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INSIGHT: Economic Considerations for ICO Regulation and Litigation

BNA Snapshot

Abe Chernin, Nicole Moran, and Pierrick Morel of Cornerstone Research examine economic considerations for initial coin offering (ICO) regulation and litigation. ICOs are a rapidly growing method of raising capital for new ventures that make use of blockchain technology. Regulators across the world are scrambling to keep up with the advance of ICO fundraising, and guidance is continuously evolving.



By Abe Chernin, Nicole Moran, and Pierrick Morel

Initial Coin Offerings (ICOs) are a rapidly growing method of raising capital for new ventures that make use of blockchain technology. In exchange for traditional government-backed currency or cryptocurrency, ICO participants enter into a contract that distributes an equivalent value of new crypto tokens at that time or at a later point.

Regulators across the world are scrambling to keep up with the advance of ICO fundraising, and guidance is continuously evolving. U.S. agencies—the SEC, CFTC, FinCEN, individual states—and many foreign governments have all weighed in on the issue to varying degrees. Moreover, as the body of regulatory guidance has evolved, private litigation from early ICOs has followed. It appears that more recent ICOs are "learning" from the growing body of regulatory commentary and, as ICO structures change, subsequent private litigation is expected to evolve as well.

Going forward, a number of questions will likely require economic analysis in order to better inform regulatory investigations and assess private litigation. A few issues that are expected to be central to the legal and economic strategy of any ICO-related matter include:

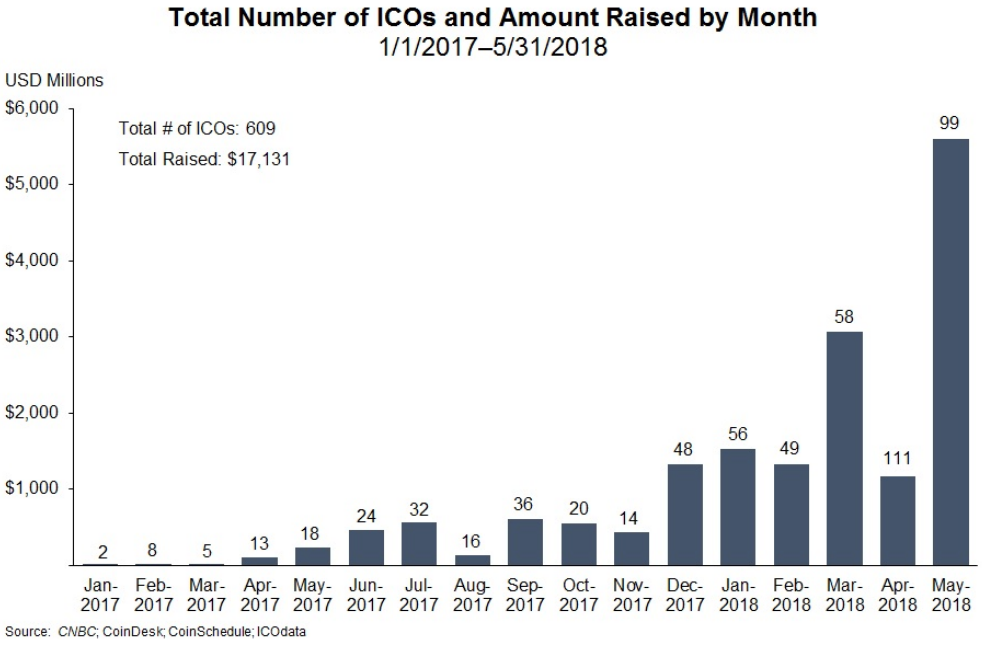
1. What are the economic benefits of the at-issue crypto tokens?
2. How do those benefits drive the value of the at-issue crypto tokens?
3. How has the value of the at-issue crypto tokens been affected by alleged wrongdoing?

This article explores the current ICO regulatory landscape and provides preliminary insights on key economic questions likely to arise in future ICO-related disputes.

