SEC Request for Comments: Exemptions within a world of digital assets

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Introduction

The Securities Exchange Commission (SEC) of the United States serves as a regulatory body that operates to ensure that financial services offered by companies or other entities are properly labeled to prevent fraudulent activity. With the world's highest value stock exchange and a plethora of finance and financial technology firms emerging from the United States, it is in the interest of the SEC to ensure that development is balanced with the technological and programmatic advancement of the work done by the companies in this space.

To be able to better do this, the SEC has a set of exemptions. Most recently, the commission announced a raft of new exemptions under the Jumpstart Our Business Startups (JOBS) Act in 2012, which aimed to provide a regulatory framework for new crowdfunding and finance portals. However, in the past seven years, intense innovation has taken place in the financial world.

The advent of blockchain based products, such as cryptocurrencies, tokenized assets, cryptosecurities, and mobile first investment solutions, ranging from Robinhood's influence over established stock and cryptocurrency markets, to CryptoKitties' platform for buying procedurally generated digital cats, has highlighted a new gray area existing within the security framework. This gray area has both motivated an increase in fraudulent activity and stifled technological innovation.

To ensure that the United States remains a competitive securities ecosystem, speed and accessibility need to be paramount in making changes to securities regulations; the extant formal system is insufficient to ensure this. In part 1 of these comments, problems with the existing framework are highlighted. In part 2 of these comments, a solution for each problem is posited. In part 3 of these comments, implementations of these possible solutions that took place during the summer of 2019 are described.

I. Flaws in the current exemptions framework

A. The Exempt Offering Framework

For businesses that do not deal with digital assets, the current SEC framework for exemptions is quite rigorous and thorough, featuring a variety of generally-sufficient criteria. However, for digital assets that are not within these exact parameters, the SEC framework is incomplete. Instead, the SEC has evaluated digital assets on a case by case basis, with some actually going through a review with the SEC and some not.

For example, Pocketful of Quarters[8], a token platform for trading currencies between various videogames without any loss of value, stated that they had undergone a one year period of continuous communication with the SEC regarding the legality of their tokens. At the end of this year, the firm received a letter from the SEC saying that the coin is not a security and is compliant with SEC law. However, this process was not employed by numerous other token platforms that seem to have similar utilization models. Kik, a Canadian messaging application, was recently fined for illegally selling securities after launching an Initial Coin Offering (ICO) for tokens that would be used for certain services within the app[9].

From this example, the clear solution would be to submit information about one's business involving digital assets to the SEC well before the launch of a product, wait for approval, and then only begin distribution of the product. However, there are two issues with doing this:

1. **The SEC has no functionality around dealing with this:**
   There is no automated way for a company to check if they are selling a security or not. It is completely up to the customers and the company to determine if the product is a security and to either file a complaint or register a security, respectively. While there has been an improvement in this case with startups, such as Securitize offering to help build solutions that ensure compliance if a digital security is in fact created, there are no tools to easily define whether a digital asset is a security or not.
2. **The consensus definition of value for digital assets is still rather difficult to reach:**
   When digital assets were first created, they were representations of physical assets that were already existing in the real world. Truly digital assets were first seen in videogames, and had no relation to the real world. However, this was complicated with the introduction of game currencies that could be bought using fiat currencies, and then more so through the introduction of blockchain based tokens. To combat this, new tokens that were not used only as a financial instrument alone were branded as utility tokens, as they fulfilled some use. But,

there is no formal verification process of what this utility is, with some branded utility tokens being labeled as securities by the SEC. A clear derivation of value for any given digital asset is missing from many existing tokens, and is simply implied.

B. Capital raising exemptions within the framework

For those digital assets that are actually securities, one way that they are also used to legally gain the funds needed to build out their platforms is by creating a crowdfunding campaign, either on an established crowdfunding platform, such as Kickstarter or Indiegogo, or by using a newer, more token focused platform, such as Republic. All crowdfunding platforms that offer security operate under Regulation CF, which is an exemption of the securities filing laws.

