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Crypto Coin Offerings and the Freedom of Expression

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I. INTRODUCTION ................................................................. 403
II. THE STRUCTURE OF CRYPTO SPEECH ................................. 412
   A. Software’s Historically Deregulated Domain .......... 412
   B. Crypto Coin White Papers as Speech ................. 416
   C. AppCoins as Microtransactions to Access Expressive Content ............................................ 423
III. CATEGORIZING CRYPTO COIN OFFERINGS AS EXPRESSION .. 427
   A. First Amendment Analogies ................................ 427
   B. Commercial Speech Challenges ...................... 441
   C. International Law Perspectives on Freedom of Expression .................................................... 450
IV. REGULATING MISLEADING EXPRESSIONS WHILE DEREGRULATING “ECOSYSTEM SPEECH” ................................. 452
   A. The Governmental Interest in Regulating Coin-Founding Speech ............................................. 453
   B. Traditional Legal Principles Governing Optimistic Statements ................................................. 454
      1. The Securities Act and Exchange Act ............. 454
      2. The Lanham Act of 1946 ............................ 471
      4. Protecting “Ecosystem Speech” ..................... 475
   C. Allowing Forward-Looking Statements in and After Coin Offerings ........................................... 476

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D. Increasing Remedies for Factual Fraud ............... 479
E. Reducing the Burden Associated with Disclosure Requirements ................................................. 480
V. CONCLUSION ................................................................................................................. 484
I. INTRODUCTION

Open, peer-to-peer, privacy-enhancing networks of software resources power massive digital economies in the form of crypto coin protocols and their users. A coin is an item that operates as a medium of exchange, or a currency, and therefore deserves to be exempt from regulation as a security or commodity in the view of many sellers of digital tokens.1 The Telegram Group, led by the founder of social media giant VKontakte, attempted to build such a token, the Gram coin and the TON Blockchain, promising "a decentralized platform for everyone."2 Initially planned as a public offering like Ether, Ripple, TRON, and other popular tokens, Telegram transitioned Gram into a private offering restricted to accredited wealthy investors, purported to restrict the resale of Grams, disclaimed any obligation to govern or maintain the coin or the TON Blockchain or to create any applications for it, and stated that the TON Foundation would not vote Grams it retained.3 Even so, the Securities and Exchange Commission (SEC) enjoined any offer to sell Grams not registered as securities.4

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3 See id. at 1, 7–20, 28–29. But see SEC v. Telegram Group Inc., 448 F. Supp. 3d 352 (S.D.N.Y. 2020) (finding that Telegram stated that it intended to use investor funds to develop the TON Blockchain, that Grams could be purchased on mass as cryptocurrency and return value to purchasers as a result), final judgment entered, (S.D.N.Y. June 26, 2020) (enjoining defendants Telegram Group, Inc. and TON Issuer, Inc. from offering security without an effective registration statement or applicable exception to registration requirement); Complaint at ¶¶ 2, 52, 54, 79, 86, 89, 104, SEC v. Telegram Group Inc., No. 19-cv-09439 (S.D.N.Y. complaint filed Oct. 11, 2019) (alleging that Telegram at least indirectly sold Grams to the public, sold them regardless of whether purchasers would use TON Blockchain, indicated that it would integrate Grams with Telegram Messenger under its control, did not restrict all resales at a profit, and sold more than $424 million in Grams in the U.S.).

4 See Telegram, 448 F. Supp. 3d 352. While recognizing the existence of an exemption for private offerings to accredited investors by which Telegram could sell Grams without registering them, the SEC contended that given Telegram’s intention that Grams reach the public to fuel the TON Blockchain, this exemption could not apply, so this exemption could not apply to Grams or seemingly any other cryptocurrency.
The government’s pursuit of Kik Interactive for marketing a crypto coin as an unregistered security heightened the tension between permissionless software development and potentially crushing regulation. While Section 5 of the Securities Act of 1933 (Securities Act) and Section 12(g) of the Securities Exchange Act of 1934 (Exchange Act) require that certain securities and stocks be registered before they are offered to large segments of the public, Kik’s coin does not necessarily represent stock in a company but rather a ticket to enter a decentralized ecosystem of digital services. Kik is a software and social media company. If it can be prosecuted for offering a cryptocurrency, relics of banks’ checkered past will haunt most blockchain enterprises.


7 See id. ¶ 5, 37.
2021] Crypto Coin Offerings and the Freedom of Expression 405

Federal courts have concluded that cryptocurrencies could fall under the federal securities laws, the commodities laws, or other statutes.8 Courts have also found state statutes and

common-law theories applicable to some token-related disputes.\(^9\) With the SEC and state securities regulators warning that the

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securities laws apply to many cryptocurrencies, token and appcoin promoters may subject themselves to long prison sentences for offering or selling unregistered securities, operating unregistered “exchanges,” transacting in tokens, advising those who transact in tokens as “investments” as to which tokens are best or when it is time to buy or sell them, or even publishing articles or books on the topic. In other countries—notably China, India, Russia, and South Korea—similar laws threatened, for at least a time, to decimate cryptocurrency trading.

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Concerns about the SEC’s role are slowing down crypto coin offerings, even as some publishers of software and digital content struggle with arbitrary bans and large deductions from their revenue to app stores’ operators. Digital tokens and appcoins solve historical dilemmas of software licensing—including traditional app stores’ closed systems for app approval, high advertising costs as a percentage of initial revenue, low levels of participation in in-app economies, and high intermediary charges reducing developers’ margins. Millions of app users can


(13) See supra; Binance Weekly Report: Binance Research, CZ Cryptokitties, and More, Binance (Jan. 6, 2019), http://www.binance.com/en/blog/288965342777089568/Binance+Weekly+Report:+Binance+Research,+CZ+Cryptokitties,+and+More (["Whenever a user makes a purchase inside a game or an app, the developer only gets 70% of the transaction value. AppCoins will change that by rewarding the developer with 85% of the tokens spent by users."]) (noting that Binance was largest crypto exchange in mid-2019 and made announcements from Hong Kong); see also REUTERS, China’s Bitcoin Market Alive and Well as Traders Defy Crackdown, EXPRESS TRIBUNE (Sept. 30, 2017), http://tribune.com.pk/story/1520086/chinas-bitcoin-market-alive-well-traders-defy-crackdown/ (["China waited until September 4, 2017 to formally ban ICOs and even weeks after that, “the three largest players OkCoin, Huobi and BTCCChina . . . announced that they will close their mainland businesses by the end of September"]).
potentially use digital tokens to exchange game content or unlock game developers’ upgrades.\textsuperscript{15} Banking law’s past could therefore slow down software and internet inventions.

Enter regulatory competitors. Regulatory competition—sometimes criticized as a “race to the bottom”—involves efforts by jurisdictions to match or surpass the attractiveness of other jurisdictions’ laws from the standpoint of companies and investors.\textsuperscript{16} On some occasions, countries such as Australia, Brazil, Singapore, Switzerland, Belarus, and Lithuania, and states such as New Hampshire, Nevada, and Wyoming, have reassured some types of token promoters that they will not be targeted or amended their laws to attract initial coin offering (ICO) promoters, rather than chasing them away with vague bans.\textsuperscript{17} The European Union is slowly gaining a reputation for trying not to scare off ICOs.\textsuperscript{18} Like Singapore, it has taken a light-touch approach by vaguely...


warning that some ICOs could be subject to prospectus requirements, without finding specific tokens in violation of them.\textsuperscript{19} Such moves may explain why the SEC announced in 2018 that Bitcoin and Ether, two cryptocurrencies with the most users and largest market capitalizations, are not securities, despite previously announcing that ICOs may involve securities and require registration of all parties involved.\textsuperscript{20}

The ICO market has grown more than 1,000\% annually by value, and perhaps even faster by units, with more than 1,100 coins being founded in less than a decade.\textsuperscript{21} Should Congress or other U.S. states consider adopting an approach like that of Singapore or New Hampshire? If so, where will the deregulatory push end, and at what cost? Will the European Union or Asian Tigers divert investment from the U.S., or could lax regulation harm U.S. investors while China, EU members, India, and Russia protect their investors by taking a hard line on ICOs?\textsuperscript{22} Will ICO authors follow the original “bitcoin refugees” into exile in Asia, Canada, or island nations ranging from the Bahamas and Bermuda to Cyprus and Malta?\textsuperscript{23}

while European Securities and Markets Authority has concluded that ICOs “could, potentially,” be securities offerings that must be preceded by a prospectus and registered unless exempt, the European Central Bank has stated that for purposes of currency and payments laws, “in the EU, virtual currency is not currently regulated and cannot be regarded as being subject to the (current) Payment Services Directive or the E-Money Directive”).


\textsuperscript{22} See CHUEN & LOW, supra note 17, at 106–12.

This Article explores precedents that exist within U.S. securities and consumer protection laws for a light touch approach for use by the U.S. in the context of global regulatory competition for ICOs. The novelty of its approach lies in surveying the treatment of specific types of statements to investors or consumers in areas outside of federal securities law. Some of these statements closely resemble those that ICO and appcoin promoters use to sell tokens, gain followers, attract developers, and tout their respective ecosystems. In Part II, the Article examines typical ICO white paper statements and their regulatory implications. The law of commercial speech and intermediate First Amendment scrutiny undergirds Part III, which analyzes First Amendment issues arising out of cryptocurrency and ICO promotion. Part IV contains a brief survey of statutory and constitutional principles supporting light-touch regulatory regimes, including principles that shape the law of federal securities fraud, securities registration, false advertising of goods or services, common-law fraud, and products liability.

Crypto coin offerings are similar to relatively unregulated provision of information in securities law and in other fields, including vague boasts and “ad speak,” genuine optimistic statements about the future, subjective ratings of securities or commodities, software “upgrades,” search-engine speech, and the creation of economies in virtual worlds. This Article highlights the First Amendment and other constitutional issues that onerous regulations may confront and draws analogies to how legislatures and the courts have reconciled the freedom of economic expression and the cause of consumer protection under the Exchange Act, the Lanham Act, consumer fraud law, and the law of warranties. Several themes in the case law in these areas are ripe for application to ICOs: the need for precision and proportionality in framing regulation, the proscription against regulatory overkill and one-size-fits-all approaches, and the duty of courts and regulators to preserve basic freedoms.


25 The First Amendment provides that “Congress shall make no law . . . abridging the freedom of speech, or of the press . . . .” U.S. CONST. amend. I; see infra Part III.

26 See infra, Part IV.

27 See id.
II. THE STRUCTURE OF CRYPTO SPEECH

A. Software’s Historically Deregulated Domain

Regulation exists on a sort of spectrum. On one side there is what the Supreme Court has referred to in constitutional terms as “comprehensive federal system[s]” of regulation.28 Further, in the deregulatory direction are multistakeholder approaches, like the regulation of the internet under the light-touch (initially) of the U.S. Department of Commerce,29 or the regulation of the early ICOs.30 In early ICOs, participants in building markets and infrastructures mostly regulate their own “ecosystems” using standards, protocols, shared applications, and research communication, while the common law and statutes stand in reserve for the more severe disputes that arise.31 A multistakeholder approach to internet governance gained prominence with the operations of the Internet Corporation for Assigned Names and Numbers.32 Next comes self-regulation, which is sometimes merely an adjunct to public regulation in a multistakeholder approach.33 At the other extreme from fully


2021] Crypto Coin Offerings and the Freedom of Expression 413

regulated industries are unregulated bazaars, anarchy, anonymous speech-making, and internet content in some respects.34

Polycentric approaches to regulation help organize the internet’s potential chaos, using a multistakeholder approach. In polycentric systems of regulation, multiple nodes enforce norms on a semi-autonomous basis. Nodes may include states, nongovernmental organizations, corporations, voluntary associations, and other actors.35 A polycentric model is driving aspects of U.S. cybersecurity policy.36

34 See Restoring Internet Freedom, 82 Fed. Reg. 25568 (proposed May 23, 2017) (describing internet interconnection services, as opposed to retail internet service for a monthly or hourly fee, as “historically unregulated”); FCC Report to Congress, Federal-State Joint Board on Universal Service, 13 FCC Rcd. 11501, 11524 para. 43 (Apr. 10, 1998) (“The language and legislative history of both the House and Senate bills indicate that the drafters of each bill regarded telecommunications services and information services as mutually exclusive categories.”); Letter from Five Senators to Honorable William E. Kennard, Chairman, FCC, at 1 (Mar. 20, 1998) [http://perma.cc/67U8-DZNR] (“[N]othing in the 1996 [Telecommunications] Act or its legislative history suggests that Congress intended to alter the current classification of Internet and other information services or to expand traditional telephone regulation to new and advanced services.”); Comments of AT&T Services, Inc., Protecting and Promoting the Open Internet: Framework for Broadband Internet Services, before the FCC, GN Docket Nos. 14-28, 10-127, at 59 (July 15, 2014) [http://perma.cc/VL7W-53RA] (describing “backbone Internet access and content-delivery services to thousands of large and small businesses and edge providers” as “historically unregulated peering and transit arrangements” under federal law); see also Sarah Castle, Cyberbullying on Trial: The Computer Fraud and Abuse Act and United States v. Drew, 17 J.L. & POL’Y 579, 597 (2009) (“After all, [internet speech] involves the expression of words and thoughts through an historically unregulated medium.”); Ann Daniels, The Online Gun Marketplace and the Dangerous Loophole in the National Instant Background Check System, 30 J. MARSHALL J. INFO. TECH. & PRIV. L. 757, 760, 766–67 (2014) (noting that websites such as Armslist operate as “unregulated bazaar[s]” because federal law exempts secondary sales of firearms from regulations applicable to primary sales with licensed gun dealers); Philipp Paech, The Governance of Blockchain Financial Networks, 80 MOD. L. REV. 1073 (2017), http://eprints.lse.ac.uk/87569/1/Paech_Governance%20of%20Blockchain_Author.pdf [http://perma.cc/5SRS-LJ45] (attributing “the original, highly disruptive concept underlying Bitcoin or Ethereum” to “open, largely anonymous, unregulated peer-to-peer networks that eliminate the need for financial intermediaries”). For example, on bulletin boards organized by Usenet or services such as Yahoo!, young people and others could anonymously post their thoughts for the world at large to potentially read. See Castle, supra, at 583 n.24.


36 See CCLA Urges Senate to Improve Cybersecurity Information Sharing Act, COMPUT.
Cryptocurrencies may be well-suited to polycrneric regulatory responses. Crypto coin networks are not traditional properties or companies that could ever be controlled by an executive officer or board of directors; they bring together dispersed creative and technical contributors. Bitcoin is a “concept” and “network” like the internet, as well as a quantum of measurement or value for various transactional purposes.\textsuperscript{38} Altcoins, app coins, and ICOs involve opportunities to access or deploy segments of digital code.\textsuperscript{38} The Monetary Authority of Singapore describes coins and tokens as “cryptographically—secured representation[s]” of the right to obtain something or do something, presumably something that the issuer of the coin or token can influence.\textsuperscript{49}

As the first cryptocurrency, Bitcoin has a fascinating history. It was launched in January 2009 with a reference to the second bailout of the British banks.\textsuperscript{40} A paper attributed to Satoshi Nakamoto was subtitled “A Peer-to-peer electronic cash system.”\textsuperscript{41} Just as Napster and Limewire replaced vulnerable websites for hosting music files with a distributed network of user file libraries, Bitcoin would distribute the transaction ledger in a permissionless and transparent way, while eliminating inflation by restricting the number of coins and requiring increasingly complex math problems to be solved to issue them as supply runs out.\textsuperscript{42} It is thought that the PayPal blockade of Wikileaks—a move towards coordinated corporate censorship that presaged recent initiatives to ban social media users—contributed to online support for an alternative to corporate systems.\textsuperscript{43} In that respect, the rise and fate of...
2021] Crypto Coin Offerings and the Freedom of Expression 415

cryptocurrencies is fundamentally tied to the great political controversies of our century.44 Bitcoin and crypto coin software in general embody a form of political association and organizing for collective freedom.45

Cryptocurrencies and blockchains are in their infancy. They are like the internet in 1989 or 1990. In their world, Amazon and Google have not been invented yet. Innovators are trying to solve problems with transaction costs and delays, energy consumption, theft, and lack of trust.46

Part of the case for crypto coins involves promoting economic efficiency.47 Blockchains could reduce the costs of wire transfers, private ledgers, and other financial costs dramatically by some estimates.48 One method of enabling frictionless commerce is to deploy automated smart contracts to pay out tokens based upon conditions triggered by Internet of Things devices or other technologies.49 Cryptocurrency-enabled sectors of the economy in the near future could include software, social media, logistics, hospitality, wallets, payments, capital markets and investment banking, real estate, and many others.50


44 See Benkler, supra note 43, at 313; Philip Di Salvo, Whistleblowers, in THE INTERNATIONAL ENCYCLOPEDIA OF JOURNALISM STUDIES 1, 1–3 (2019); Kathleen Hall Jamieson, Cyberwar: How Russian Hackers and Trolls Helped Elect a President: WHAT WE DON’T, CAN’T, AND DO KNOW 1 (2018); Peter Oborne, He’s a Hero, not a Villain, 30 BRIT. JOURNALISM REV. 43, 44 (2019); Brian Rappert, Leaky Revelations: Commitments in Exposing Militarism, 60 CURRENT ANTHROPOLOGY S148, S148 (2019).