The Rapid Growth of the ICO Market

ICOs have soared in popularity in the past twelve months. The funds raised have skyrocketed from approximately $100 million globally in 2016 to more than $4.5 billion in 2017, with the overwhelming bulk raised in the latter half of the year. Approximately $12.5 billion was raised globally in the first five months of 2018 alone, including private ICOs (e.g., Telegram).

To put these amounts in context, angel and seed-stage Internet venture capital raised between $2.5 and $3.5 billion globally in 2016 and 2017 combined. At the moment, ICOs are clearly outpacing traditional methods of raising seed capital.



ICO Regulation—A Steady State on the Horizon?

The rapid growth of ICOs has triggered a surge of attention from both business communities and regulators. The SEC in particular has shown a keen interest in ICOs, making several public statements on the topic, including one from SEC Chair Jay Clayton on December 11, 2017, outlining the need to review carefully the facts and circumstances of each ICO:

The cryptocurrency and ICO markets have grown rapidly. These markets are local, national and international and include an ever-broadening range of products and participants. They also present investors and other market participants with many questions…. The answers to these and other important questions often require an in-depth analysis, and the answers will differ depending on many factors.

Further, in response to a recent Wall Street Journal article about an ICO “sweep” by the SEC that reportedly involved “dozens of subpoenas and information requests,” an SEC representative confirmed that the agency was “very active, and I would just expect to see more and more.”

With no affirmative framework in place articulating the features of an SEC-compliant ICO, it appears the SEC will, for now, attempt to regulate through enforcement. Although a current case brought by the SEC and the DOJ in the Eastern District of New York against Maksim Zaslavskiy, who raised money through two ICOs purportedly backed by real estate and diamonds, may, when ruled upon, end up shaping the future of ICO regulation, the clearest articulation of the SEC's position to date has appeared in its reports on the ICOs of Slock.it's Decentralized Autonomous Organization (DAO) and Munchee. Through its application of the Howey Test, the SEC found that both sets of tokens were, in substance, securities and should have been registered as such.

The proceeds from the DAO ICO were intended to be used to fund projects voted on by token-holders. If these projects subsequently generated profits, token-holders would receive returns. The expectation of profits appears to be a security-like feature.

The cease and desist order issued by the SEC on Munchee's ICO provided additional guidance for ICOs that straddle the line between providing utility to network participants and having security-like features such as the expectation of future profit. Munchee, a blockchain-based iPhone application for restaurant reviews, indicated its tokens were expected to be of tangible use to the token-holders—reviewers could use them to dine at partner restaurants and restaurants could use the tokens to purchase advertising. In determining that Munchee tokens were substantively securities, the SEC focused on the benefits highlighted in the company's marketing statements (tradability in the secondary market, increased token value over time), rather than the tangible uses of the tokens (participation in a restaurant network).

While the SEC's evaluation of crypto tokens currently focuses on whether they exhibit the characteristics of a security, other regulators are focused on different features of ICOs. The CFTC has a Virtual Currency Task Force to enforce antifraud laws for commodities, and the Financial Crimes Enforcement Network (FinCEN) has deemed all ICO issuers to be money transmitters subject to the Bank Secrecy Act, effectively categorizing crypto tokens as currency. The IRS has weighed in as well, stating that crypto tokens should be treated as property for federal tax purposes.

For their part, ICO issuers are showing interest in regulatory compliance. In the summer and fall of 2017, for example, issuers gave seemingly little weight to regulatory concerns, but currently many appear to be focused on using available commentary to try to pre-empt regulatory scrutiny.