However, there is a mismatch between the fundraising activity that could occur within the theoretical crowdfunding platforms outlined in Regulation CF frameworks and real crowdfunding platforms. Regulation CF places a cap on the amount that a certain entity can raise within 12 months to $1.07 million. Additionally, it places strict restrictions on how much a given individual can invest in a particular company, where the company operates, and the resale of the security.

These restrictions make sense in a very competitive environment where a company is raising a Series A round of funding, which is meant to help tide the company over for a year and where all users on the crowdfunding platform are investing money that is close to the amount they are limited to invest.

But, crowdfunding platforms are not simply centralized platforms for buying securities from a particular company; they tend to also be social networks in their own right, and/or are heavily dependent on decentralized communication through various social networks in order to help promote certain companies and gain sales of securities.

In such a system, the money for a company that is just starting out is more a conduit for demonstrating serious interest for a product, rather than just a means to gain a financial return. For this group of people, a year long lockout period is enough to stop them from providing helpful funding to their interested company for reaching a company goal, albeit an amount less than that individual's investment limit and not nearly enough to gain such helpful investors a meaningful long term return[6]. While this does ensure that company investors are more serious investors who will not immediately take their

money out of the company once a return is made, it does exclude retail investors who are looking to see more progress from the company before making an investment.

However, making this follow-on investment may also prove difficult for retail investors, as companies can only raise a maximum of $1.07 million through securitized crowdfunding in one year. While this may not be an issue for the majority of businesses that are just starting out, some businesses are more capital intensive and would require more funding to be able to be well established. Additionally, crowdfunding also serves as a way for a business to gain customers by utilizing the crowdfunding platform's network effect to reach a niche audience that is interested in such products. If a larger customer base is established through the use of a crowdfunding platform, then these customers have a chance of not being able to actually receive products from this company because the company cannot raise more than the $1.07 million cap, which may be needed to deliver products to these additional customers.

Nonetheless, a cap must exist around how much a company should raise and a set of restrictions should exist identifying who can invest how much at any given time, especially in the age of digital assets. Many digital assets have been subject to "pump and dump"[3] schemes, in which investors buy large amounts of a particular product, causing others to buy, and then sell a large amount of the product at the peak, drastically decrease the value of the product for other investors and making it difficult for the company to actually manifest the digital asset into a real utility.

But, the cap and the restrictions should be company specific. The rigidity of the rules that currently exist means that many companies that could have raised capital from the public are turning to private investment groups, such as venture capital groups, loans from banks, and other forms of dilutive capital, that do not provide the market determination and vested interest that selling to the public does. Creating a toolset that defines this specific cap and set of restrictions for a particular company would decrease the amount of companies that turn to private, dilutive investors and increase the amount of trust of the public in specific regulation CF securities, as there would now be a specific "report card" of sorts that a company would have to fulfill if they wanted to be listed as an official Regulation CF security. This could be a separate set of rules for governing a new Regulation CF, but could also be a new exemption on top of Regulation CF that could be called Regulation CF+, and would serve as the homolog to Regulation A+, which serves to change caps for Regulation A companies.

Those familiar with the digital assets industry, specifically with cryptocurrencies, cryptosecurities, and other tokenized financial instruments, would be familiar with

technical whitepapers that would seem to be the solution to these problems. Projects in this industry often put out whitepapers detailing in depth the types of technologies that are involved to make a particular token, to distribute the token, and to ensure actual return on investment, in the form of some sort of product or profit, in addition to details around repayment schedules, offering schedules, and other pertinent information.

But, there is no standardization of these whitepapers analogous with offering circulatories. Whitepapers can be more technical in nature or can be more business focused in nature, and feature completely different sets of points addressed. This can make it difficult for a retail investor to adequately understand the product they are anticipating and to make an informed investment decision when available. While a change in caps and other restrictions for a specific project may make the project seem more legitimate than others that are not verified by the SEC, it does not ensure adequate comprehension, and could lead to large dropoff once a lockout period is complete.

Providing a clear guideline that details the content that a retail investor should expect from all financial projects beyond offering amount and identification information about the business should be required. Not only would this better guide retail investors looking to support new businesses, but it would also provide exchanges with a concrete set of guidelines they must take into account before accepting new tokens onto their platforms, as new tokens without enough due diligence can lead to bad actors joining the exchange.