45 See Ashutosh Bhagwat, When Speech Is Not “Speech,” 78 OHIO STATE L.J. 839, 884 (2017) (arguing that “First Amendment protection should extend only to collective, communicative activity that has relevance to democratic citizenship and self-governance (defined broadly)” and surveying related case law). It is noteworthy that the sale of violent video games to minors and the operation of commercial adult websites constitute “speech,” even though such conduct offers little in terms of argumentation or analysis that is important for political or economic progress. See Brown v. Ent. Merchs. Ass’n, 564 U.S. 786, 790 (2011); see Ashcroft v. Am. Civ. Liberties Union, 542 U.S. 656, 666–67 (2004).


48 See Primavera De Filippi & Aaron Wright, Blockchain and the Law: The Rule of Code 64 (2018); see Rachel F. Fefer, Cong. Rsch. Serv., IF10810, Blockchain and International Trade 1 (2019); see Mills et al., supra note 47.

49 See De Filippi & Wright, supra note 48, at 72–76, 81, 88.

50 See, e.g., infra Tables 1 and 2; see also Eric Johnson, Logistics Startup ShipChain Hit with Cease-and-Desist Order, JOC.COM (May 23, 2018, 12:48 PM),
B. Crypto Coin White Papers as Speech

ICOs are solicitations to buy or subscribe to systems of digital code, or to accept them for various forms of informational or commercial exchanges.51 Bitcoins are computer files that share certain characteristics of currencies, such as being tradable for goods or services or for official currencies, and being accepted for deposit in online accounts (wallets, i.e. other computer files).52 Application tokens, known as appcoins, coordinate rights of access to content, programs, networks, or online democracies, most famously in the way that semi-autonomous code-based economic agents known as “smart contracts” operate on the Ethereum network to unlock content or resources in an ecosystem, the “Cryptocosm.”53

Bitcoin transactions, like those in the banking system, are recorded on ledgers.54 A ledger is a database, and a database is a form of speech. Blockchains are public ledgers of transactions, and differ from bank ledgers in being more public, more comprehensive of all transactions in a given cryptocurrency or

51 See Future Tech Podcast, Cooley LLP Marco Santori Fintech Bitcoin and Blockchain Attorney, YouTube (July 11, 2017), http://www.youtube.com/watch?v=tPGG8SOAnA5Q; see Zuluaga, supra note 17, at 2, 4; cf. Policing the Wild Frontier, supra note 38, at 67 (explaining that ICOs involve buying or subscribing to “blockchain technology”).


token, and semi-private in that in many instances the transacting parties’ names, addresses, countries of residence, and IP addresses are not reliably linked to each transaction record. Blockchains are often touted as being “immutable,” but “forks” of a particular chain, such as the Ethereum blockchain, may change the ledger after a vote or other decision by the token’s subscribers, foundation, or other controlling parties. They promote the integrity of cryptocurrencies like Bitcoin by providing a radically distributed, yet richly transparent index of transactions.

ICOs involve the sale of cryptocurrency tokens based largely on white papers, or extended arguments for why a new way of organizing economic relations, assembling and deploying assets, or exchanging messages or entitlements could benefit the buyers of tokens. An ICO white paper typically strikes four major themes: bold and optimistic predictions for the future, summaries of the cryptographic solution employed, indications of how the coin or asset will unlock content or network resources, and arguments about how peer-to-peer production of that content or resource will help secure a better or more efficient future. Table 1 presents examples of future-predictive themes from influential white papers for ICOs.


58 See Investor Bulletin: Initial Coin Offerings, supra note 8 (referring to use of white papers in ICOs). While Bitcoin did not hold an ICO, it offered coins in return for mining, or contributions of computing power to the network, so it is included here as offering something for coins for that reason, as well as for the sake of completeness.
Table 1: ICO White Paper Predictions

<table>
<thead>
<tr>
<th>Cryptocurrency</th>
<th>Prediction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitcoin⁶⁰</td>
<td>In payment systems, security and privacy will come into conflict as increases in computing power may necessitate a public history of transactions that is too large and complex to tamper or forge; the public record of transactions could threaten privacy while hacks will threaten payment security.</td>
</tr>
<tr>
<td>Ethereum⁶¹</td>
<td>In the future, autonomous agents will exist on blockchains to allocate resources and currency balances, offering an alternative to centralized corporations.</td>
</tr>
<tr>
<td>Ripple⁶²</td>
<td>There is a need for a global, distributed payment-processing system, which would resist not only fraud but also authentic transactions that conflict (presenting the double-spending problem).</td>
</tr>
<tr>
<td>EOS⁶³</td>
<td>Blockchain users typically write distributed applications or DApps for customers in finance, logistics, media, retail sales, or the sharing economy, and want a decentralized and open-entry community in which to do so, secured with cryptography and a “Constitution” for dispute-resolution.</td>
</tr>
<tr>
<td>TRON⁶⁴</td>
<td>By partnering with BitTorrent, a decentralized userbase adopting the same crypto token can empower creators to distribute their work directly to fans without incurring intermediary charges.</td>
</tr>
</tbody>
</table>

⁶⁰ Nakamoto, supra note 37, at 1.
### Crypto Coin Offerings and the Freedom of Expression

<table>
<thead>
<tr>
<th>Crypto Coin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Golem</strong>[^65]**</td>
<td>Instead of subscribing to expensive corporate cloud service providers, digital artists and others in need of sophisticated computing resources will rent them from a decentralized supercomputer fueled by microservices rendered in exchange for token transfers.</td>
</tr>
<tr>
<td><strong>Kin</strong>[^66]**</td>
<td>Creative people with internet access, by building cooperative content platforms using tokens, will be liberated from dependence on large advertising-based social media corporations.</td>
</tr>
<tr>
<td><strong>Filecoin</strong>[^67]**</td>
<td>Internet users, by using encrypted and decentralized storage of their content provided in exchange for the network’s coin, will evade censorship and interception of data while enjoying reliability of files.</td>
</tr>
<tr>
<td><strong>Steem</strong>[^68]**</td>
<td>Contributors to the vast advertising businesses of major social media platforms will take control of their creativity by using smart tokens to rapidly and efficiently earn money from fan communities.</td>
</tr>
<tr>
<td><strong>Musicoin</strong>[^69]**</td>
<td>Hundreds of thousands of musicians can collaborate independently on the same blockchain-powered platform to sell or license their music and get paid rapidly and reliably.</td>
</tr>
<tr>
<td><strong>Bancor</strong>[^70]**</td>
<td>An “Internet of Value” will enable anyone to adopt a digital token that will help them get paid for writing articles, commenting in discussions, or selling goods or services.</td>
</tr>
<tr>
<td><strong>Gram</strong>[^71]**</td>
<td>A social media application can integrate an advanced multi-blockchain architecture that can handle thousands of distributed applications for the network’s users.</td>
</tr>
</tbody>
</table>


[^66]: Kin: A Decentralized Ecosystem of Digital Services for Daily Life, Kin 6 (May 2017), [http://www.kin.org/static/files/Kin_Whitepaper_V1_English.pdf](http://www.kin.org/static/files/Kin_Whitepaper_V1_English.pdf). See also Levine, supra note 50 (describing Kik Interactive’s dispute with the SEC over registration of this white paper).


[^69]: Musicoin: A Decentralized Platform Revolutionizing Creation, Distribution and Consumption of Music, MUSICOIN 12 (Oct. 2017), [http://drive.google.com/file/d/1KVwv6PKUn9gMNfjgWW65k1p4UvKg5QG0u/view](http://drive.google.com/file/d/1KVwv6PKUn9gMNfjgWW65k1p4UvKg5QG0u/view). Musicoin was among the top 200 coins by market capitalization in early 2020. See, e.g., All Cryptocurrencies, supra note 20.


OpenST⁷² Individuals and companies will mint and issue branded, digital tokens that users can easily exchange for other branded tokens or for a “Simple Token”—a convertible store of value across many brands.

Syncfab⁷³ In the Industrial Internet of Things (IIOT), tokens will incentivize manufacturers and supply chain vendors to exchange time-sensitive supply and demand information more rapidly, as well as competitively sensitive data, like purchase histories, to decentralize and revolutionize manufacturing.

Smart VALOR⁷⁴ Memberships in a new form of stock exchange will be made available in a token sale, with the members then participating in a Swiss-based marketplace for crypto coins—including asset-backed tokens relating to emerging companies, venture capital, private equity, and real estate funds.

Gram⁷⁵ All information, including photo and video, will be sold at its market-clearing price using a token that approximates in value a share of all the information available for purchase with the token; miners will maintain the metadata on available information and its pricing to earn tokens.

Fetch.ai⁷⁶ Using a new platform for trading machine intelligence, data can “sell itself” over a decentralized protocol that operates more efficiently, and in more dimensions, than traditional software retailers.

The Bitcoin paper initiated the tradition of crypto coin offerings heralding a new form of economic organization in which the users of a public network, by joining the processing power and storage capacity of their collective computing resources, would forge an alternative to government-backed financial intermediaries keeping currency users “honest.”⁷⁷

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⁷⁵ Durov, supra note 71, at 45.


⁷⁷ See Nakamoto, supra note 37, at 1 (arguing that the decentralized public ledger of
Altcoins and other crypto coins continue to argue in their vein, speculating that and providing reasons why peer-to-peer administration of a collective resource such as a payment, storage, or media network will benefit coin holders. Table 2 presents examples of peer-to-peer arguments from influential or otherwise noteworthy white papers for ICOs.

Table 2: P2P Arguments in White Papers

<table>
<thead>
<tr>
<th>Coin</th>
<th>Argument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitcoin</td>
<td>A peer-to-peer network could document a public record of token spending, using cryptographic proof-of-work timestamps to distribute the role of verifying transactions and token status to computer nodes distributed across a network, rather than using a ledger controlled by a trusted central party.</td>
</tr>
<tr>
<td>Ethereum</td>
<td>In the future, autonomous agents will exist on blockchains to allocate resources and currency balances, offering an alternative to centralized corporations.</td>
</tr>
<tr>
<td>Ripple</td>
<td>There is a need for a global, distributed payment-processing system which would resist both fraud and authentic but conflicting (double-spent) transactions.</td>
</tr>
<tr>
<td>EOS</td>
<td>Blockchain users typically write distributed applications or DApps for customers in finance, logistics, media, retail sales, or the sharing economy, and want a decentralized and open-entry community in which to do so, secured with cryptography and a “Constitution” for dispute-resolution.</td>
</tr>
<tr>
<td>TRON</td>
<td>By acquiring the BitTorrent software and protocol, the TRON token founders are bringing DApps and smart contracts to end users who can now directly exchange information or value without trusted central intermediaries.</td>
</tr>
</tbody>
</table>

token spending, maintained simultaneously at many nodes and updated on a peer-to-peer basis, would be computationally too voluminous to tamper with if user nodes remain “honest” for the most part: “The system is secure as long as honest nodes collectively control more CPU power than any cooperating group of attacker nodes.”.

78 See id.
79 Buterin, supra note 56.
81 Grigg, supra note 63, at 7.
82 Tron: Advanced Decentralized Blockchain Platform, supra note 64, at 4–5, 7, 37.
<table>
<thead>
<tr>
<th>Token</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Golem</strong>[^83]**</td>
<td>Computers assembled in a peer-to-peer network can share the network's applications, computing capacity, and other infrastructure, unrestricted by the rules of proprietary cloud solutions or payment processors. When combined with storage coins like Filecoin and the capabilities of other Ethereum tokens, the Golem network could enable even large streaming services to run in decentralized ways.</td>
</tr>
<tr>
<td><strong>Kin</strong>[^84]**</td>
<td>The Kin token will be a “decentralized ecosystem of digital services for daily life,” enabling creators for social media and other industries and even casual browsers to be paid for their contributions to public discourse.</td>
</tr>
<tr>
<td><strong>Filecoin</strong>[^85]**</td>
<td>A “peer-to-peer algorithmic market[ ]” for storage will be more efficient than “monolithic” options.</td>
</tr>
<tr>
<td><strong>Steem</strong>[^86]**</td>
<td>Social media intermediaries such as Facebook and YouTube could be replaced with a blockchain for attribution and payments, with fast-launching digital assets maintained using a decentralized blockchain and open-source software.</td>
</tr>
<tr>
<td><strong>Musicoin</strong>[^87]**</td>
<td>A Pay Per Play Smart Contract will harness peer-to-peer file sharing’s efficiency while promoting remuneration of musicians at higher levels than the record labels or streaming giants plan to allow.</td>
</tr>
<tr>
<td><strong>Bancor</strong>[^88]**</td>
<td>A “Smart Token” network will facilitate a multiplicity of highly liquid low-fee mechanisms of digital exchange.</td>
</tr>
<tr>
<td><strong>OpenST</strong>[^89]**</td>
<td>Users who join an open network of networks can leverage “crypto-economics” to mint and issue their own tokens that may be tethered to a convertible crypto-assets backed by a “value blockchain.”</td>
</tr>
<tr>
<td><strong>Syncfab</strong>[^90]**</td>
<td>In the Industrial Internet of Things (IIOT), tokens will incentivize manufacturers and supply chain vendors to exchange time-sensitive supply and demand information more rapidly, as well as competitively sensitive data like purchase histories, to decentralize and revolutionize manufacturing.</td>
</tr>
<tr>
<td><strong>Smart Valor</strong>[^91]**</td>
<td>A peer-to-peer marketplace for tokens and token-backed investments achieves scale by incentivizing issuers and investors to participate and then leveraging the transactional relationships among its participants, thereby promoting the</td>
</tr>
</tbody>
</table>

[^83]: GOLEM, supra note 65.
[^85]: PROTOCOL LABS, supra note 67, at 1.
[^86]: STEEM, supra note 68, at 31.
[^87]: MUSICOIN, supra note 69, at 12.
[^88]: Hertzog et al., supra note 70, at 5.
[^89]: Bollen et al., supra note 72, at 5.
[^90]: SYNCFAB, supra note 73, at 18.
[^91]: SMART VALOR, supra note 74, at 9, 58.
C. AppCoins as Microtransactions to Access Expressive Content

With appcoins, software developers will enjoy more open and social—and perhaps more fair and just—ways of finding users. Cryptocurrencies and token standards enable investors and startup founders to collaborate smoothly and quickly. A market for apps worth an estimated $200 billion annually in this decade will be revolutionized, and become more efficient. The West Coast credo of “beg for forgiveness, don’t ask for permission” has ensured that work on ICOs has continued despite many warnings and great uncertainty, with those from the East Coast and other regions who are more cautious being left behind.