In an attempt to comply with the SEC's signaling regarding crypto currencies, issuers of tokens with security-like properties are more overtly following regulations established by the Jumpstart Our Business Startups (JOBS) Act, which allows for “exempt offerings.” These regulations, initially created for equity crowdfunding and early stage venture capital, include:

- Reg D 506(c) - allows for unlimited “accredited crowdfunding” by “accredited investors.” Accredited investors are individuals or organizations that meet certain income or wealth requirements.
- Reg A+ - allows issuers to raise $50 million from anyone in a twelve-month period but demands both an initial and semiannual SEC financial review. While Reg A+ is not currently as popular as Reg D 506(c), some issuers, such as Knowbella Tech LLC, are choosing to go through this process rather than investing the time to verify each contributor's accredited status.

In the United States, the SEC's current strategy of regulating through enforcement has caused significant uncertainty among ICO issuers. Other countries, however, have already established more transparent regulatory principles with the explicit goal of providing clarity to market participants and fostering growth in their ICO markets. Switzerland is one such country and could serve as a model for a regulatory steady state. It offers a realistic, measured framework that could promote growth and innovation while applying common-sense regulation based on the economics of tokens.

The Swiss framework is based on the underlying economics, or benefits, or crypto tokens, as established by the Swiss Financial Market Supervisory Authority (FINMA). It identifies three categories of crypto tokens:

- Utility tokens, to be reviewed against existing commodity and consumer protection laws;
- Asset tokens, to be reviewed against existing securities regulations; and
- Payment tokens, to be reviewed against existing money laundering regulations.

Importantly, FINMA understands that many ICOs will be hybrids of these three categories, and multiple laws can apply to hybrid tokens. For example, the authority has indicated that a utility token that can be widely used as a means of payment will be reviewed against money laundering regulations as well.

ICO Litigation—A Changing Landscape

Initial ICO disputes—both suits brought by ICO participants and regulatory enforcement actions—generally had similar types of claims. Typically, they involved allegations of business fraud and/or failure to register securities. For example, Centra Tech marketed itself as the provider of the first “multi-blockchain asset debit card” that could function on Visa and MasterCard networks by “instantly converting hard-to-spend cryptocurrencies.” It also claimed to be the provider of an online marketplace called cBay, for using converted digital assets. The touted economic benefits of Centra Tech's CTR crypto tokens, endorsed by celebrities such as DJ Khaled and Floyd Mayweather, included access to the “Centra Wallet” cryptocurrency debit card, and the ability to collect network rewards in the online marketplace. However, despite raising more than $30 million in October 2017, Centra Tech has not launched any projects to date, prompting the DOJ, the SEC, and a class of ICO participants to file lawsuits (a federal grand jury recently indicted the three co-founders in the DOJ case). The claims in these suits relate not only to the failure by Centra Tech to register CTR tokens as securities, but also to business fraud, as plaintiffs claim they were misled about the relationships Centra Tech had with Visa and MasterCard.

New types of claims are also likely to emerge as ICO structures and associated regulatory guidance continue to evolve. As more and more ICOs become registered token sales (e.g., Reg D 506(c) and Reg A+), then issues associated with common securities disputes may become more relevant.

In that case, understanding the economics of the crypto tokens at issue will likely be one of the first steps in evaluating ICO-related claims. This involves determining the underlying benefits of crypto tokens and then analyzing the drivers of their price.

Crypto Token Economics: What Are the Benefits?

To illustrate the potential economic benefits of crypto tokens, consider the tokens sold at a typical video game arcade. A customer can pay a dollar to purchase four tokens that can be used to play video games at that specific arcade but the tokens do not have value outside the venue.

With that analogy in mind, it is helpful to consider the economic benefits of crypto tokens in the context of the three main categories contemplated by the Swiss regulators:

- Utility: crypto tokens that provide access to a platform or reward users who add value to the platform. Obtaining utility crypto tokens in an ICO is similar to purchasing tokens at an arcade and being able to immediately use those tokens to play games. Utility features can be assigned to tokens used in a variety of business and personal endeavors. For example, Filecoin tokens can be redeemed for cloud-based file storage services. FirstBlood allows its token-holders to participate in a decentralized eSports platform where they can play matches and participate on a jury to determine outcomes. This non-monetary value, or utility, is comparable to the economic value derived from commodities.