C. Gaps in the framework

Bad actor guidelines and other guidelines regarding Know Your Customer (KYC) and Anti Money Laundering (AML) protocols are quite rigorous. For small companies that are not fortunate to have strong business and legal team members who can account for these regulations, adapting to these rules while also delivering a product quickly to adjust for current market conditions can be quite difficult and could inhibit companies that are going to market. This creates a gap in the framework provided by the SEC for securities, in which the company has to decide for themselves if they are complying with KYC and AML rules.

Providing a set of resources that can be used to complete these checks free of charge or at a drastically decreased price directly from the SEC website would greatly decrease the time needed for businesses to get a product to market in the securities industry, specifically the digital assets market. Currently, businesses are reliant on applications, such as Plaid, that can provide some of these functionalities. However, in order to do

so, they charge a minimum of $500/month as a starting price for companies looking to get the information they need in order to be compliant with the rules set by the SEC for crowdfunding and other forms of security sales.

D. Investor Limitations

As per the Securities Act of 1933, an accredited investor, if not connected to a trust or to any other organization, is defined as an individual with assets in excess of $1,000,000, not including their primary place of residence. However, there is no establishment within this regulation of actual financial literacy, besides the dollar amount. Financial literacy and the ability to have a large sum of assets may be correlated, but do not necessarily represent the same person.

This puts retail investors at a huge disadvantage in terms of most investment offerings; they are made to investment within a set cap for their income bracket, are subject to longer lockout times, and must work with other accredited investors, which include brokers and other firms, to be able to activate or derive some features of an accredited investor. The biggest feature that retail investors cannot access immediately is secondary trading. This does not make sense, as a retail investor per current laws would have less of an impact if they resold a security than an accredited investor who would have invested more and could change the entire market value of the security through their actions.

In a digital world, the ability to address real financial literacy notwithstanding the amount of assets one owns is much simpler than ever before. Rather than assuming excellent financial literacy for accredited investors and decent financial literacy for retail investors, there should be a more thorough form of literacy determination that weighs actual financial skills with the amount of one's requisite assets for a more comprehensive cap upon a particular individual.

E. Integration

For a small business, startup, and/or a firm that is working within a new financial instrument framework, the exemptions that exist today may not fit their exact use cases. Gaps between Reg CF exemptions and either Reg D, Reg A, or Reg A+ are too wide to cross normatively for startups from micro-scale economic environments into general small business environments. To add to this, small businesses now need more capital fundraising events to keep pace with both each other and with prime contractors in multiple industries, leading to a decrease in competitiveness overall[7]. This haphazard advance has left micro-businesses and startups in a position where Reg CF caps inhibit transition into other exemption filings.

This is starting to be addressed by companies that are operating within the Reg CF exemption to provide new services, such as SMBX[10], which provides a platform for small businesses to gain loans from a group of supporters of a specific company. However, this does not address all small businesses and startups that have a wide range of fundraising needs. Creating a more integrated framework of exemptions to help a company decide which one best fits their needs and to allow them to make their own exemption based on their particular situation would enable a faster turnaround of new financial instruments, while still keeping a rigorous oversight system in place.

F. Pooled Investment Funds

Pooled investment funds coupled with a new breed of financial instruments could result in a large number of new opportunities for investors looking to support innovative companies and for innovative companies looking to gain both financial support and a steady customer base. The “pooled” aspect of the fund ensures that a network effect around a particular financial instrument must exist for it to be successful, which ensures that a majority of those who are initial interested investors must have actual interest in the product for them to be able to network and gain enough investment to help the company meet its funding targets.

But, it is also due to this network effect that new financial instruments can be very dangerous. Through the power of networked online platforms[1], the ability to grow fraudulent multi-level marketing schemes has greatly increased. Gaining new recruits through Facebook and other online platforms has become commonplace. Worse yet, the performance failure of these platforms decreases public trust in many web based financial instruments. To be able to best combat this issue, there needs to be a set of guidelines for proper implementation of a pooled investment fund for every use case.