Appcoins could serve as decentralized versions of the ubiquitous microtransactions that dominate video games

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92 See Durov, supra note 71, at 3, 101.
93 See Simpson et al., supra note 76, at 7.
94 See APPCOINS OFFICIAL, AppCoins ICO is Closed—Hardcap Reached!, MEDIUM (Dec. 21, 2017), http://appcoins.medium.com/appcoins-ico-is-closed-hardcap-reached-3a653e6b9208 (“AppCoins is a new cryptocurrency that all Aptoide users can earn and spend inside app stores. Once the protocol is implemented, AppCoins can be adopted by any app store, regardless of the operating system. The protocol creates a new shared ecosystem among all app stores, powered by the blockchain. AppCoins is to become the new universal language of the global app economy.”); see also AppCoins: Redesigning the App Economy, supra note 14, at 1, 4–6, 16–18 (explaining how AppCoins will target problems facing traditional app stores such as their closed systems for app approval, high advertising costs as a percentage of initial revenue, low levels of participation in in-app economies, and high intermediary charges reducing developers’ margins).
96 See AppCoins: Redesigning the App Economy, supra note 14, at 19.
97 Future Tech Podcast, supra note 51; see also Our Clients: Angellist, COOLEYGO (2020), http://www.cooleygo.com/clients/angellist/ [http://perma.cc/B5KT-YFPE] (describing the “ask for forgiveness, not permission” approach as the corporate policy of Angellist, a California-based company designed to help startups change the world through permissionless innovation); see generally ADAM THIERER, PERMISSIONLESS INNOVATION: THE CONTINUING CASE FOR COMPREHENSIVE TECHNOLOGICAL FREEDOM 7 (2016).
marketed on a freemium model, or as existing in persistent online multiplayer worlds. As of nearly five years ago, Electronic Arts earned about two-thirds of a billion dollars in revenue from microtransactions in sports games such as FIFA 16. In 2019, the top five free-to-play video games each made more than $1.5 billion in revenue, driven largely by microtransactions. There was as estimated $90 billion in freemium revenue in 2019. Cryptocurrencies may make microtransactions more lucrative and efficient for developers of games, or other creative works, because the administrative costs and intermediary fees may be reduced.

Using units such as the Satoshi, one hundred million of which equal one Bitcoin, gatherers or curators of data to which others might like to subscribe—like sports data for fantasy football players or financial data for market timers—could be paid in efficient microtransactions, including subscription or usage fees. Microtransactions of this kind establish a persistent market in virtual worlds alongside the traditional market in game graphics and engines sold on recorded media, such as CDs or DVDs. In addition, combining microtransactions with crypto coins liberates players from the arbitrary discretion of the publisher in the traditional model, which results in days and days of work on characters and buildings being deleted. An appcoin enables the players of

98 See Matthew R. Yost, Video Game Gambling: Too Big a Bet for New Jersey, 70 Rutgers Univ. L. Rev. 335, 341 (2017); see also Rebecca E. McDonough, Loot Boxes: “It’s a Trap!”, 46 N. Ky. L. Rev. 62, 85 (2019) (defining microtransactions and identifying them as responsible for “81% of the approximately $36 billion generated in revenue for the video game industry” in 2017 alone).
100 See id.
103 Cf. Kirill Shilov, 3 Innovative Ways the Blockchain Can Ramp Up Your In-game Revenue, HACKER NOON (Mar. 12, 2018), http://hackernoon.com/3-innovative-ways-the-blockchain-can-ramp-up-your-in-game-revenue-c90ecf92e61e [http://perma.cc/A4AR-BF99] (stating that players are “more than happy to pay for in-game extras” and spend as much as they want because they can access otherwise unavailable characters and items).
104 See BITGUILD, BitGuild: Changing Games Forever, MEDIUM (Mar. 1, 2018),
some games to secure their creations on the blockchain, protecting players from these abrupt losses.\textsuperscript{105}

Appcoins can help check the power of what regulators suggest is an emerging monopoly or oligopoly concerning the monetization of online content.\textsuperscript{106} The market power of prominent


\textsuperscript{106} See, e.g., FIN. TIMES LTD., Big Tech Chiefs Cast as 21st Century Robber Barons at US Hearing, IRISH TIMES (July 30, 2020), 12:31 AM, http://www.irishtimes.com/business/technology/big-tech-chiefs-cast-as-21st-century-robber-barons-at-us-hearing-1.4317722 [http://perma.cc/Z29K-MKB3] (“The hearing cast the leaders of 21st century corporate America as modern robber barons . . . .”); Keach Hagoy & Rob Copeland, Justice Department Ramps up Google Probe, with Heavy Focus on Ad Tools, WALL ST. J. (Feb. 5, 2020), http://www.wsj.com/articles/justice-department-ramps-up-google-probe-with-heavy-focus-on-ad-tools-11580904003?reflink=share_mobilewebshare&shareToken=stb1a208f43b2d40b2b3ad302d7d94fe86 (noting that an inquiry by the Justice Department into antitrust violations involving the Internet is focusing on Google’s presence “at every link in the complex chain between online publishers and advertisers, giving it unique power over the monetization of digital content”); Pontin, supra note 13 (describing Internet intermediaries taking a large share of app developers’ online earnings); see also Taylor Hatmaker & Devin Coldwey, Secret Documents from US Antitrust Probe Reveal Big Tech’s Plot to Control or Crush the Competition, TECHCRUNCH (July 31, 2020, 12:07 PM), http://techcrunch.com/2020/07/31/house-antitrust-investigation-documents [http://perma.cc/TYQU-J8N3] (suggesting that internal Google documents produced “during the House Judiciary’s marathon hearing” may support some legislators’ theory that Google strove to “control or crush” competitors like YouTube because Google officials expressed “alarm about the ‘orthogonal threat’ posed by social networks and other websites with ‘high entertainment value’”) (emphasis added); Rachel Denney, Will Antitrust Probe into Google Start Crackdown on Big Tech?, IMPACT (Feb. 13, 2020),
platforms upon which creators rely to earn a living is even being compared to the railroad monopolies of the nineteenth century, which treated farmers and shippers arbitrarily and charged unjust and discriminatory rates in the years prior to the Interstate Commerce Act, thereby increasing enforcement of the Sherman Act.¹⁰⁷

Unlike corporate stock, which is an investment that will pay off or not based on the efforts of corporate management and does not confer an entitlement to use of a product or service, ICOs and appcoins such as Ether unlock network assets or application data.¹⁰⁸ Ether, as the Ethereum network token, leverages computing power for applications to use.¹⁰⁹ Most ICOs are not typical business shares or partnership contracts sold as investments without any utility in terms of software or content.¹¹⁰ Crypto coins are uniquely valuable because they are linked to creatively-developed applications and reams of networked data, as a result of which commentators use phrases such as “utility tokens” and “functional cryptocurrencies.”¹¹¹


¹⁰⁹ See id. at 2–3.

¹¹⁰ See id. at 1, 4; De Filippi & Wright, supra note 48, at 100–01.
III. Categorizing Crypto Coin Offerings as Expression

Cryptocurrency offerings and appcoins in particular have proliferated in a cloudy regulatory environment. Yet increasingly, vague criminal statutes threaten coders who offer computer files that operate in some ways like money, in other ways like software, and in still other ways like the stuff of cryptography or futurism in literature. This Part explains the First Amendment standards applicable to crypto coin speech, and advocates narrowing the scope of securities laws.

A. First Amendment Analogies

Analogies often prove to be critical to the resolution of important First Amendment cases. For example, is a ban on selling pharmacies’ data on doctors’ prescription trends more like a “ban on the sale of cookbooks” (as the Supreme Court held), or more like a ban on the sale of private medical records to other

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112 See Gian Volpicelli, The $3.8bn Cryptocurrency Bubble Is a Huge Deal. But It Could Break the Blockchain, WIRED UK (July 14, 2017), http://www.wired.co.uk/article/what-is-initial-coin-offering-ico-token-sale [http://perma.cc/E3XH-483A]; see also Bhaskar et al., supra note 12, at 554 (suggesting that most ICOs involve incentivizing labor that builds out a network of content or transactions, by enabling the laborers to “exit” after selling coins on an exchange or to another company in a merger or acquisition, or after coins are exchanged for stock subject to an Initial Public Offering (IPO)); cf. Marco Santori, Appcoin Law: ICOs the Right Way, CoinDesk (Nov. 9, 2016, 11:11 AM), http://www.coindesk.com/appcoin-law-part-1-ico-the-right-way [http://perma.cc/7E3K-QRGG] (defining appcoins as ICOs that are not securities because, inter alia, they are useful to access network or encrypted application assets—like condominium shares, their “sellers” may not be the ones creating the trading market that could lead buyers to profit from coin trading, or the profits from trading will vary due to the efforts of appcoin buyers who are the ones building out the user-generated content in a computer network, game, or virtual world); Reinaldo Ferreira, $18 Million ICO: Social Android App Store Aptoide Launches AppCoins, EU-STARTUPS (Nov. 8, 2017), http://www.eu-startups.com/2017/11/social-android-app-store-apticoint-launches-appcoins-with-a-18-million-ico/ [http://perma.cc/GD5S-WQ7Q] (explaining how AppCoins compatible with the Aptoide app store will enable video-game and virtual-world players to be rewarded with virtual currency for their time, which they can then use to access new or better games or world content, or to engage in trades with other players).

113 See Winters v. New York, 333 U.S. 507 (1948) (statute prohibiting publishing pattern of stories promoting “bloodshed” was void for vagueness under First Amendment despite being justified by state as preventing criminal incitement); cf. Brown v. Ent. Merchs. Ass’n, 564 U.S. 786, 805 (2011) (statute making it a crime to sell violent video games to minors was overly restrictive of protected software-encoded speech, as well as underinclusive with respect to other violent content); Ent. Software Ass’n v. Blagojevich, 469 F.3d 641, 650 (7th Cir. 2006) (statute making it a crime to sell sexually explicit video games to minors “sweeps too broadly” in violation of First Amendment, although court did not reach vagueness issue discussed by lower court); James v. Meow Media, Inc., 300 F.3d 683, 699 (6th Cir. 2002) (warning that imposing tort liability on violent video games would raise First Amendment concerns). Futurism is a genre or movement that concerns “events and trends of the future, or which anticipate[s] the future.” Futurism, LEXICO (last visited Nov. 16, 2020), https://www.lexico.com/en/definition/futurism [http://perma.cc/4YM5-HHYU].
doctors in search of new patients?\textsuperscript{114} Does a regulation prohibiting the use of corporate funds in the creation of videos attacking a likely presidential candidate justified as preventing bribery, or does it amount to government censorship of political speech, even on advocacy websites?\textsuperscript{115} Is an inaccurate credit report, bond rating, or search engine result more like a defamatory statement or more like profit-seeking ad activity?\textsuperscript{116}

Commercial speech is accorded less protection than non-commercial speech.\textsuperscript{117} Indeed, the Court has recognized that the Government has wider latitude to regulate the former.\textsuperscript{118} However, commercial speech is not inherently undeserving of protection; the Court has observed: “It is clear . . . that speech does not lose its First Amendment protection because money is

\textsuperscript{114} Sorrell v. IMS Health Inc., 564 U.S. 552, 570–72 (2011); \textit{id.} at 586–90 (Breyer, J., joined by Ginsburg, J., and Kagan, J., dissenting) (analogizing regulation at issue to regulation of privacy of patient records generated by provider participation in federal insurance programs and to how “FDA oversees the form and content of labeling, advertising, and sales proposals of drugs, but not of furniture” as content-neutral regulation subject to lesser scrutiny).


\textsuperscript{116} \textit{Compare} Dun & Bradstreet, Inc. v. Greenmoss Builders, Inc., 472 U.S. 749, 762 (1985) (analogizing credit reports to advertising regulation for purposes of First Amendment limitations on actions for libel and slander relating to a matter of public concern); \textit{with id.} at 788–90 (Brennan, J., joined by Marshall, J., Blackmun, J., and Stevens, J., dissenting) (pressing the analogy between credit reports and more political speech or press writing). \textit{See also id.} at 762 n. 8 (plurality opinion) (“The dissent suggests that our holding today leaves all credit reporting subject to reduced First Amendment protection. This is incorrect. The protection to be accorded a particular credit report depends on whether the report’s ‘content, form, and context’ indicate that it concerns a public matter.”). \textit{See also Compuware Corp. v. Moody’s Invs. Servs., Inc.,} 499 F.3d 520, 529–30 (6th Cir. 2007) (applying First Amendment actual malice standard to claim based on credit rating of a public company); Search King Inc. v. Google Tech., Inc., No. CV-02-1457, 2003 WL 21464568, at *4 (W.D. Okla. May 27, 2003) (rejecting argument that accuracy of search engine results could be regulated as purportedly objective service offered for profit); Paula Lauren Gibson, \textit{Does the First Amendment Immunize Google’s Search Engine Results from Government Antitrust Scrutiny?}, 23 \textit{COMPETITION: J. OF ANTITRUST & UNFAIR COMPETITION L. SECTION STATE BAR CAL.}, no. 1, 2014, at 125 (citing, inter alia, Langdon v. Google, Inc., 474 F. Supp. 2d 622 (D. Del. 2007)); Frank Pasquale, \textit{Rankings, Reductionism, and Responsibility}, 54 \textit{CLEV. ST. L. REV.} 115 (2006).


\textsuperscript{118} \textit{Id.} at 563 (“The First Amendment’s concern for commercial speech is based on the informational function of advertising. Consequently, there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity. The government may ban forms of communication more likely to deceive the public than to inform it . . . .”).
spent to project it, as in a paid advertisement of one form or another.”

Speech may be denied First Amendment protection if it offers or facilitates a transaction that is itself illegal. Speech, however, is not denied First Amendment protection simply because it invites or induces a payment of funds. An advertisement for ordinary products or services may deserve some manner of constitutional protection because it serves the public interest. For this reason, speech inviting a money-for-content transaction may enjoy protection akin to that recognized for strictly political or non-profit speech.

In addition to information touching upon ethical and political considerations, such as whether goods are “Made in the USA” or produced without animal cruelty, price and quality information is similarly important to consumers in a capitalist democracy. As a result, even the laws of commercial libel and deceptive advertising are hemmed in by free speech law.