- Asset: crypto tokens that are expected to increase in value and thus yield a return. Obtaining asset crypto tokens is similar to purchasing tokens for a yet-to-be-built arcade, with the expectation that the tokens will increase in value, because the new arcade will have in-demand games that command a premium to play. DAO, discussed above, is an example of an ICO that issued asset tokens. The proceeds were to be used to fund projects voted on by token-holders. If the projects generated profits, token-holders would realize a return. The expectation of returns based on future profits is a security-like feature.

- Payment: crypto tokens with payment benefits can be used as compensation for goods and services and/or as a medium of exchange. Tokens with payment features can also be traded for other tokens and fiat currency. Obtaining crypto tokens with payment benefits is akin to purchasing tokens at an arcade that can be redeemed for food and merchandise in nearby stores as well as for playing games at the arcade. While the ability to use the tokens to play games may be considered a utility, the ability to exchange them for other goods and/or services is a currency-like feature.

Tokens can have more than one type of economic benefit that drives their value. For example, Ether has all three types of crypto token features. It was originally created to serve as the “fuel” within Ethereum's blockchain platform to enable the creation of decentralized applications and smart contracts (utility-like feature. However, it has since taken on other uses. For example, ICO issuers often accept Ether from investors that the issuers can convert to a fiat currency to pay for operational expenses, and companies such as Overstock now allow customers to purchase their products using Ether (both payment-like features. In addition, because of Ether's growing use, investors have bought and held it with the hope that it will continue to increase in value (asset-like feature).

Traditional commodities, such as gold, can also have economic benefits that fit into more than one category. For example, gold can be held as an investment asset and also be used to produce jewelry and industrial products.

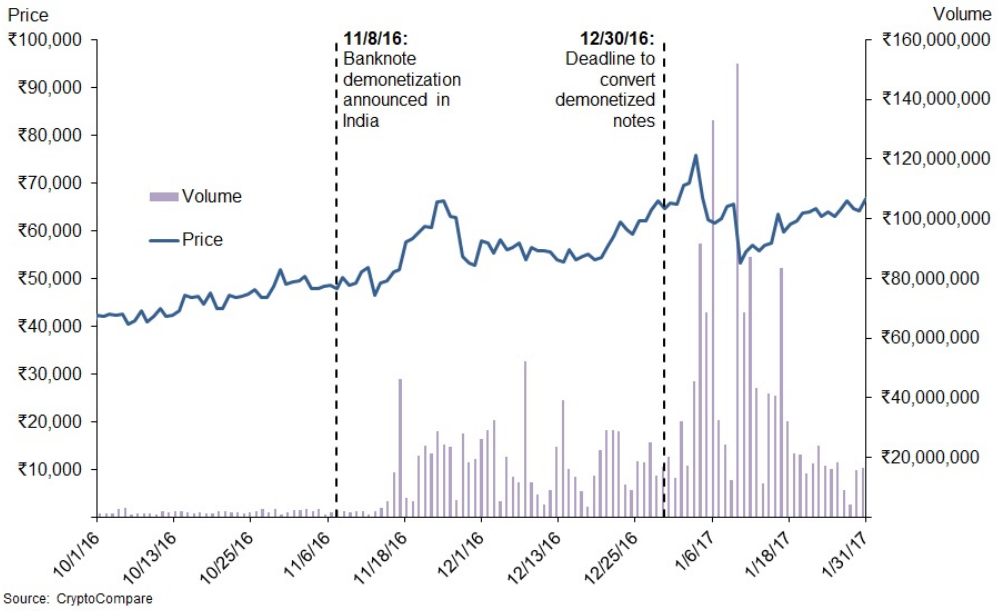
With this framework in mind, the discussion below focuses on the economic factors that drive value or are correlated with a crypto token's market price. Are prices driven by payment factors, like a currency? Are they driven by company-specific factors, like a security? Are token production and consumption the main factors driving value, like a commodity? Given the relatively recent proliferation of crypto tokens, many of these questions have not been fully addressed in academic literature. Existing literature focuses on factors that are correlated with the values of crypto tokens, but has not yet examined predictive drivers of those values.