II. Possible solutions

For digital assets that are securities, there needs to be a more thorough set of tools to allow these securities to work within the existing set of exemptions for raising capital, for for identifying bad actors, and for setting caps, both on themselves and on possible investors. For digital assets that are not securities, there needs to be a toolset that proves that that asset is not a security in order to prevent the firm from being levied large fines, and a set of guidelines behind these non-securities to ensure that they do not dupe investors.

One way in which this oversight system can be customizable, yet also extensive, impartial, and easy to update over time is through the use of a blockchain based or

some other distributed smart contract system of rules that each security must fill out. This kind of a system would ensure that the companies who are looking to launch security products are all getting fair, impartial treatment and can even see the exact rules that the commission is following to be able to determine the eligibility of a particular security under each exemption. This kind of a system could also be updated very quickly, without changing previous securities. Instead, the new rules would be a fork on top of the existing codebase and would mark all previous versions as running an older version of the commission's code. An example of how to do this is provided in part 3.

This solution can also be extended to provide improved KYC-AML protocols that would be interoperable between various financial instruments. Market activity on one platform could be recorded, saved as proof of improper activity, and shared between various platforms to enable better risk assessment without high costs and shutdown of financial systems. Additionally, a decentralized identification method can be applied to provenance bad actors and disqualifying events from forensically disaggregated transactions and other activities; this can be extended into more advanced interaction protocols somewhat similar to implicit password recognition used by large social media platforms. In this way, a blockchain ID system provides decentralized means for both engaging in crowdfunding activities even if the communications are decentralized and ongoing crowdsourced tracking of bad actors and disqualifying events without necessitating a centralized regulator. Creating such a system would greatly improve collaboration between various entities who would be running KYC-AML checks. This by no means should be construed as stating that taking the current identification system and shifting it to a blockchain will be an improvement; this would further complicate the issues that already exist with trusting centralized entities to provide this info. Rather, a blockchain system that actively prompts engagement from multiple firms to feed into an aggregate ID is what needs to be created to ensure interoperability and fairness.

In terms of non-securitized digital assets that act within this gray area, there should be a more thorough guideline as to what type of communication is lawful between such providers of assets and their customers to ensure that the public understand that the product is not a security. This can be done by having a smart contracting system as described before, but could also simply be done with a template for whitepapers and online communications.

III. Implementation of possible solutions: Hard Tech Fund at UC Davis

The Hard Tech Fund is a new sustainable hardware development program at the University of California, Davis. It was started to serve as a bridge between the hardware

producing projects and angel investment firms to be able to turn sustainable devices into products that consumers can use.

To select companies that are in line with this mission, the fund completes a 2 hour interview with each prospective company, spending 1 hour on technical background review and 1 hour on business vision review. Once selected, the companies then spend 10 weeks during the summer to build out their minimum viable product (MVP) before a demo day at the end of August. Each company is provided funding, equipment, space, and mentorship.

The program was fortunate to gain various seed and pre-seed investment groups, such as UC Davis' PLASMA, Skydeck, HAX, and other accelerators as guests for the demo day. However, with only hardware projects, the Hard Tech Fund wanted to employ an alternative method of funding in order to serve as a backup if no group became interested in investment, even if the product has clients. The fund decided to employ pre-order tokens as a means of gaining non-dilutive pre-seed donations that could be used to build out the demonstration products. This would allow for an impartial way to sequester total raised funds from the company and create a set of tranches in which the company could raise money. However, doing so proved complicated, as some utility tokens such as this one could be seen as being a security.

Thus, a system needed to be built out to ensure that a token is indeed not acting as a security. To begin with, the tokens needed some sort of utility beyond providing access to the product once a pre-order was shipped, as this can be a very long time. To do this, the team developed a smart contract system for digesting the contributions made for a particular project and seeing if they fit within the company's milestones. Then, these contributions, along with the actual milestones the company set and their initial budget, would constitute data that would also be accessible through the purchase of a pre-order token.

But, this did not solve the issue of ensuring that all market participants are not bad actors. Additionally, there was no way of having the market determine a non-competitive price for the product that favored the highest bidder, which may or may not be in the interest of a company that is just getting started and may not have the capacity to deal with a large number of pre-orders.