Crypto coin speech is quite unlike that of a lawyer, accountant, or other professional, whose speech is ripe for regulation. In First Amendment case law relating to lawyers, the Supreme Court and the lower federal courts have stressed the fiduciary relationship between lawyers and their clients. Advice rendered by a fiduciary

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120 See Va. State Bd. of Pharmacy, 425 U.S. at 759 (citing Pittsburgh Press Co. v. Pittsburgh Comm’n on Hum. Relations, 413 U.S. 376, 384 (1973)) (although advertisements for employment may be “commercial speech,” they can be prohibited if discriminatory, because discriminatory hiring is an illegal transaction).
123 See Va. State Bd. of Pharmacy, 425 U.S. at 761 (citing Bigelow v. Virginia, 421 U.S. 809 (1975)).
126 See Dun & Bradstreet, Inc. v. Greenmoss Builders, Inc., 472 U.S. 749, 758 n.5 (1985) (stating in dicta that “the power of the State to license lawyers, psychiatrists, and public school teachers—all of whom speak for a living—is unquestioned”) (citing Thomas v. Collins, 323 U.S. 516 (1945)).
127 See Milavetz, Gallop & Milavetz, P.A. v. United States, 559 U.S. 229, 250–52 (2010) (while “[u]njustified or unduly burdensome disclosure requirements offend the First Amendment by chilling protected speech,” regulation of advertising at issue was constitutional because its requirements “govern only professionals who offer bankruptcy-
is often delivered in private rather than in a public forum like a newspaper or a website, and therefore does not implicate the public’s weighty interest in the “free flow of... information.”\textsuperscript{128} Moreover, the patient or other client has a greater interest in informed, accurate disclosures from an existing fiduciary than a person whose will is not overborne by in-person solicitation of specialized services.\textsuperscript{129} This interest is attenuated when it comes to solicitation by strangers, or advice received from them.\textsuperscript{130}
Crypto Coin Offerings and the Freedom of Expression

Professional speech and reports by hired experts (such as credit bureaus) are also purportedly objective and therefore verifiable.\footnote{See id.} By contrast, the utility and ultimate value of any particular crypto coin depends upon many debatable premises and unpredictable future trends. While attorney and other professional advertising may involve similarly subjective and unverifiable claims about qualifications, respective track records, and likelihood of various outcomes including large damages recoveries in the case of personal-injury lawyers in particular, such advertising is unlike crypto white papers in that it is often “solely motivated by the desire for profit”\footnote{Dun & Bradstreet, 472 U.S. at 762.} and “[does] no more than propose a commercial transaction.”\footnote{Pittsburgh Press Co. v. Pittsburgh Com. on Human Relns., 413 U.S. 376, 385 (1973). See also Dun & Bradstreet, 472 U.S. at 791–92 (Brennan, J., joined by Marshall, J., Blackmun, J., and Stevens, J., dissenting) (“In every case in which we have permitted more extensive state regulation on the basis of a commercial speech rationale the speech being regulated was pure advertising—an offer to buy or sell goods and services or encouraging such buying and selling.”).}

Professional regulation does not dictate an orthodox viewpoint in a “matter[ ] of opinion or force citizens to confess by word or act their faith therein.”\footnote{Zauderer, 471 U.S. at 651.} By contrast, regulating crypto white papers may censor calls for fundamental economic and social change, a form of speech that has been deemed “the essence of self-government.”\footnote{Garrison v. Louisiana., 379 U.S. 64, 74–75 (1964). See also New York Times Co. v. Sullivan, 376 U.S. 254, 269 (1964).} It is a matter of great public concern whether an alternative to the fraud-prone system of banking and investment (a system arguably driving historic levels of inequality) can be built, just as it was of great import whether the Internet would make everyone a publisher. Thus, crypto speech should take its place “on the highest rung of the hierarchy of First Amendment values.”\footnote{4 Liquormart v. Rhode Island, 517 U.S. 484, 498 (1996); compare id. at 497 (discussing situations in which less speech might be permissible as a state-law mandate). See also Citizens United v. Fed. Election Comm’n., 558 U.S. 310, 361 (2010) (“[I]t is our law and our tradition that more speech, not less, is the governing rule.”); Lorillard Tobacco Co. v. Reilly, 533 U.S. 525, 571 (2001) (“The First Amendment . . . constrains state efforts to limit advertising of tobacco products, because so long as the sale and use of tobacco is lawful for adults, the tobacco industry has a protected interest in communicating information about its products and adult customers have an interest in

\footnote{See id.}
Investment fraud and other misleading commercial speech may be regulated without running afoul of the First Amendment. In this regard, it is useful to compare price regulation of a goods and services with more general, quasi-political statements about a company’s business practices or its working environment, including matters subject to collective bargaining. Statements relating to price, the contents of goods, the qualifications of a person to perform a service for a fee, and the like, do little more than propose a commercial transaction, and often do not contain more general or political opinions. On the other hand, compelled disclosures of controversial statements of opinion or belief raise different and heightened levels of constitutional scrutiny. The Supreme Court, for example, has distinguished between a basic, factual disclosure that a fundraiser is paid to raise funds, from a disclosure of more

receiving that information.”); Rubin v. Coors Brewing Co., 514 U.S. 476, 497 (1995) (observing that "more speech and a better informed citizenry are among the central goals of the Free Speech Clause."); Riley v. Nat’l Fed’n of the Blind, 487 U.S. 781, 800 (1988) (explaining that public education is less speech-restrictive alternative to compelling or dictating the content of speech by adding unwanted disclosures or other verbiage).

See, e.g., Ohralik v. Ohio State Bar Ass’n, 436 U.S. 447, 456 (1978) ("Numerous examples could be cited of communications that are regulated without offending the First Amendment, such as the exchange of information about securities . . . ."); Paris Adult Theatre I v. Slaton, 413 U.S. 49, 64 (1973) (stating in dicta that "neither the First Amendment nor ‘free will’ precludes States from having ‘blue sky’ laws to regulate what sellers of securities may write or publish about their wares."); Bulldog Inv. Gen. P’ship v. Sec’y of the Commonwealth., 460 Mass. 647, 663, 668 (2011) (concluding that because Supreme Court authority declares securities regulation to be consistent with First Amendment rights in commercial speech area, it passed First Amendment muster to require disclosure statements).

See, e.g., Greater New Orleans Broad. Ass’n v. United States, 527 U.S. 173, 193–94 (1999) (broadcasting of casino advertising may be regulated to prevent harm to gamblers or the public, in part because “It is well settled that the First Amendment mandates closer scrutiny of government restrictions on speech than of its regulation of commerce alone.”) (citing Trs. of the State Univ. of N.Y. v. Fox, 492 U.S. 469, 480 (1989)); N.Y. State Rest. Ass’n v. N.Y. City Bd. of Health, 556 F.3d 114, 132 (2d Cir. 2009) (holding that state requirement that restaurants post caloric content data on menus was permissible under First Amendment because “Commercial disclosure requirements are treated differently from restrictions on commercial speech because mandated disclosure of accurate, factual, commercial information does not offend the core First Amendment values of promoting efficient exchange of information or protecting individual liberty interests.”) (quoting Nat’l Elec. Mfrs. Ass’n v. Sorrell, 272 F.3d 104, 114–15 (2d Cir. 2001); Pharm. Care Mgmt. Ass’n v. Rowe, 429 F.3d 294, 308–11 (1st Cir. 2005) (upholding pharmaceutical benefit manager disclosure requirements as regulating only “expression related solely to the economic interests of the speaker and its audience.”) (quoting El Dia, Inc. v. P. R. Dept. of Consumer Affairs, 413 F.3d 110, 115 (1st Cir. 2005), and citing Central Hudson Gas & Electric Corp. v. Public Serv. Comm’n of N. Y., 447 U.S. 557, 561 (1980)); Anschez Corp. v. Merrill Lynch & Co., 785 F. Supp. 2d 799, 824, 830 (N.D. Cal. 2011) (negligent misrepresentation claims related to investing are not subject to dismissal under First Amendment); Abu Dhabi Com. Bank v. Morgan Stanley & Co., 651 F. Supp. 2d 155, 176 (S.D.N.Y. 2009) (similar).
complex ideas and claims with which the speaker may disagree.141 Requiring a credit rating agency to adopt standards might also rise to the level of compelled speech.142 As a result, not every statement by an agency that harms another business or investor can be silenced or corrected without abridging the freedom of speech.

In addressing a case involving the publication of an article relating to a security within the SEC’s jurisdiction, the D.C. Circuit in 1988 rejected the notion that enjoining such an article would constitute a forbidden prior restraint or an impermissible intrusion of securities law into protected commercial speech under the First Amendment.143 The court reasoned that “areas of extensive economic supervision,” such as securities and competition law, are subject to the deferential scrutiny of commercial speech regulations.144 Moreover, the court analogized the regulation of such articles—even those that resembled journalism rather than proxy or offering statements—to the regulation of attorney conduct.145

However, the continued viability of the D.C. Circuit’s 1988 ruling is questionable. While at the time misleading speech seemed to be completely outside the First Amendment’s impact zone, recent cases undermine this view.146 In Ibanez v. Florida

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141 See id. at 796–99, n.11 (making this distinction). See also Hurley v. Irish-American Gay, Lesbian & Bisexual Grp. of Bos., 515 U.S. 557, 559, 577 (1995) (explaining that it violates the First Amendment to force a speaker to be associated with a message with which the speaker does not agree); Mia. Herald Publ’g Co. v. Tornillo, 418 U.S. 241, 256 (1974) (holding that newspapers may not be required to serve as a neutral forum in which candidates for public office may respond to attacks); Thomas v. Collins, 323 U.S. 516, 539–40 (1945) (observing that a regulation which merely requires a speaker to present identification might be permissible, while one that more aggressively censors or shapes the speech would not be absent some commercial nexus); Glickman v. Wileman Bros. & Elliot, Inc., 521 U.S. 457, 481 (1997) (Souter, J., dissenting) (noting that “compelling cognizable speech officially is just as suspect as suppressing it, and is typically subject to the same level of scrutiny.”); Compuware Corp. v. Moody’s Invs. Servs., Inc., 499 F.3d 520, 533–34 (requiring company to change its rating of company offering would violate First Amendment); Jefferson Cty. Sch. Dist. v. Moody’s Invs. Servs., Inc., 175 F.3d 848, 856–58 (requiring company to change its ratings of a bond would be impermissible under First Amendment); Wollschaeger v. Governor, 848 F.3d 1293, 1308 (observing that courts are “properly skeptical of the government’s ability to calibrate the propriety and utility of speech on certain topics.”); Search King Inc. v. Google Tech., Inc., No. CIV-02-1457, 2003 WL 21464568, at *4 (requiring Google to up-rank website to avoid interfering with site’s business interests might infringing Google’s freedom of speech) (citing Mia. Herald, 418 U.S. at 256).
142 See Compuware, 499 F.3d at 533–34.
145 Commodity Trend Serv., Inc. v. Commodity Futures Trading Comm’n, 149 F.3d 679, 686 (7th Cir. 1998).
146 See Rebecca Tushnet, Truth and Advertising: The Lanham Act and Commercial
Department of Business & Professional Regulation, the Supreme Court distinguished between categories of “potentially” and actually misleading speech, stating that only the latter is subject to prohibition even in professional contexts of advertising services offered for a fee.\textsuperscript{147} In United States v. Alvarez,\textsuperscript{148} the Court deemed efforts to boost one’s image with an inflated and misleading military record to be a potentially First Amendment-protected part of “dynamic” public debates.\textsuperscript{149} In Expressions Hair Design v. Schneiderman, the Court rejected an effort to regulate the prices displayed or announced by retailers, even though the Solicitor General of the United States warned that the law regulated conduct alone and that such a ruling might jeopardize false advertising law.\textsuperscript{150} The following year, the Court concluded that regulating the manner in which unlicensed pro-life “pregnancy centers” masqueraded as medical clinics at the expense of unwitting patients violated the First Amendment. The state of California had passed a law requiring such centers to disclose that they were not licensed medical centers and did not employ doctors. California defended the law, arguing that the centers were affected as “treatment” providers or advertisers of treatment for a fee.\textsuperscript{151} The disclosure requirement was justified only by a fear of potential harm, according to the Court, and therefore imposed an unjustified burden.\textsuperscript{152}

\textsuperscript{147} Id. at 728; see also id. at 735–39 (Breyer, J., joined by Kagan, J., concurring in the judgment) (noting that lying without foreseeable injury to others may be protected speech); id. at 733, 749 (Alito, J., joined by Scalia, J., and Thomas, J., dissenting) (conceding that lying to “further philosophical or scientific debate” might be constitutionally protected); Louis W. Tompos et al., The Constitutionality of Criminalizing False Speech Made on Social Networking Sites in a Post-Alvarez, Social Media-Obsessed World, 31 HABBR. J.L. & TECH. 65, 92–102 (2017) (suggesting that criminalizing false statements on Internet that do not cause foreseeable harm is unconstitutional after Alvarez). Whether the defendant in Alvarez stood to gain commercially from the statement at issue is debatable. See Alvarez, 556 U.S. at 714 (he was not applying for a job or “financial benefits”); id. at 744 (Alito, J., joined by Scalia, J., and Thomas, J., dissenting) (claiming to have been awarded a military honor could lead to “other material rewards, such as lucrative contracts”).


\textsuperscript{149} 567 U.S. 709, 710 (2012).

\textsuperscript{150} Id. at 728; see also id. at 735–39 (Breyer, J., joined by Kagan, J., concurring in the judgment) (noting that lying without foreseeable injury to others may be protected speech); id. at 733, 749 (Alito, J., joined by Scalia, J., and Thomas, J., dissenting) (conceding that lying to “further philosophical or scientific debate” might be constitutionally protected); Louis W. Tompos et al., The Constitutionality of Criminalizing False Speech Made on Social Networking Sites in a Post-Alvarez, Social Media-Obsessed World, 31 HABBR. J.L. & TECH. 65, 92–102 (2017) (suggesting that criminalizing false statements on Internet that do not cause foreseeable harm is unconstitutional after Alvarez). Whether the defendant in Alvarez stood to gain commercially from the statement at issue is debatable. See Alvarez, 556 U.S. at 714 (he was not applying for a job or “financial benefits”); id. at 744 (Alito, J., joined by Scalia, J., and Thomas, J., dissenting) (claiming to have been awarded a military honor could lead to “other material rewards, such as lucrative contracts”).

\textsuperscript{151} Id. at 727.


contemporary First Amendment doctrine relies on “counterspeech” as an available method of resolving the potential harms of unregulated public discourse, and disfavors preemptive bans.153

While registration of traditional securities might therefore add to the body of information available to the public,154 registration requirements for coins such as Ether or Bitcoin would chill a substantial amount of coin speech without necessarily adding much information to the marketplace.155 Disclosure of the information required to register a traditional securities offering may be primarily factual and uncontroversial, but forcing a utility coin, service coin, or appcoin promoter to call a coin a “security” and to call itself a shareholder or founder of a company mandates a controversial statement of a subjective legal conclusion.156 Such decisions present serious First Amendment dangers by allowing government officials to determine whether a potential speaker has satisfied “necessarily subjective” standards to qualify as an eligible speaker.157 Even in the context of advertising services to the general public, a disclosure requirement violates the freedom of speech if it relates to someone else’s services or is “unduly burdensome.”158 It is improper under Zauderer and its progeny to mandate a disclosure that is inaccurate or one that is controversial.159 A

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156 See infra note 202 and accompanying text.


159 See American Beverage Ass’n v. City & County of San Francisco, 916 F.3d 749, 764–67 (9th Cir. 2019) (Christen, J., joined by Thomas, J., concurring in the result) (inaccurate or scientifically controversial disclosure fails under Zauderer); National Ass’n of Mfrs. v. SEC, 800 F. 3d 518, 530 (D.C. Cir. 2015) (holding that a non-factual or ideologically-loaded disclosure fails muster under Zauderer); Ent. Software Ass’n v.
compelled statement that Bitcoin or a utility token is a security might be inaccurate, while a compelled statement that a particular cryptocurrency can be subject to an accounting of revenue or profits like a typical corporation would certainly be controversial.

Major crypto coin white papers are starkly dissimilar to IPO registration statements or other corporate proxy statements, which may be regulated extensively with little fear of First Amendment challenges to the regulatory scheme, or at least under traditional First Amendment doctrine predating the widespread adoption of the Internet. Unlike corporations issuing stock, but like other open source software projects, many cryptocurrencies lack a centralized issuer. Although other tokens are explicitly marketed as investments and lose all their value due to the incompetence or criminality of their founders and/or promoters, so-called “service tokens” or appcoins as well as payment or “currency” tokens operate less like corporations and more like subscriptions or monies. Consumers do not

Blagojevich, 469 F.3d 641, 652 (7th Cir. 2006) (questioning a mandate of somewhat subjective “18” label on “sexually explicit” video games as when not being a mere factual disclosure); Wash. Post v. McManus, 355 F. Supp. 3d 272, 282, 296–300 (D. Md. 2019) (A disclosure requirement for paid digital communications on online platforms, such as political ads on news websites, could not be sustained as a requirement to disclose uncontroversial information under Zauderer. The court noted that “laws compelling publishers to make election-related disclosures [do not] have much of a history in this country.”), aff’d, 944 F.3d 506 (4th Cir. 2019).


“invest” in money or services, but rather earn or buy them; a coin without an “enterprise” is therefore not a “security” that should have to be registered unless exempt, among other requirements.\textsuperscript{163} While the distinction might be lost if crypto coins also had to preregister, this is an argument against enacting such a requirement in the first place.