Payment Features: Are Prices Driven by Payment Factors, Like a Currency?

The rise of Bitcoin in India is an example of how crypto tokens may be used as a substitute currency with payment features. In November 2016, the Indian government announced a demonetization policy to remove all 500 and 1,000 Rupee banknotes from circulation, requiring all citizens to take these notes to banks and exchange them for newly printed currency. This caused long lines at banks, and as a result, Indian citizens started to explore alternative means of storing wealth.

This exploration is correlated with an increase in the volume of Bitcoin-to-Rupee trading as well as an upward trend in Bitcoin-to-Rupee transaction rates. Although the Indian government's goal was to force people into the banking system and combat tax evasion, an unintended consequence may have been to motivate the use of Bitcoin as a preferred alternative means of storing wealth.

Bitcoin Price and Volume of Bitcoin-Rupee Trade in Indian Rupees
10/1/16–1/31/17

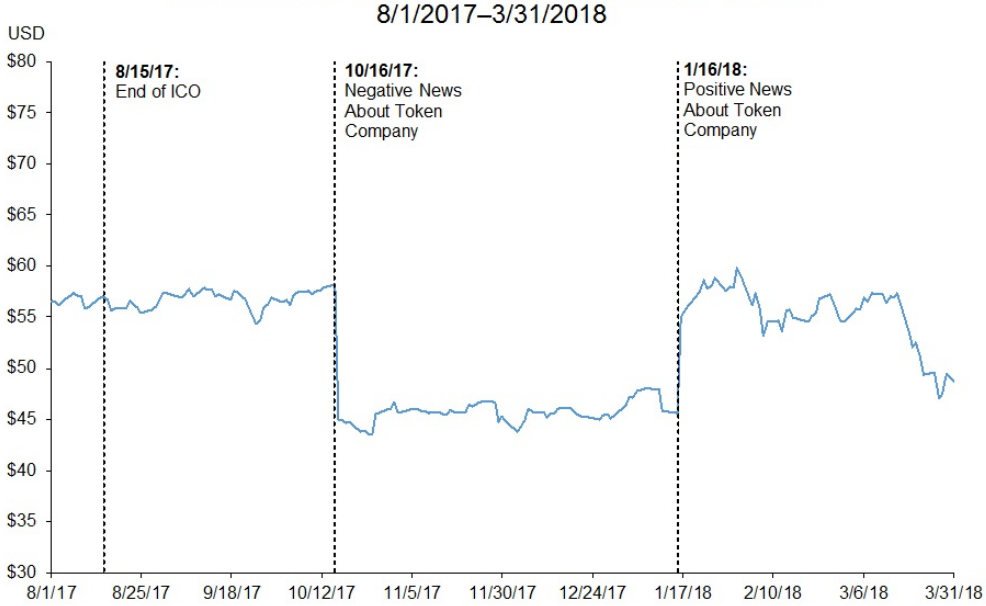


Source: CryptoCompare

Asset Features: Are Prices Driven by Company-Specific Factors, Like an Equity Investment?

The prices of some crypto tokens can also react to company-specific factors. The hypothetical example below depicts the price drop of a token following the release of news about the issuer.