To handle this issue, the team created a set of smart contracts for market due-diligence. In these contracts, those who were interested in the products would be asked questions about their familiarity with a particular topic and about their experience in crowdfunding

and investment. Answering each of these questions would give a certain number of points to a market participant. Then, with a set of points made available, the participants could decide which companies they would like to evaluate by voting with those points in terms of investment potential, and the quantity of each MVP they would like to buy or prerogative on salable product scalability. Before this step, participants were also provided the ability to gain points through interactions with other participants, though not the same scale as points gained by answering questions on the first page.

Through this system, we were able to create an implicit verification process beyond blanket KYC-AML protocols by seeing how market participants act and talk with one another, as doing so was identified as a benefit to them. Through participating in this process, market participants would be providing market pricing for a new product based on their purchasing power and get a receipt with each of the company's contributions to the product. This model benefits both the seller and the buyer: it creates a true equilibrium between what the market participant is willing to pay and what went into making the product, both in terms of actual equipment and labor hours Thus, it is almost the antithesis of the competitive auction model: a consensus auction.

To test this system of smart contracts, dubbed 111, the contracts were deployed on the Ethereum test net Ropsten. The forms were given to guests of the demo day event[4] held at the end of the ten week program. Participants who attended in person were able to see the projects and meet the founders to be able to evaluate the teams. Participants who could not attend in person watched each team give a 2-5 minute pitch over Facebook Live.

Thanks to this system, the program was able to better identify ways to work with 5 different groups that were interested in the projects and filled out the forms. The teams were able to get the feedback they need to be able to better improve their product moving forward in a very impersonal way. The full results of this market due diligence and pre order system are still being compiled and can be made available in the near future. The smart contracts used can be accessed here: Pre-Order Token: https://ropsten.etherscan.io/address/0x43df08860123cad7103a413ffb629ed8c1f85a04#code Smart contract to manage fund: https://ropsten.etherscan.io/address/0x12175af3eae41f68d8758c42ec464713b47299a7#code Smart contract for new tasks that are logged from Toggl, Github, or other sources: https://ropsten.etherscan.io/address/0x5051e8e24aba179ebb173b0df44a4b17206dce1d#code.

IV. Concluding remarks

In an ever competitive landscape of financial instruments that are increasingly digital in nature, having a clear set of rules and exemptions is necessary in order to profitably attract, keep, and manage talent in this space. More than anything, these rules need to be more flexible to help prevent fraud, while also fostering innovation. This does not mean that rules and oversight should suddenly disappear; in fact, with so many products on offer currently, the role of the SEC is more important than ever, as it is marginally easier to scam both retail and accredited investors.

Other jurisdictions around the world are greatly exploiting the market opportunity that the SEC has left open by not fully addressing digital assets in a thorough way. For example, after experimentation in Zug around digital identity and business laws, the Swiss Financial Market Supervisory Authority (FINMA) has made it legal for banks and other financial institutions to embrace blockchain based products as a medium of exchange with consumers, even publishing its own initial coin offering (ICO) guidelines.[2] This has led to an exodus of companies and talent that were or are currently based in the United States, such as the Tezos Foundation[5], a group launching a self amending token ledger with founders both from California.

To address this drain of resources from the United States, several states have been trying to develop their own regulatory frameworks. The most notable state to have done this is Wyoming, which has recently passed a variety of blockchain laws. But, rather than providing thorough oversight, the state is having interested parties submit limited information about the token and pay a fee of $1000[11]. While these fees have been discussed to be decreased in their meeting minutes, the fact that an arbitrary fee such as this one can be applied to any project, small or big. As a contrast, Malta accepts and requires whitepapers during a similar review cycle with a similar fee schedule.

Just as companies are using technology to create new financial instruments, there needs to be the same effort from regulatory industries to use the same technologies to improve the exemptions framework to best address the new businesses being created in the United States in this field. While the new portal created by the SEC does address this to some extent, there is still a lot of work that needs to be done to better prepare companies for the process of launching digital assets. Starting a new firm in an area that could have real damage to both consumers and the overall economy should not be easy. However, deliberately making it difficult and requiring companies that have the talent to build new solutions to spend a majority of their funds on legal and business development solutions to work around these regulations is unfair.

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