A crypto white paper, in many ways, is like computer scientists’ research output, or (less charitably) like an article in a magazine quoting a corporate executive touting his or her corporation, or else a scientific study funded by a corporation to boost its sales by praising its products.\textsuperscript{164} This is highly significant, for it supports the contention that a white paper or other crypto coin article or social media post does not “retain[ ] its commercial character when it is inextricably intertwined with otherwise fully protected speech.”\textsuperscript{165} Unlike a pure advertisement (e.g. for a specific car at a specific price), many white papers do not state a price, and instead read like lengthy tracts of peer-to-peer software coding, coupled with arguments for decentralized economic power and new forms of online activity and human relationships.\textsuperscript{166} The paper that popularized the digital coin movement, the Bitcoin white paper, emphasized cybersecurity advantages of a digital cash system based on coins secured by a peer-to-peer methodology using a lot of work to make the ledger of transactions difficult to forge or mutilate as hackers array computer power against the ledger.\textsuperscript{167} If cybersecurity in 2008 was a scholarly discipline (notably in computer science) related to reducing the perpetration of fraud using the Internet, Bitcoin promised to advance it by harnessing the users of the coin to generate a tamper-resistant chronological list of past Bitcoin transfers, preventing digital check kiting.\textsuperscript{168}


\textsuperscript{163} See, e.g., 15 U.S.C. § 77b(a)(1) (omitting money within definition of “security” even while defining “security” to include “investment contract” and providing numerous examples of such contracts or securities); 15 U.S.C. § 78c(a)(10) (excluding “currency” from definition of “security” even while defining “security” to include “investment contract”).

\textsuperscript{164} See, e.g., Andreesen, supra note 101.


\textsuperscript{166} See \textit{Narayanan \textit{et al.}, supra} note 161, at 25 (exploring computer science of cryptocurrencies in depth); \textit{cf. Bernstein v. United States Dep’t of Just., 176 F.3d 1132, 1141 (1999)} (finding that computer source code is protected as free speech).

\textsuperscript{167} See \textit{Nakamoto, supra} note 37, at 1.

\textsuperscript{168} See \textit{Nakamoto, supra} note 37, at 1; \textit{cf., e.g., The Cybersecurity Partnership Between the Private Sector and Our Government: Protecting Our National and Economic Security: Joint Hearing Before the S. Comm. on Commerce, Sci., & Transp. and the S. Comm. on Homeland Sec. & Governmental Aff., 113th Cong. 11–12 (2013)} (statement of Janet Napolitano, Secretary, U.S. Department of Homeland Security) (noting that fraud by
papers may also summarize other tokens or their own white papers, which is something not often seen in corporate disclosure filings.169

Peer-to-peer payment systems often resemble labor unions’ organizational structure to a greater extent than they resemble corporations or partnership shares. In attempting to evade the “excessive fees” of banks, payment processors, app stores dominated by oligopolistic Internet platforms, and the like, crypto coin founders and subscribers exercise their basic First Amendment rights to freedom of association and joint economic activism.170 While the users of such systems may expect to earn a profit from successful management of their assets within the system, a potentially larger portion of the value of payment tokens derives from their utility in various marketplaces, rather than their being invested and earning a return like money that buys a share of stock.171 A union pension likewise depends on the counterfeiting was a key cybersecurity priority during the Obama administration; President’s Info. Tech. Advisory Comm., Cybersecurity: A Crisis of Prioritization 8 (2005), http://www.nitrd.gov/pcac/reports/20050301_cybersecurity/cybersecurity.pdf [http://perma.cc/SXY4-ECHY]. Check kiting is the informal name for obtaining money or assets in the control of a financial institution by knowingly and with the intent to defraud making a false representation of having enough funds to pay for a purchase or debt, such as by writing a completely bogus check with no funds there to cover the amount. See, e.g., 18 U.S.C. § 1344; United States v. Doherty, 969 F.2d 425, 428 (7th Cir. 1992).


170 See United Transp. Union v. Mich. Bar, 401 U. S. 576, 577–80, 586 (1971) (holding that union had right to offer Illinois attorneys to Michigan clients, in probable violation of Michigan laws governing unlicensed provision of legal advice by those lacking admission to the state bar, nonlawyers sharing or controlling a lawyer’s fees, nonlawyer soliciting clients for lawyers, etc. Court invoked “the First Amendment principle that groups can unite to assert their legal rights as effectively and economically as practicable.”) (emphasis added) (first citing United Mine Workers v. Ill. State Bar Ass’n, 389 U.S. 217 (1967); then citing Brotherhood of R.R. Trainmen v. Va. State Bar, 377 U.S. 1 (1964); and then citing NAACP v. Button, 371 U.S. 415 (1963)); see also, In re Primus, 436 U.S. 412, 426 (1978) (“The Court has held that the First and Fourteenth Amendments prevent state proscription of a range of solicitation activities by labor unions seeking to provide low-cost, effective legal representation to their members.”); Tailey v. California, 362 U.S. 60, 64 (1960) (noting right to hand out information without regulation of one’s identity); United Transp. Union, 401 U.S. at 586–600 (Harlan, J., concurring in part and dissenting in part) (reciting various potential violations of Michigan law governing attorney registration and conduct, and similar violations in Brotherhood of R.R. Trainmen); State Emp. Bargaining Agent Coalition v. Rowland, 718 F.3d 126, 133–34 (2d Cir. 2013) (noting First Amendment also protects economic or other “associations”) (quoting NAACP v. Alabama ex rel. Patterson, 357 U.S. 449, 460–61 (1958)); Boardman v. Inslee, 354 F. Supp. 3d 1232, 1247 (W.D. Wash. 2019) (noting that “[c]onditioning public employment on union membership, no less that on political association, inhibits protected association and interferes with government employee[s] [sic] freedom to associate,” justifying “strict” First Amendment scrutiny) (quoting Rowland, 718 F.3d at 133–35)).

171 See Int’l Brotherhood of Teamsters v. Daniel, 439 U.S. 551, 562 (1979) (concluding...
efforts of the portfolio or investment managers to maximize the return on investment while minimizing risk, ensuring that the defined benefit or other retirement arrangement can be paid in the end. Still, focusing only on the extent to which pension funds are “invested” in order to mandate registration under securities laws improperly ignores other aspects of a union and its pension fund. Requiring preregistration as an approved speaker on such topics as the trading of cryptocurrencies restricts “[t]he right thus to discuss, and inform people concerning, the advantages and disadvantages of [crypto coin open-source software projects] and joining them”; this right “is protected not only as part of free speech, but as part of free assembly.” Moreover, the fact that some white papers might not require registration if they reject founder involvement in developing the token ecosystem on principle, or forswear any commercial use of the token under any circumstances, should trigger strict scrutiny of Howey-style tests for registration.

Crypto coin collectives also implicate the “right to work for a living.” The right to work for some manner of compensation may be protected under the Fifth Amendment from federal interference, and under some combination of the Fifth and the Fourteenth Amendments at the state level. Laws with
unpredictable reach or breadth may be void for vagueness as denials of due process of law; they may also violate equal protection principles if they fail to apply to all actors, instead singling out an unlucky few.\(^{178}\)

Increasingly since the 1960s, the Fifth Amendment has invalidated statutes or ordinances that (1) are framed indefinitely or (2) that invite random or discriminatory application to the detriment of economic or political activity.\(^{179}\) As a criminally enforceable norm, the prohibition against selling “Howey” securities absent a registration or applicable exemption raises particularly acute vagueness concerns.\(^{180}\) Additionally, the

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\(^{178}\) See Village of Willowbrook v. Olech, 528 U.S. 562, 564 (2000) (“The purpose of the equal protection clause . . . is to secure every person within the State’s jurisdiction against intentional and arbitrary discrimination, whether occasioned by express terms of a statute or by its improper execution through duly constituted agents.”) (internal quotation marks omitted).


international human right of freedom of expression is also infringed if civil or criminal sanctions are unpredictable or speech-suppressive, such as by imposing to jail terms or fines.\textsuperscript{181}

B. Commercial Speech Challenges

The First Amendment provides little protection for false or misleading speech.\textsuperscript{182} For example, prior restraints on commercial speech may be permissible when false or misleading statements are made in connection with the marketing of pharmaceutical ingredients or testimonials about their effectiveness, as such speech does no more than propose a commercial transaction.\textsuperscript{183}

A “reasonable relationship” test, or form of rational basis review, applies to law governing an “ordinary” commercial sale.\textsuperscript{184} This is similar to the “permissive” standard of review for disclosure rules, where a market actor is compelled by law to speak in a manner that includes “purely factual and uncontroversial information.”\textsuperscript{185}

There is a suggestion that speech “incidental” to unlawful “conduct” (whether an offer, sale, failure to register within a certain profession or trade, etc.) should be entirely excluded from First Amendment coverage.\textsuperscript{186} If incitement of imminent lawless


\textsuperscript{182} See Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc., 425 U.S. 748, 771–72 n.24 (1976) (noting that “truthful information” may not be suppressed even when “wholly false” or merely “deceptive or misleading” speech may be subject to state or federal regulation to deal with its false or misleading character, for example “to require that a commercial message appear in such a form, or include such additional information, warnings, and disclaimers, as are necessary to prevent its being deceptive.”).


\textsuperscript{185} See id. at 1152 (Breyer, J. dissenting) (quoting Zauderer, 471 U.S., at 651).


Several justices of the Supreme Court, whose views were perhaps more representative of recent majorities in First Amendment cases, opined that it would violate the First Amendment to enjoin the publication of a newsletter dedicated to recommending the buying or selling of securities. Specifically, the violation was alleged to be that a publisher had violated the Investment Advisers Act by failing to disclose criminal convictions in the course of registering as an adviser before starting the newsletter.\footnote{See Lowe v. SEC, 472 U.S. 181, 211 (1985) (White, J., joined by Rehnquist, J., and Burger, C.J., concurring). The lower court judges agreed. See also SEC v. Lowe, 725 F.2d 892, 906 (2d Cir. 1984) (Brierrant, J., dissenting); id. at 893; SEC v. Lowe, 556 F. Supp. 1359, 1371 (E.D.N.Y. 1983). The majority in Lowe did not reach the First Amendment issue.}

To begin with the Central Hudson test for narrower possible regulations that would serve a governmental interest, there are numerous alternatives to prior restraints on ICOs in the form of regulations that would serve a governmental interest, there are numerous alternatives to prior restraints on ICOs in the form of

regulates a profession—or presumably also, another trade or business—this does not raise a constitutional issue under the First Amendment.\footnote{See also SEC v. Lowe, 725 F.2d 892, 906 (2d Cir. 1984) (Brierrant, J., dissenting); id. at 893; SEC v. Lowe, 556 F. Supp. 1359, 1371 (E.D.N.Y. 1983). The majority in Lowe did not reach the First Amendment issue.}
registration as a security or commodity issuer/exchange. Under light touch approaches, narrower restrictions on crypto coin expression could regulate false but verifiable claims without suppressing subjective or unverifiable opinions. For example, the Federal Trade Commission (FTC) currently regulates misleading Internet access subscription advertisements or terms under the light touch approach adopted by the Federal Communications Commission in 2017 for broadband Internet access regulation.\(^{191}\)

The FTC also has the power (although it presently defers to the ESRB) to regulate misleading claims in the marketing or terms of video games, email accounts, online marketplaces, and social media access contracts, without requiring such offerings to be preregistered with it.\(^{192}\) Similarly, the statutes and common-law

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\(^{191}\) See, e.g., Mozilla Corp. v. FCC, 940 F.3d 1, 17–18, 49–50, 59, 71–72 (D.C. Cir. 2019) (citing In re Restoring Internet Freedom, 33 FCC Rcd. 311, ¶ ¶ 1, 4, 18, 152, 209, 217 (2018)); id. at 71–72 ("We do note that antitrust enforcement by the Commission's sister agencies (the Department of Justice and the FTC ... aims at generating and protecting competition, ... [which] would tend to multiply the voices in the public square," [promote transparency, and give teeth to] "ISP commitments [of open access to the Internet and minimum quality of service provided to users] backed up by FTC enforcement ... "). (quoting Restoring Internet Freedom, 33 FCC Rcd., at ¶ 153).

principles governing fraud, warranties, fiduciary duties, unjust enrichment, restitution, and related causes of action provide robust remedies—including incarceration and punitive damages far in excess of the remedies the SEC typically seeks—and do not require every transaction to be registered by a financial elite in advance. In some cases, even counterspeech or public


education efforts may be deemed adequate multi-stakeholder alternatives to harsh penalties for proven falsehoods.\textsuperscript{194} The availability of such alternatives to prior restraints and difficult-to-satisfy preregistration requirements establishes a less restrictive means to regulate ICO speech under the First Amendment.

Regulation of commercial speech by means of keeping the public in ignorance of developments in a field of applied science or other commerce fails First Amendment scrutiny when less restrictive but equally or more effective regulations of conduct are available.\textsuperscript{195} For example, the Supreme Court has struck down, because less restrictive means of regulation were available, certain prohibitions on the promotion of products and solicitation of new clients relating to prescriptions for “compounded drugs.”\textsuperscript{196} Rather than enforced ignorance of products that may not violate the law in itself—in this case, an offer of compounded drugs—Congress should have directly regulated the prescription of such drugs to patients who do not need them or who might be harmed by them, either in isolation or as combined with their other medications.\textsuperscript{197} Similarly, the First Amendment makes it unconstitutional to ban advertisements or labels that reference the low price or high alcohol content of beer or spirits.\textsuperscript{198} Although this ban might


\textsuperscript{194} Thus, in Alvarez, the less restrictive means available to regulators trying to preserve the incentive or expressive purposes of the military medal and honors systems was to public a database of confirmed awardees and their medals or honors. United States v. Alvarez, 567 U.S. 709, 735 (2012) (Breyer, J., concurring).

\textsuperscript{195} See, e.g., Ibanez v. Fla. Dep’t of Bus. & Pro. Regul., 512 U.S. 136, 152 (1994) (O’Connor, J., concurring) (“States may not completely ban potentially misleading commercial speech if narrower limitations can ensure that the information is presented in a nonmisleading manner.”); cf. Bernstein v. U.S. Dep’t of Just., 176 F.3d 1132, 1139–41 (9th Cir. 2000) (speech on cryptography, including distribution of executable code, protected by First Amendment from export controls that unconstitutionally operated as prior restraint).

\textsuperscript{196} Thompson v. W. States Med. Ctr., 535 U.S. 357, 366, 375–76 (2002). But see id. at 382–83 (Breyer, J., joined by Roberts, C.J., Stevens, J., and Ginsburg, J., dissenting) (emphasizing the risk that patients will take “untested” compounds, which due to new drug combinations, differing absorption rates, or other factors “can, for some patients, mean infection, serious side effects, or even death”).


\textsuperscript{198} 44 Liquormart, Inc. v. Rhode Island, 517 U.S. 484, 505–08 (citing Rubin v. Coors
reduce alcohol abuse and implicitly subsidize alternatives like water or fruit juice, directly regulating the price or alcohol percentage of a beverage is a less restrictive and potentially more effective alternative to compelled ignorance of available options at alcohol retailers.\textsuperscript{199} For these reasons, a regulation’s relationship to the underlying governmental interest should not be indirect, immaterial, speculative, or disproportionate.\textsuperscript{200}

Assuming that a form of rational basis review applies, the path towards a First Amendment defense to ICO or appcoin registration or other requirements will be more difficult.\textsuperscript{201} Regulators or prosecutors are citing abuses to crack down on ICOs, as China, New York, and other jurisdictions are doing, in order to protect consumers from harm, banks from unfair competition, or investors and non-investors alike from instability.\textsuperscript{202} Even as a “preventative” criminal statute triggered by speech, the Supreme Court might uphold it as advancing “urgent” national interests in consumer protection.\textsuperscript{203} The impact on speech of regulating the conduct would be incidental and the

\textsuperscript{199} See Ibanez, 512 U.S. at 143–44 (quoting Edenfield v. Fane, 507 U.S. 761 (1993)) (speculation and conjecture insufficient basis to invoke governmental interest in First Amendment context); United States v. Caronia, 703 F.3d 149, 165–66 (2d Cir. 2012) (promotion of off-label drug use could lead to patient injury, medical malpractice, and civil claims for negligence, it may not be restrained simply due to these potential harms if true and non-misleading under First Amendment); cf. Amarin Pharma, Inc. v. FDA, 119 F. Supp. 3d 196, 236 (S.D.N.Y. 2015) (“[T]he FDA’s concern that future events may one day make [a promotional] claim misleading cannot justify treating [a] presently true and non-misleading statement as if it were unprotected speech.”).