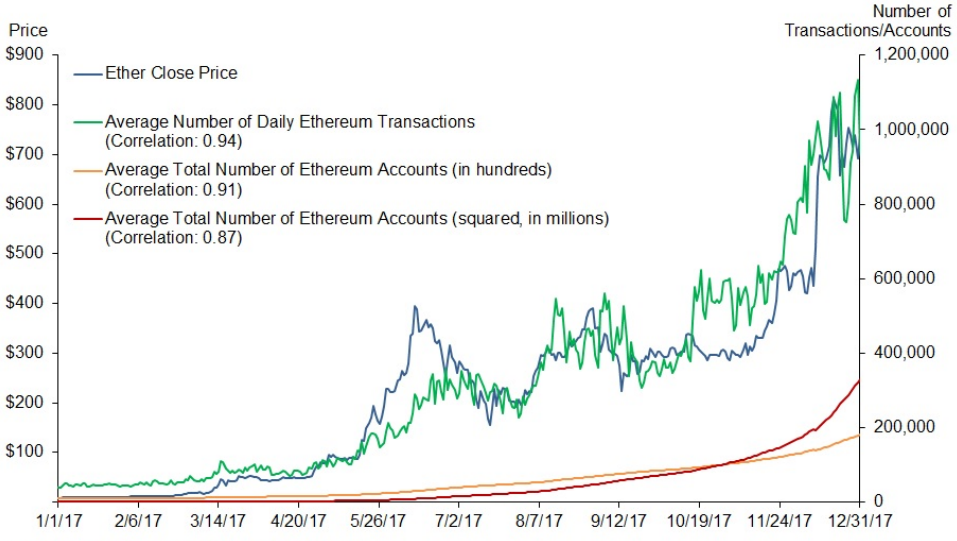
Price Impacts of Company-Specific Announcements
8/1/2017–3/31/2018



Utility Features: Are Prices Driven by Token Production and Consumption Factors, Like a Commodity?

Finally, token production and consumption factors can change the perceived utility of crypto tokens, leading to price movements. Historically Ether prices have been correlated with the number of transactions on the Ether blockchain. In other words, higher use of and demand for the tokens is associated with higher prices, as is generally the case with commodities. Network effects create a positive feedback loop whereby a product becomes increasingly more useful and valuable as more people use it.

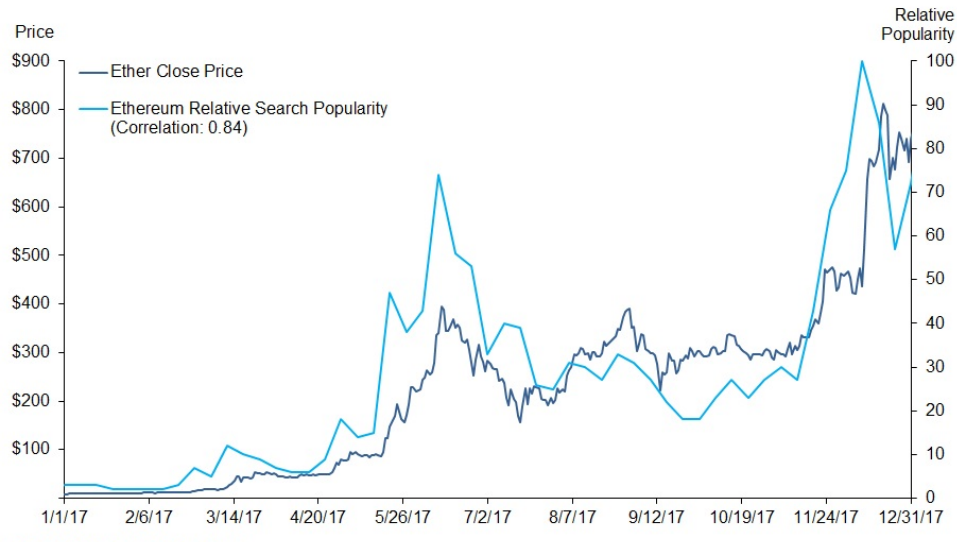
Ether Price vs. Daily Transaction Activity and Total Number of Accounts
1/1/2017–12/31/2017



Source: CryptoCompare; CoinMetrics; Etherchain; Etherscan

The perceived utility of crypto tokens can also be approximated by tracking the number of searches for them on the Internet. Google searches of Ether appear to be highly correlated with Ether's prices. Search popularity may be associated with all three potential functions of crypto tokens: increased use of the tokens as a means of payment, increased expectations associated with investing in the tokens, or expanding network size.

