc.).

Reasonable Expectation of Profit: In this situation, there is no profit to be earned by the new member. However, if the fact pattern was changed and the member-based organization was

instead a for-profit corporation and a token entitled its holder to a pro-rata portion of the corporation's quarterly profits, then an argument can be made that the holder purchased the token as a passive investment.

Derived Mainly from the Efforts of Others: As written, there is no profit to be derived from the efforts of others. However, in the context of a for-profit corporation distributing quarterly profits to token holders, the profits received by the token holders are likely derived mainly from the efforts of the corporation's employees, and not the token holders themselves.

7. VARIABLES TO CONSIDER WHEN ANALYZING THE ISSUANCE AND SALE OF A TOKEN

Some of the common variables listed below have been found significant in determining whether a token, venture or activity meets the criteria for a security under US securities laws. This is by no means an exhaustive list, but it serves to provide a flavor of the attributes that a court will look at when considering whether a token should be considered a security.

1. Are there any rights associated with a token?

- Are these economic rights, such as rights to dividends, warrants, share of the enterprise's profits etc.? If so, these will likely weigh in favor of the finding of a security.
- Are these corporate governance rights like voting? If they resemble typical equity security rights, these will likely weigh in favor of the finding of a security.

2. Is the token transferable or divisible?

- If the answer is yes to either feature, it will likely weigh in favor of the finding of a security because these are attributes of a security that aid in its general marketability and liquidity.

3. Will the token be "exhausted" with use?

- If the answer is yes, it may mitigate the finding of a security because the token is used for consumption of a good or service and is not designed to trade from one person to another.

4. What is the basis of the token's underlying value?

- If it has a de minimis value redeemable for merchandise like T-shirts or hats or other non-valuable items, this may mitigate the finding of a security because the value is not related to the enterprise's value or profits.
- If, however, the value is related to the enterprise's value or profits, it will weigh in favor of the finding of a security.
- Note that if the token's value is pegged, indexed or referenced to an asset totally independent of the enterprise, it may not be considered a security but may be deemed a "derivative" instrument which could be subject to the jurisdiction and regulation of the

Commodity Futures Trading Commission, which is beyond the scope of this discussion.

5. Is the token issued or sold to the public generally, or only available to a select group?

- If the token is issued or sold to the public generally, this is a factor that will likely weigh in favor of the finding of a security. Among other things, the issue of investor protection is raised by an “indiscriminate” sale to the public.
- If the token is made available to a select group only, this may reduce the investor protection concerns and may mitigate the finding of a security.

6. Do the token owners have the direct ability to affect the success of the enterprise?

- If token owners can actively participate in the decision making and profit taking of the enterprise, this will mitigate the finding of a security. A showing that the enterprise’s profits are not derived largely from the efforts of a promoter or third party is a failure of the last prong of the Howey test.
- If, however, token owners are merely passive in this regard, this will weigh in favor of the finding of a security.

7. Is there a risk of loss to the participant?

- If yes, this will weigh in favor of the finding of a security under the Silver Hills case in California and the other US states that follow the “risk capital” test.
- In the states that do not follow the “risk capital test”, this may be an additional factor to be considered but it will not be dispositive in determining whether something is a security.

8. What is the intent of the seller and the buyer of a token?

- If the seller is selling a service or a good to be used solely by the buyer for his/her personal use, such as the seller and buyers of the apartment co-operative stocks in Foreman, it will mitigate the finding of a security because the token has been used for consumption and is not designed for trading.
- If however, the seller is selling an item designed to create a pro-rata profit for all pooled token owners, and the buyers intend to make a profit through the ownership of the token with no independent effort on their own, like the orange groves in the Howey case, this will strongly weigh in favor of the finding of a security.

8. AREAS OF CONCERN FOR REGULATORS

As mentioned above, the overarching concern of securities regulators with respect to the issuance, sale and purchase of crypto-tokens is investor/consumer protection. For example, in the US, the securities laws are designed to provide a non-confusing and transparent understanding of a possible investment. This is implemented, among other things, by the

issuer's provision of full and fair written disclosure about its investment to consumers who are potential investors, as well as requiring securities to be sold only by registered persons who must consider the suitability of the investment for a given purchaser. Consequently, selling documents describing a potential investment must contain required discussions, among other things, relating to the possible risks of investment, investment purpose, management and financial aspects of the enterprise, owner's rights and governance issues. Advertising material regarding the investment is similarly regulated, and all communications to potential investors are subject to anti-fraud requirements.

As a consequence, when confronted with new products that are not clearly securities, US securities regulators look to the factors and variables discussed above through the prism of these investor protection concerns. Issues like transparency, clear disclosure and ease of understanding, sophistication of potential investors, transferability and risk of loss are foremost in their mind. Therefore, they can be more apt to rule in a conservative fashion in favor of investor protection, even if this results in finding new products to be securities. Although not indifferent to progress, efficiency and technological advances, their brief runs first to the investor and secondly to the safe operation of the securities markets.

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