\textsuperscript{200} See United States v. Carolene Prods. Co., 304 U.S. 144, 152 (1938) (explaining that “regulatory legislation affecting ordinary commercial transactions” typically need only “rest[] upon some rational basis.”); see also Expressions Hair Design v. Schneiderman, 137 S. Ct. 1144, 1152 (Breyer, J., concurring) (contending that this precedent should apply to a regulation of how a business describes its prices and services to purchasers).

\textsuperscript{201} See Franklin R. Edwards et al., Crypto Assets Require Better Regulation: Statement of the Financial Economists Roundtable on Crypto Assets, 75 FIN. ANALYSTS J. 14, 15 (2019) (emphasizing these risks in call for better regulation of ICOs and crypto-exchanges like Coinbase); Kelvin FK Low & Ernie Teo, Bitcoins and Other Cryptocurrencies as Property?, 9 LAW, INNOVATION & TECH. 235, 253–54 (2017) (describing risk that consumers will suffer cyberthefts measured in tens or hundreds of millions of dollars on unregulated cryptocurrency exchanges like Mt. Gox or Ethereum blockchain); Christian Rueckert, Cryptocurrencies and Fundamental Rights, 5 J. CYBERSECURITY 1, 4 (2019); Daniel Follensbey & Mark Lennon, Braving Bitcoin: A Technology Acceptance Model (TAM) Analysis, 18 J. INFO. TECH. CASE & APPLICATION RSCH. 220, 226 (2016) (arguing that after traditional financial institutions lobbied for them, New York’s regulations had “their desired effect of causing many bitcoin businesses to pull out of New York State altogether”) (internal citations omitted).

speech offering a prohibited transaction could be prohibited alongside the transaction itself.\textsuperscript{204}

Contemporary commercial speech doctrine does not, in my view, support a rational basis review of the requirement that a registration statement is required before a crypto coin may be offered via a white paper, website, or social media account. Section 5 of the Securities Act\textsuperscript{205} does not simply mandate that coin promoters disclose “purely factual and uncontroversial information,” like the address of a law office or the names and bar affiliations of its partners.\textsuperscript{206} Instead, unless an exemption applies, it requires years of audited income and cash flow statements that have a contested and arguably speculative application to tokens such as Bitcoin.\textsuperscript{207} Thus, a law requiring a

\textsuperscript{204} See Expressions Hair Design, 137 S. Ct. at 1150–51 (observing that if a law regulated the price of a sandwich, it would regulate the speech announcing or evidencing the price of the sandwich, but holding that a “law’s effect on speech [may] be only incidental to its primary effect on conduct, and it has never been deemed an abridgment of freedom of speech or press to make a course of conduct illegal merely because the conduct was in part initiated, evidenced, or carried out by means of language, either spoken, written, or printed”) (quoting Rumsfeld v. For. Acad. & Institutional Rights, Inc., 547 U.S. 47 (2006)).


\textsuperscript{206} See Expressions Hair Design, 137 S. Ct. at 1152–53 (Breyer, J., concurring) (suggesting that a statute that required a merchant to disclose its respective cash and credit-card prices for the same good or service would require such a disclosure of uncontroversial information) (citing Zauderer v. Off. of Disciplinary Couns. of Sup. Ct. of Ohio, 471 U.S. 626, 651 (1985)).

gas station to disclose a cash price of $2.99 for a gallon of regular unleaded gasoline alongside a credit-card price of $3.19 merely requires the credit-card price to be revealed, and “would not hinder the transmission of information to the public.”\textsuperscript{208} Strictly applying Section 5 of the Securities Act and Section 12(g) of the Exchange Act to crypto coins would hinder speech relating to them because, as explained below, such coins are frequently not amenable to traditional metrics of profitability, managerial control, and expectation of success.

Requiring pre-registration of all token offerings undermines a primary function of the First Amendment: “To require a censorship through license which makes impossible the free and unhampered distribution of pamphlets strikes at the very heart of constitutional guarantees.”\textsuperscript{209} Like the restriction on pharmaceutical effectiveness claims that have not been cleared with the FDA, an outright restriction on non-registered claims regarding crypto coin use cases or potential value is clearly unconstitutional.\textsuperscript{210} Even someone with a criminal record should have the right to publish ideas that could become potential investments via a newsletter or its contemporary internet equivalent.\textsuperscript{211} Like a restriction on federal employees from receiving pay for speaking on topics on which they have expertise, a pre-registration requirement for ICO and AppCoin white papers would chill the formulation and growth of expression, while other regulations with lesser impacts on speech were available.\textsuperscript{212}
It is not sufficient to say that advertisements or professional speech must be subject to some kind of legal oversight.\textsuperscript{213} Rather, courts consider whether the mode of advertisement or solicitation can overbear the will of the recipient, rendering the recipient unable or unwilling to simply discard or ignore the contents.\textsuperscript{214} Absent that kind of overpowering solicitation, the less restrictive alternative of remedying fraudulent crypto coin or other product offerings after the fact, shows that penalizing unregistered speech relating to the utility or value of crypto coins is disproportionate and unconstitutional.\textsuperscript{215}

\textsuperscript{213} Cf. Bhagwat, supra note 45, at 839–40.

\textsuperscript{214} See Shapero v. Ky. Bar Ass’n, 486 U.S. 466, 474–76 (1988) (noting that an advertisement from a lawyer, unlike an ongoing attorney-client relationship, “can readily be put in a drawer to be considered later, ignored, or discarded,” so the relevant inquiry is not whether advertisements harm “potential clients” but rather “whether the mode of communication poses a serious danger that lawyers will exploit any such susceptibility”); see also Fla. Bar v. Went For It, Inc., 515 U.S. 618, 637–40 (1995) (arguing that under Shapero, direct mail solicitations of clients within thirty days of their accidents may serve a “legitimate purpose” and recipients may simply throw them in the trash if they are not useful or helpful).

\textsuperscript{215} See, e.g., Shapero, 486 U.S. at 468, 476 (ban on “soliciting legal business for pecuniary gain by sending truthful and nondeceptive letters to potential clients known to face particular legal problems” unconstitutional because less restrictive means existed: punishing “actual abuses” or “isolated abuses of mistakes,” and requiring filing of all solicitations with the bar or other regulator for investigative and information-gathering purposes related to such prosecutions and punishments); In re R.M.J., 455 U.S. at 201–02 (noting overbearing or inherently misleading advertising may be banned, but truthful advertising of legal services may not be prohibited by state bars that could punish “inaccurate” solicitations plagued by major “omissions;” “the preferred remedy is more disclosure, rather than less”) (quoting Bates, 433 U.S. at 375); Went For It, 515 U.S. at 641–43 (Kennedy, J., joined by Stevens, J., Souter, J., and Ginsburg, J., dissenting) (objecting to “wild disproportion” of relatively narrow regulation on solicitation of legal business of accident victims within thirty days of accident, and emphasizing a less restrictive alternative that when a client “enters into a contract with an attorney and later regrets it, Florida, like some other States, allows clients to rescind certain contracts with attorneys within a stated time after they are executed”); Ohralik v. Ohio State Bar Ass’n, 436 U.S. 447, 462 n.20 (1978) (finding the Court has held that “a lawyer who engages in solicitation as a form of protected political association generally may not be disciplined without proof of actual wrongdoing that the State constitutionally may proscribe.”); id. at 478 (Marshall, J., concurring in part and concurring in the judgment) (while “misrepresentation” may occur in attorney solicitation, its prevention is among the “concededly legitimate interests [that] might well be served by more specific and less restrictive rules than a total ban on pecuniary solicitation”); In re Primus, 436 U.S. 412, 438–39 (1978) (imposing ethical discipline on attorney who solicits client—in furtherance of right of free association—violates the First Amendment unless there is actual misconduct). But see Ohralik, 436 U.S. at 456, 461, 484 (upholding “prophylactic” ban on in-person solicitation which might, among other evils, be misleading, even though presumably such “misrepresentation” could be punished after it actually occurs).
C. International Law Perspectives on Freedom of Expression

Human rights law recognizes the right of everyone “to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.”\(^{216}\) The Human Rights Committee—which is empowered to opine to signatories to a core human-rights convention as to the scope of the right to seek and impart ideas in the media—maintains that such infringements must be “provided by law,” and must be necessary “for respect of the rights or reputations of others” or “for the protection of national security or of public order (ordre public), or of public health or morals.”\(^{217}\) Preregistration of crypto coin speech is of doubtful necessity to protect the rights of others, which could be protected by a variety of other means including FTC cease and desist orders and disgorgement of profits, civil litigation for fraud or other torts with the prospect of class actions and punitive damages, and criminal prosecution for a variety of fraud-related offenses.

Human rights law also recognizes the right to hold an opinion, and this is seen as so fundamental that it is “a right to which the Covenant permits no exception or restriction.”\(^{218}\) The UN expert on the freedom of expression, David Kaye, announced in 2018 that his office sees “laws or arrangements” that “require the ‘proactive’ monitoring or filtering of content” as conflicting with the free expression norm against “prepublication censorship.”\(^{219}\) He objected that “restriction of user-generated content before its publication subjects users to restrictions on freedom of expression without prior judicial review of the legality, necessity and proportionality of such restrictions.”\(^{220}\) Any disproportionate or unjustified restrictions on the freedom of expression violate the right to speak and communicate ideas recognized under human-rights law.\(^{221}\)


\(^{217}\) Id. at pt. 3.


\(^{220}\) Id. at 7.

Regional as well as universal human-rights treaties protect the right to earn a living and choose one’s occupation. They also protect the freedom of association, which frequently and by tradition includes the exchange of funds as dues, as well as the freedom of expression including the right to share ideas by any media regardless of national frontiers. As Christian Rueckert explains, there is a human right to build crypto coin ecosystems:

When a message is transmitted or information is embedded in the blockchain using a transaction of bitcoins, [for example], this transaction clearly falls within the scope of the right to freedom of expression and information. . . . Persons who provide software as an infrastructure for the transfer of information can also invoke the right to freedom of expression and information. This follows from the Pirate Bay decision of the [European Court of Human Rights] where the Court decided that providers of a file-sharing website can rely on Art. 10 [of the European Convention on Human Rights and Fundamental Freedoms]. . . . [A]ny restriction of the Bitcoin protocol’s development and any regulatory guideline for developers interfere[s] with their right to freedom of expression.

Like the securities laws and the other laws analyzed below, the freedom of expression may not protect the utterance of false facts, even in noncommercial speech—although nations may have more leeway to prevent misleading advertisements. Some
IV. REGULATING MISLEADING EXPRESSIONS WHILE DEREGRATING “ECOSYSTEM SPEECH”

One must distinguish commercial speech that makes an “easily verifiable” claim from speech that is subjective, quasi-political, or based on optimistic projections. Under the Central Hudson test, the “State cannot regulate speech that poses no danger to the asserted state interest, . . . nor can it completely suppress information when narrower restrictions on expression would serve its interest as well.” There is a real danger, as explained above, that speech relating to crypto coins as an alternative to traditional ways of conducting e-commerce or buying software will be completely banned. Requiring pre-registration of crypto white papers in this way strikes at the heart of the First Amendment. That is because all “sanctions on the publication of truthful information of public concern” threaten “the core purposes of the First Amendment.”
Regulation of securities may do no violence to the First Amendment if it is not targeted at speech or if such targeting is “necessary to achieve the goals of federal securities laws.” Still, in framing regulations of software (and internet) speech, Congress, the states, the courts, and administrative agencies attempt to differentiate speech that governments regard as harmful from other speech that should be lawful. They have drawn distinctions that support the conclusion, among others, that writing the Bitcoin or Ether white papers and launching these foundational crypto coins did not violate the Securities Act or amount to fraudulent activity. Similar distinctions are drawn in implementing other laws governing advertising, commerce, and commercial speech. Accordingly, this Part surveys federal and state law for distinctions and doctrines relevant to misleading ICO/AppCoin speech.

A. The Governmental Interest in Regulating Coin-Founding Speech

The governmental interest in preventing fraud and regulating professional conduct or complex economic systems is often said to be substantial and even compelling. Yet there is a reduced public interest in regulating vague boasts and wild-eyed boosterism. Throughout the law, legislatures and adjudicators tend to distinguish between vague or optimistic statements about oneself or one’s enterprise, and statements of existing or recent fact that could be verified as being true or false. This distinction supports statutory and constitutional principles embodying light-touch regulatory regimes, including principles of the law of federal securities fraud, securities registration and disclosure requirements, false
advertising of goods or services, common-law fraud, and products liability.\(^{234}\) Crypto white papers tend to focus on projections and puffery. In that, they are similar to relatively unregulated provision of information in both securities law and in other fields, including over-the-top self-promotion, honest if flawed optimism about the future, subjective comparisons of securities or commodities, search-engine results or other rankings, and the creation of economies in virtual worlds.\(^{235}\) Depending on how the SEC conducts its enforcement and public-education campaigns, the law’s solicitude for puffery will either buttress its regulatory forbearance, or stand in contrast to its potential overreaching.

B. Traditional Legal Principles Governing Optimistic Statements

1. The Securities Act and Exchange Act

Federal courts have concluded that cryptocurrencies could fall under the regulatory purview of the SEC under the Securities Act and the Exchange Act, as well as under other investment-related laws.\(^{236}\) Moreover, the ABA wants states to follow New York’s lead in purporting to impose prior restraints on persons handling “virtual currencies.”\(^{237}\) Such laws, however, threaten to make most cryptocurrency speech unlawful as it has

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\(^{234}\) See Tapscott & Tapscott, supra note 31, at ch. 11 (observing that numerous legal scholars argue for a light touch approach to blockchain); supra note 34 (citing authorities on status of information services under communications law); infra notes 323, 325, 340 (citing treatment of puffery and forward-looking statements in securities law, puffery in false advertising and fraud law, etc.).

\(^{235}\) See, e.g., supra note 116; cf. Vili Lehdonvirta & Edward Castronova, *Virtual Economies: Design and Analysis* 96 (2014) (suggesting that certain sales of Facebook Credits by users to Facebook Platform developers, and even more marketplace sales of Linden dollars, a virtual currency in a virtual world, are unregulated); Iviane Ramos de Luna et al., *Analysis of a Mobile Payment Scenario: Key Issues and Perspectives*, in *Impact of Mobile Services on Business Development and E-Commerce* 22, 27 (Francisco Liébana et al. eds., 2019) (stating that European Central Bank regards Facebook Credits and virtual world currencies as unregulated virtual currencies).

\(^{236}\) See, e.g., Press Release, Two ICO Issuers Settle SEC Registration Charges, Agree to Register Tokens as Securities, *supra* note 8.

\(^{237}\) Chino v. N.Y. Dep’t of Fin. Servs., No. 101880/2015, slip op. 51908(U) (N.Y. Sup. Ct. N.Y. Cnty. Dec. 21, 2017) (citing N.Y. Comp. Codes R. & Regs. tit. 23, § 200.1 et seq., noting that it requires filing lists of “the identity and physical address of parties to transactions,” current financial statements, official background checks, verification of tax status of every applicant’s household or business, fingerprints, etc., and holding that plaintiff had failed to file a cognizable challenge to its constitutionality); Plaintiff’s Amended and Verified Complaint and Article 78 Petition, Chino v. N.Y. Dep’t of Fin. Servs., No. 101880/2015 (N.Y. Sup. Ct., N.Y. Cnty. complaint filed May 25, 2017) (challenging constitutionality of BitLicense regime, which allegedly drove out of business a service intending to provide computers and services needed to process cryptocurrencies at delis and bodegas).
historically been articulated and structured. The cost of reporting financial results with the SEC under the Exchange Act is more than most coins could bear, and it is unclear how Generally Accepted Accounting Principles apply to Ether or Bitcoin, not to mention other coins with artificial intelligence or social media integration. In other countries, notably China and South Korea, regulation drove much crypto coin activity underground.