Ether Price vs. Search Popularity
1/1/2017–12/31/2017



Source: CryptoCompare; Google Trends

Selected Potential Damages and Class Certification Issues

As discussed, initial ICO lawsuits focused on business fraud or failure to register securities. Future lawsuits are likely to have new types of claims that can be assessed based on the economics of the value drivers outlined above.

For example,*Rule 10b-5* and Section 11 claims may be brought in disputes related to registered tokens that derive at least part of their value from asset-like features. Economic analysis plays a critical role in such suits, whether it involves assessing market efficiency at the class-certification stage, or loss causation and/or damages at the merits stage.

Unique issues specific to class certification may also arise in future ICO litigation. For example, the existence of market efficiency—that is, whether the price of a security rapidly incorporates new information, a relevant analysis for class certification in many securities cases—could be more complex for a registered token. In addition, because not all participants are necessarily based in the United States and blockchain technology can hinder the identification of U.S. versus non-U.S. participants, class definition (and identifying potential class conflicts) may also be complicated.

For damages claims requiring an analysis of price impact, certain analyses of price movements have been accepted by courts because they reflect scientific practice rooted in academic research and constitute standard practice in traditional securities litigation. In loss causation and damages analyses, event studies can help determine whether the correction of the alleged misrepresentation or omission affected the price of the security at issue. Econometric tools, such as event studies, may be critical for analyzing the price movements of registered tokens with asset-like features. Furthermore, disentangling the effects of the myriad factors that may influence the price of registered tokens may require the use of other sophisticated techniques in addition to econometric tools.

If claims are brought in courts that allow for damages to be measured by rescission, the currency in which damages are calculated will have important ramifications for economic harm. Because ICO participants use a variety of fiat and cryptocurrencies to purchase tokens, depending on whether those currencies increased or decreased in value following the ICO, different participants may suffer different economic harm. If damages are calculated in the currency of participation, coin forks and hard forks, which refer to instances when an existing cryptocurrency essentially splits into two or more currencies, may cause further complications in determining rescission amounts.

Conclusion

Because the body of regulatory guidance is rapidly evolving, a steady state framework for ICOs remains far from certain. As the ICO market continues to mature, private litigation and regulatory disputes will evolve as well. Claims related to business fraud disputes and failure to register securities may give way to issues more commonly seen in traditional securities suits.

While the economic tools required to evaluate issues in traditional securities suits are relatively well established, the economic landscape is still in flux for suits concerning crypto tokens. Despite the dearth of case precedent, relevant economic questions for ICO-related disputes will likely be informed by the underlying benefits and value drivers of the at-issue crypto tokens.

Authors' Note

While not an official pronouncement, recent statements by William Hinman, Director of the SEC's Division of Corporation Finance, have offered additional clarity around the future of ICO regulation—specifically, the circumstances under which a token should be subject to SEC oversight.

Director Hinman highlighted the need to evaluate whether a third party's efforts are essential drivers of a token's expectation of return. He commented that Bitcoin and Ether should not be considered securities because there is no "central third party whose efforts are a key determining factor in the enterprise."

Consistent with the Munchee order, Director Hinman also noted the importance of how tokens are marketed and who ultimately purchases them—if tokens are marketed with an expectation of profit and/or to parties other than the potential users, then tokens are more likely to have security-like features.

While Director Hinman's statements do not change the fact that the SEC is regulating through enforcement, they provide a clearer understanding of what features of an ICO are deemed security-like, and should help issuers evaluate different options. Although not yet an affirmative framework, these statements suggest the SEC is prioritizing, and is perhaps willing to facilitate, regulated growth of the ICO market.

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