The principles of American consumer and investor protection law provide a basis for regulating misleading ICO promotions after the fact and only as to provably false factual claims, as opposed to punishing mere failures to register in advance. The SEC and CFTC initially took a somewhat hands-off approach to crypto coins, warning that transactions in them could satisfy the Howey test and the definition of capital gains, etc., but not pursuing enforcement actions in 99% or 99.9% of cases that their announcements might justify. The SEC Chairman has referred

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to a period of educating ICO promoters being followed by a period of suing or prosecuting them. 241 Famously, SEC guidance relating to the DAO affair indicated that digital token investment schemes may be unregistered offerings of securities. 242 The SEC has sued several firms for unregistered ICOs and obtained consent decrees or injunctions against many, perhaps most, of them, as well as a short criminal sentence in one egregious case. 243 Moreover, the CFTC warned of pump and dump practices in crypto markets, which is a manipulative device in connection with the sale of a security or a commodity. 244

The Supreme Court has recognized a critical distinction between fraud in an investment offering versus a non-“investment” fraud, which would not be securities fraud. 245 Thus, many

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241 See, e.g., Clayton, supra note 240.
243 See, e.g., SEC v. Titanium Blockchain Infrastructure Servs. Inc., No. CV18-4315-DSP, slip op. at § III (C.D. Cal. May 30, 2018), subsequent proceedings at (C.D. Cal. consent judgment filed May 23, 2019) (injunction against offering unregistered token as security); SEC v. PlexCorps, 2017 U.S. Dist. LEXIS 206145 (E.D.N.Y. Dec. 14, 2017) (finding SEC likely to be able to show that “PlexCoin Tokens” were securities that need to be registered); SEC v. Shavers, No. 4:13-CV-416, 2014 WL 4652121, at *1, *10 (E.D. Tex. Sept. 18, 2014) (investigating the SEC’s stated claim against promoter of Bitcoins Savings & Trust for selling unregistered securities, although promoter did not seem to have own coin or token); Press Release, Two ICO Issuers Settle SEC Registration Charges, Agree to Register Tokens as Securities, supra note 8; Press Release, SEC Obtains Emergency Order Halting Fraudulent Coin Offering Scheme, supra note 8; Press Release, SEC Suspends Trading in Three Issuers Claiming Involvement in Cryptocurrency and Blockchain Technology, supra note 8.
245 See Reves v. Ernst & Young, 494 U.S. 56, 61 (1990) (“Congress did not . . . intend
investments that are offered to others do not need to be registered as securities, including business and law partnerships and sales of businesses, software licenses useful in making the licensee’s business more profitable, contracts to sell or lease items which the investor continues to control, union pension fund investments, condominiums and housing cooperatives, and certificates of deposit to earn a fixed interest rate on capital delivered to a bank—any fraud preceding such deals would not be fraud in connection with the sale of a “security” or “investment contract.” 246 When an

246 See Marine Bank, 455 U.S. at 557 n.5 (explaining that for purposes of securities fraud action, a certificate of deposit did not qualify as a “certificate of deposit, for a security” under Exchange Act, 15 U.S.C. § 78c(a)(10), even though the plaintiff invested such a certificate in a slaughterhouse and retail meat-market refers, because a “certificate of deposit, for a security” traditionally refers to instruments issued “in the course of corporate reorganizations”); Int’l Brotherhood of Teamsters, Chauffeurs, Warehousemen & Helpers of Am. v. Daniel, 439 U.S. 551, 561–62 (1979) (indicating that entitlement to benefits paid under union pension fund whose size would be affected by success of fund’s investments was not a “security” or “investment contract” under SEC v. W.J. Howey Co., 328 U.S. 293, 300 (1946); United Hous. Found., Inc. v. Forman, 421 U.S. 837, 845, 858–59 (1975) (stating that “shares” in a nonprofit housing cooperative are not “securities” or “investment contracts” under Securities Act/Exchange Act); SEC v. ETS Payphones, Inc., 408 F.3d 727, 732–33 (11th Cir. 2005) (per curiam) (finding that investments in payphone leasing and placement business would only be securities if investors “retained minimal control over the telephones”); Matek v. Murat, 862 F.2d 720, 731–32 (9th Cir. 1988) (suggesting that investments in general partnership are not put into a security or “investment contract” when partners control enterprise using their voting rights and have access to information about partnership affairs otherwise than through protections of SEC filing requirements); Goodwin v. Elkins & Co., 730 F.2d 99, 103 (3d Cir. 1984) (“An investment contract or interest may still be classed as a security even if the investor is required to perform some duties, as long as those duties are ‘nominal or limited and would have little direct effect upon receipt by the participants of the benefits promised by the promoters.’”) (citation omitted); Williamson v. Tucker, 645 F.2d 404, 419 (5th Cir. 1981) (holding that joint venturers or partners may not buy securities or investment contracts when their “powers” are “real one[s] which they are in fact capable of exercising.”); Odom v. Slavik, 703 F.2d 212, 215 (6th Cir. 1983) (per curiam) (similar to Williamson); Lino v. City Investing Co., 487 F.2d 689, 691–93 (3d Cir. 1973) (concluding that even when promoters contact investors to sell them franchises, franchises created by such sales are not securities when investors work to make the franchises profitable); Rivanna Trawlers Unlimited v. Thompson Trawlers, Inc., 650 F. Supp. 1378, 1383 (W.D. Va. 1986) (“In determining whether a partnership or joint venture comes under the securities law, courts have considered the powers that the investors or partners are legally entitled to, rather than what powers they exercised or expected to exercise” and “courts have uniformly refused to define investments as securities in cases where ‘the power retained by the investors is a real one which they are in fact capable of exercising . . . ’”) (quoting Williamson, 645 F.2d at 419); Cryptocurrencies: Oversight of New Assets in the Digital Age: Hearing Before the Comm. on Agric., 115th Cong. 70 (2018) (statement of Lowell D. Ness, Managing Partner, Perkins Coie LLP) (“Ongoing software updates and upgrades constitute ongoing efforts of others under Howey, but they are not likely to rise to the requisite level of efforts to form an investment contract.”); Debevoise & Plimpton, A Securities Law Framework for Blockchain Tokens, COINBASE 20, 22 (Dec. 7, 2016); https://www.coinbase.com/legal/securities-law-framework.pdf [http://perma.cc/AEL9-ZBG3] (indicating that licenses of software should not be treated as security, because
investor continues to control the business in which he or she invests, as with a franchise of a national restaurant or retail chain that uses standard layouts or recipes, he or she may not purchase a security or investment control because the franchisor or other business partner is not in complete control. In the case of union pension funds, it is not a typical "investment" to labor under a collective bargaining agreement that calls for a share of one’s compensation to be diverted into a pension whose funds are invested for profit. With respect to condominiums and housing cooperatives, they are not securities when they are not marketed based “solely by the prospects of a return,” because units may be used for household purposes even though any shares in units and common areas may also be flipped for large profits.

Crypto coin corporations are arguing in several pending lawsuits that because their token actually operates as a currency, it is excluded from the definition of security by statute. The Exchange Act states that a security or investment contract, by definition, “shall not include currency.” To the extent that a crypto coin is useful in payments, just like euros and to a greater extent some foreign currencies (those of Venezuela or Zimbabwe, for example), this exemption should apply.

A narrowing construction of “security” would be appropriate in view of the principle of statutory construction known as noscitur a sociis, and perhaps also the one known as ejusdem generis, at least when it comes to crypto coins that are not marketed as shares of stock or securities using those precise words. The principle of noscitur a sociis states that one should

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247 See ETS Payphones, Inc., 408 F.3d at 732 (holding that investors in payphone leasing and placement business only purchased securities because they “retained minimal control over the telephones” and that “the more control investors retain, the less likely it becomes that the contract qualifies as a security”).


249 Forman, 421 U.S. at 852–53 (emphasis added) (citing Howey, 328 U.S. at 300).


construe a phrase like “investment contract” by its neighbors in a statute or statutory clause. The principle of *ejusdem generis* requires a general term or phrase to be interpreted as within the same class or genus as the more specific terms that precede it in a statutory list. In the case of the Securities Act, the terms that precede and follow “investment contract” are relatively passive investments like stocks, bonds, mineral rights, and debt notes.

An important consequence of paying attention to these basic rules of construction is that some crypto coins would be neither securities nor commodities. Protecting crypto coins from the prior restraints imposed by the Securities Act and the Exchange Act alone will not vindicate the freedom of expression when it comes to white papers and token ecosystems if any contract relating to a digital token remains unlawful unless it is sold by an entity regulated under the Commodities Exchange Act (CEA).

Reading the catch-all clause of the CEA as being restricted by *ejusdem generis* and *noscitur a sociis* to commodities similar to the agricultural and precious mineral commodities listed in CEA is one way of ensuring that crypto coins are not subject to the CEA’s restraints.

Congressional intent may also be relevant to the question of whether crypto coin white papers are offers of investment contracts. Congress intended the definition of “security” to capture “the ordinary concept of a security,” as of the 1930s, which was likely far removed from something like Bitcoin or other digital tokens. Likewise, the legislative history indicates that by “commodities,” Congress meant such tangible items like fruit, lumber, and metals. Both the Securities Act and the CEA were intended to apply to new instruments such as “irregular”

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256 See 7 U.S.C. §§ 6a(1)(a), 6h (2018); see also Andrew Verstein, Crypto Assets and Insider Trading Law’s Domain, 105 IOWA L. REV. 1, 20 (2019) (noting that if cryptocurrencies are still commodities, exemption from classification as securities may be of limited value, because it “takes crypto assets out of the frying pan of securities regulation and into the fire of commodities regulation”).
257 Forman, 421 U.S. at 847–48 (quoting H.R. REP. NO. 73-85, at 11 (1933)).
258 Guttman, supra note 253, at 24–25 (collecting authorities).
securities or futures contracts on ocean shipping rates or mortgages, but as mentioned above, they have not been applied to investments such as franchises, even though franchises resemble stocks or mineral rights, so there must be a limit to such laws’ protective scope.  

Many crypto coins are unlike public corporations in which members of the general public passively own shares, because such coins require significant efforts by coin adopters to succeed. The mining of Bitcoin and other mined tokens, which can confirm ongoing transactions and assemble the blockchain while preventing fraud, is an obvious example of how crypto owners are non-passive investors who are more like franchisees than Apple or Wells Fargo shareholders. As a result of being, in part, dependent on the expertise and marketing efforts of token purchasers, as well as their “efforts to ‘setup and maintain’” a blockchain and token-based ecosystem, many token founders do not exploit purchasers who are “solely” reliant on their efforts.

When it is a license of software, or a partnership to control a protocol directly rather than via managers and boards of directors as intermediaries, a crypto coin investment should not be ruled to be a security because the community and the ecosystem it creates shapes a coin’s value. Software and real property, like certificates relating to the ownership of precious metals, are not securities because they fluctuate based on market conditions rather than solely due to the developer’s or metals dealer’s ongoing efforts. A lease of valuable property rights is

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259 SEC v. W.J. Howey Co., 328 U.S. 293, 301 (1946) (referring to new promotional schemes covered by definition of security, which is not formulaic); Gutman, supra note 253, at 11, 14–15 (citing SEC v. C.M. Joiner Leasing Corp., 320 U.S. 344, 351 (1968)) (indicating that “irregular” forms of investment are covered, including futures on mortgages or ocean shipping rates).

260 See Andreessen, supra note 101; Bhaskar et al., supra note 12, at 311–12; Notice of Filing of Proposed Rule Change Relating to the Listing and Trading of Shares of the EtherIndex Ether Trust Under NYSE Area Equities Rule 8.201, 2017 WL 149923 (Jan. 13, 2017). Some crypto coins, it must be noted, are more centralized and do not use miners, making them less susceptible to this particular defense to being classified as a “security.” See Ying-Yinghsieh, Jean-Philippe (JP) Vergne & Shawang, The Internal and External Governance of Blockchain-Based Organizations: Evidence from Cryptocurrencies in Bitcoin and Beyond Cryptocurrencies, Blockchains, and Global Governance (Malcolm Campbell-Verduyn ed., 2017).

261 Ne. Revenue Servs., LLC v. Maps Indeed, Inc., 685 F. App’x 96, 100–01 (3d Cir. 2017).

262 See Debevoise & Plimpton, supra note 246, at 17–22; Ness, supra note 246, at 47–48.

263 See Noc v. Key Futures, Inc., 638 F.2d 77, 79–80 (9th Cir. 1980) (Certificates of ownership of silver bars are not a security because value “depended upon the fluctuations of the silver market,” even though dealer in certificates might go out of business before actually delivering silver, making purchasers investors in their view.); Marini v. Adamo,
clearly not a security, even though it is needed to create or expand a profitable enterprise such as oil or gas drilling.264 A sale of a work of art as an investment, even under false pretenses, does not create an “investment contract.”265 Similarly, a note secured by a mortgage on residential real estate, even if as part of an investment, is not a security if there is a “commercial” purpose for it such as resolving cash flow difficulties, rather than selling a business to the public in parts.266

The Bitcoin protocol and founding documents operate as a copyright and trademark license, to compensate the developers of an extremely complex and ingenious open-source software project, and one of the most successful branding and marketing campaigns of all time.267 An expectation that a digital token will support a “business” related or underlying the token may be different than an “expectation of profits” from an “enterprise” directly controlled by another’s “efforts,” as required by securities law.268 At least one court has held that an expectation that the

264 See Nolfi v. Ohio Ky. Oil Corp., 675 F.3d 538, 546–47 (6th Cir. 2012); see also Odom v. Slavik, 703 F.2d 212, 213–15 (6th Cir. 1983) (holding that a limited partnership agreement to develop a real estate community was not a securities transaction even if a minor partner was denied control of it, making him dependent on the other general partners); SEC v. Crude Oil Corp. of Am., 93 F.2d 844, 845, 847–48 (7th Cir. 1937) (emphasizing that none of the purchasers of contracts for future delivery of oil actually expected or wanted to receive the oil, instead desiring merely a speculative profit, in finding “forward contract” to be a security); Perry v. Gammon, 583 F. Supp. 1230, 1231–33 (N.D. Ga. 1984) (holding the “ordinary sale of real estate” is not a “securities transaction” even if purchasers intend to rely on real estate’s existing management at time of sale); Wabash Valley Power Ass’n v. Pub. Serv. Co. of Ind., 678 F. Supp. 757, 765–67 (S.D. Ind. 1989) (working through a similar analysis as to purchasers of interest in nuclear power project, who expected to use the power but also perhaps to profit from energy transactions).
265 See Mechigian v. Art Cap. Corp., 612 F. Supp. 1421, 1424, 1428 (S.D.N.Y. 1985) (investor in a lithographic plate for work of art touted as being worth much more than it really was, due to ability to make and sell prints from it at a profit, did not purchase security because "we should not try to turn every 'thing' which might be purchased and sold into a 'security' or "every commercial contract would end up being enforced in . . . class actions.").
266 See Singer v. Livoti, 741 F. Supp. 1040, 1048–49 (S.D.N.Y. 1990) (indicating that a "commercial or consumer purpose" would indicate that a "routine" consumer transaction, including a "note secured by a mortgage on a home," is not regulated by securities laws); see also Zolfaghari v. Sheikholeslami, 943 F.2d 451, 455 (4th Cir. 1991) (noting that a note secured by a mortgage on one home held as an investment for a return would not be a security).
Blockvest digital token will support a “business” would not make it a security; the court refused to find that purchasers of the token were investors in securities. A subsequent decision finding the Blockvest tokens to be securities emphasized that the purchasers were described as “passive investors.” A more active investor is different, as illustrated by cases declining to find a securities transaction when a franchisee buys the right to use trademarks and trade secrets in exchange for paying royalties and fees while agreeing to abide by certain standards, or when a business buys complicated software like Photoshop or Salesforce that is subject to use terms.

Many crypto coins also serve as a license to use a privacy-preserving form of software, reminiscent in some ways of anonymous email accounts, network firewalls, or Internet browsers with privacy modes. The absence of a dominant central firm in permission-less token-funded ecosystems could reduce the level of distrust with which many people view new technologies such as e-commerce, digital subscriptions, or social networking.

In the context of online purchases of creative

Partner of Perkins Coie LLP, arguing that some token purchasers rely on promoters to build token “network”).


271 See Debevoise & Plimpton, supra note 246, at 20–22. The analysis in this memorandum is based in part on SEC v. Koscot Interplanetary, Inc., 497 F.2d 473 (2d Cir. 1974), in which the court suggested that a promoter of an investment must retain “immediate control” for its contract with investors to qualify as “investment contract,” because “remote” control analogous to that of a franchisor over a franchisee’s format or décor would not qualify. Id. at 484–85. See also Cont’l Mktg. Corp. v. SEC, 387 F.2d 466, 470 (10th Cir. 1967) (to be a security, an investment must be “inescapably tied to the efforts of the ranchers and the other defendants and not to the efforts of the investors.”) (emphasis added).


273 See THIBAULT SCHEEPEL & VITALIK BUTerin, BLOCKCHAIN CODE AS ANTITRUST 4–5 SSRN 3597399 (2020); see also Charles Kim, How Patreon Champions its Creators and Patrons’ Data Rights, TRANSCEND (May 12, 2020), http://transcend.io/blog/how-
content, ranging from films to software, such protection of the purchasers’ privacy promotes their own right to read, exchange ideas, and participate in the benefits of intellectual and scientific advances.\textsuperscript{274}

Moreover, like the owners of general partnerships, many token holders can vote to affirm or reject a particular protocol or transactions, thereby potentially forking or otherwise altering a blockchain.\textsuperscript{275} Just as importantly, many tokens operate on blockchains that are open to inspection and provide transparency without SEC filings, just like general partners or joint venturers have access to books, records, and important meetings, which assures them of transparency without classifying their partnership or venture interests as securities.\textsuperscript{276} Such

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\textsuperscript{275} See BitGuild, PLAT Is Migrating to Tron, MEDIUM, (Apr. 8, 2019), http://medium.com/the-notices-board/plat-is-migrating-to-tron-cf64909bfba3 [http://perma.cc/ZP3C-56XH]; Stéphane Blenmus & Dominique Guégan, Initial Crypto-asset Offerings (ICOs), Tokenization and Corporate Governance 8 (Centre d’Économie de la Sorbonne, Working Paper No. arXiv:1905.03340, 2019) (“Besides, each type of crypto-asset issued during an ICO possesses its own underlying characteristics, granting rights different from the other crypto-assets (voting rights, share of capital or any particular advantage ...”), James Grimmelmann, All Smart Contracts are Ambiguous, 2 J.L. & INNOVATION 1, 19 (2019) (observing that of some smart contracts, in which category author includes some digital tokens, “protocol changes, forks, 51% attacks, and other consensus breakdowns are a kind of corruption threat” that “subject smart contracts to abrogation or alteration at the whims of other blockchain users”); Wenbin Zhang et al., A Privacy-Preserving Voting Protocol on Blockchain, 2018 IEEE 11TH INT’L. CONF. ON CLOUD COMPUTING (CLOUD) 401, 401 (“As blockchain technologies mature and ecosystems over blockchain evolve, peers on blockchain networks often face situations in which they need to conduct voting for decision-making; as happened in the case of the DAO hard fork event on Ethereum.”); see also Jonathan Rohr & Aaron Wright, Blockchain-Based Token Sales, Initial Coin Offerings, and the Democratization of Public Capital Markets, 70 HASTINGS L. J. 463, 475 (2019); Walch, supra note 240, at 861–66, 876–80; Angela Walch, Open-Source Operational Risk: Should Public Blockchains Serve as Financial Market Infrastructures?, in 2 HANDBOOK OF BLOCKCHAIN, DIGITAL FINANCE, AND INCLUSION 243, 259–66 (David Lee Kuo Chuen & Robert Deng eds., 2018).

\textsuperscript{276} See, e.g., Andreesen, supra note 101; David Bernstein, Blockchain Could
transparency and control leads courts to find that some partnerships are not securities. While corporate shareholders and limited partners also have voting rights, their shares in an enterprise may be deemed a security because their real say in what goes on is heavily diluted. The same may be true of widely-subscribed crypto coins, where the number of voting rights with respect to ledger transactions may rival the shareholder count of public companies and exceed the number of limited partners in a limited liability partnership. Still, unlike a corporation, blockchain-enabled tokens may provide a way of managing the token that is more democratic than the process characterizing most shareholders’ ability to participate in corporate governance, which is minimal in many cases due to officers’ and directors’ power. Like Bitcoin users, adopters of new crypto coins “must rely on the efforts of others on the blockchain’s ecosystem to bring their investment to fruition,” but that does not mean that they are like corporate shareholders.


See Williamson v. Tucker, 445 F.2d 404, 419–20 (5th Cir. 1981) (emphasizing partners’ access to information and abilities to participate in enterprise’s affairs); Odum v. Slavik, 703 F.2d 212, 214–16 (6th Cir. 1983) (holding that ability to participate in affairs of an enterprise would result in investment in enterprise as partner not being a security); Gotham Print, Inc. v. Am. Speedy Printing Ctrs., 863 F. Supp. 447, 454 (E.D. Mich. 1994) (noting profits of enterprise resulting “at least in large part” from participant-investors’ efforts, in addition to those of promoter, franchise-style agreement was not a security).

Williamson, 645 F.2d at 419–20.

278 Cf. Michael Abramowicz, Cryptocurrency-Based Law, 58 ARIZ. L. REV. 359, 389 (2016) (“In corporations . . . voters elect board members and entrust those board members to make decisions.”); id. at 386 (“But . . . Bitcoin cannot allow voting based on one-person, one-vote, even if that were desirable.”).


281 Shlomit Azgad-Tromer, Crypto Securities: On the Risks of Investments in
Some combination of coding, mining, and automated processes may be more determinative of the coin’s value than the identity of its founders or the coding enterprise’s cash flow at the time of a coin’s initial issuance.

Finally, like franchisees or member-managers of apartment cooperatives and the like, many coin purchasers use and improve their investments. The SEC looks to the token purchasers’ role in managing the network as an important factor, but it views crypto coins with influential or indispensable founders as more likely to be securities. It is true that in a case involving investors in rare (precious metal) coin portfolios designed—at the option of the buyer—with coins of the buyer’s choosing or coins selected by the manager and seller, the court found a security to exist. However, that decision relied on a binding precedent regarding apartment cooperatives—finding their utility and owner-member upkeep to be irrelevant—which was later reversed by the Supreme Court. Other cases involving investments in live beavers or cosmetics for resale also predated the apartment cooperative

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case.\(^{286}\) If such precedents do not count, “functional cryptocurrencies” or “utility tokens” may not be securities after all.\(^{287}\)

Crypto coin promoters such as Ripple Labs and Telegram Group are increasingly arguing that, as a functioning currency their tokens are and should be excluded from the definition of a security.\(^{288}\) Broad definitions of “currency” as a medium of exchange that circulates regardless of official status bolster this argument.\(^{289}\) This argument might not place crypto coins on the same lightly-regulated plane as other forms of software or political information, because the coin firms making this argument often point to the CFTC as having jurisdiction over currencies as commodities.\(^{290}\) However, there is a third category

\(^{286}\) See SEC v. Koscot Interplanetary, Inc., 497 F.2d 473, 485 (5th Cir. 1974); Cont'l Mktg. Corp. v. SEC, 387 F.2d 466, 469–70 (10th Cir. 1967); cf. Forman, 421 U.S. at 851–52, 858 (emphasizing that while a share in an apartment complex may be an “investment,” it is not a security or “investment contract” because it was not marketed as generating profits or resale revenue but was capable of “personal use”). It is true that in Forman, the Court announced that it was not deciding whether the promotion of an asset as both personally useful and a profitable investment would be a securities transaction, but it also suggested that it would not have been an investment contract to lease land rights that were directly useful as well as being a potentially profitable source of oil drilling rights that the lessor was primarily responsible for and promoting, stating instead that the land was strictly “incidental” to the drilling rights. Forman, 421 U.S. at 858 nn.17–18 (citing SEC v. CM Joiner Leasing Corp., 320 U.S. 344, 349 (1944)).


\(^{289}\) See MERIAM WEBSTER INC., WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 557 (Philip Babcock Gove ed. 2002) (defining “currency” as “something that is in circulation as a medium of exchange”) (emphasis added); Currency, MERIAM WEBSTER.COM, https://www.merriam-webster.com/dictionary/currency [http://perma.co/8SMF-ENEN] (last visited Nov. 16, 2020); see also Emery Bird Thayer Dry Goods Co. v. Williams, 98 F.2d 166, 172 (8th Cir. 1938) (“Our investigation indicates that any one of three meanings may be attributable to the term ‘money’: (1) Gold or silver as the monetary standard of the Nation; (2) coins and currency actually circulating as a medium of exchange; or (3) the unit of value, the dollar.”).

\(^{290}\) See Plaintiff’s Reply Memorandum of Law in Further Support of Its Motion for Summary Judgment, at 15, SEC v. Telegram Group Inc., No. 19-cv-9439 (PKC) (S.D.N.Y. Jan. 27, 2020), (No. 19 Civ. 9439); Notice of Motion and Motion to Dismiss Consol.
that is probably even more apposite: vouchers or barter units. The customs laws of the United Kingdom have a category possibly suited to such virtual commodities used for barter, called "special purpose vouchers." The Monetary Authority of Singapore, Canada’s Revenue Agency, and the Australian Taxation Office have analogized Bitcoin to a barter transaction, in which a business decides to trade its goods or services for another asset that may not be a domestic or foreign currency in traditional terms. Hong Kong and the Central Bank of the Republic of Taiwan made a similar move by calling bitcoin a “virtual commodity,” rather than traditional currency.

The SEC has been vague in announcing that the duty to register applies to “virtually any instrument that may be sold as an investment.” Virtually anything may be bought and sold for
speculative purposes by investors in the age of eBay and StubHub. The SEC has warned, in issuing no-action letters to sellers of unregistered digital tokens, that such a transaction might constitute the (criminal) unregistered sale of a security if proceeds are used “to build the . . . Platform,” if the platform is not “fully functional and operational,” if the tokens are not “immediately usable” on the platform, or if it is possible to transfer tokens to wallets. That leaves open a very narrow window in which to sell tokens without the chill and threat imposed by potential criminal prosecution or civil orders making an enterprise insolvent. Under the SEC’s view, would any form of blockchain-based art that could be exchanged for cryptocurrencies held in wallets be considered a “security”? A certain reading of its no-action letters might suggest that digital art, such as cryptokitties that sold for Ether, might be a security because it can be exchanged for other tokens.

products in bulk, and anyone else who “is working actively” on a matter relevant to the “success of [an] enterprise.” See Hinman, supra note 155 (“Similarly, investment contracts can be made out of virtually any asset (including virtual assets), provided the investor is reasonably expecting profits from the promoter’s efforts.”); cf. Framework for “Investment Contract” Analysis of Digital Assets, U.S. SEC, DIV. OF CORP. FIN. (Apr. 3, 2019), http://www.sec.gov/corpfin/framework-investment-contract-analysis-digital-assets [http://perma.cc/SW7Y-HTYC] (similar). Commodities such as wheat, soy beans, oranges, orange juice, beer, and whiskey are not defined as securities under federal law even though farmers and cooperatives thereof invest in their production and expect a profit from their eventual sale. See Glen-Arden Commodities, Inc. v. Costantino, 493 F.2d 1027, 1033–34 (2d Cir. 1974) (collecting cases).


See generally Tonya M. Evans, Cryptokitties, Cryptography, and Copyright, 47 AIPLA Q.J. 219, 220–250 (2019) (describing how smart contracts permit digital artists to exercise more control over their productions than traditional online games or worlds such
As long as the freedom of speech is not impacted, courts have held that the broad definition of security utilized by the SEC after Howey may not be determined to be unconstitutionally vague or overbroad. At least one court, however, has held that “impersonal” investment publications that do not propose a purchase by a specific customer are not commercial speech, and are therefore “protected” under the First Amendment. As a result, persons desiring to publish newsletters or market chart documents could challenge a registration requirement in the U.S. Code, albeit one governing commodities investment advice. Under the analysis of that court, white papers or other crypto coin promotional speech are directed to the world at large, rather than being targeted to the particular situation of any particular buyer or proposing an imminent purchase. A law censoring them should be struck down as being void for vagueness; it leaves speakers guessing as to how much speech or conduct directed at the general public it forbids or requires.

The vagueness defect of a potential prohibition on marketing of unregistered crypto coins is compounded by the relative weakness of the scienter requirement contained in the statute cited by the SEC. Courts rejecting vagueness challenges in complex financial crimes often emphasize the scienter requirement of the underlying statutes, which may, for example, only criminalize falsifying certain paperwork with a “purpose of evading” the statutory paperwork mandate. Although a violation of the Exchange Act, for example, must be committed

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300 See Commodity Trend Serv., Inc. v. Commodity Futures Trading Comm’n, 149 F.3d 679, 686 (7th Cir. 1998).

301 See id. at 686–89 (citing 7 U.S.C. § 1a(5)(C)).


“willfully” in order to be a crime, courts have relaxed this requirement by holding that a willful violation does not require knowledge of the existence or meaning of the rule at issue.\footnote{305} This state of affairs aggravates the lack of a clear meaning attached to the obligation to register “investment” offerings. Imprisonment for up to 10 years is a penalty that may be difficult to justify in cases involving ignorance of the law.\footnote{306}

Attorney speech presents a helpful analogy to token promoter speech, as both attorneys and promoters solicit new business and could be trusted by their clients or customers, raising questions of fiduciary duties and misleading advertisements. A Nevada Supreme Court rule restricting attorney speech on pending cases because it may disrupt the proceedings, or taint the result, was void for vagueness because the rule did not clarify what kinds of pretrial or mid-trial public appeals stating that a client in a criminal case is innocent, are permissible.\footnote{307} Although attorneys perform services for pay in trials, they still have a First Amendment interest in undeterred free speech, in being clearly told what they can do, in objective standards, and in uniform enforcement procedures for their profession.\footnote{308} Finally, the attorney speech and academic freedom cases strongly suggest that civil consequences for vague offenses may violate the First Amendment; this is relevant to such securities or commodities law remedies as being barred from certain markets or being ordered to halt an offering or to refund all proceeds.\footnote{309}


\footnote{308} See id. at 1048–52; see also United States v. Wunsch, 84 F.3d 1110, 1119 (9th Cir. 1996) (citing Grayned v. City of Rockford, 408 U.S. 104, 108–09 (1972)). Some degree of subjective enforcement by administrative agencies or state attorneys general may be permitted. See Prime Healthcare Servs., Inc. v. Harris, 216 F. Supp. 3d 1096, 1125 (S.D. Cal. 2016) (upholding scheme requiring California Attorney General to approve sale of nonprofit health care provider’s assets, including by determining whether sale is in public interest, Supreme Court has upheld statutes “based upon standards such as the public interest”) (quoting Montgomery Nat. Bank v. Clarke, 882 F.2d 87, 89–90 (3d Cir. 1989)).

2. The Lanham Act of 1946

The Lanham Act provides a cause of action for false or misleading descriptions, statements of fact, or representations in interstate commerce. A claim for deceptive advertising under federal law requires proof of a factual statement that is false, that will be likely to induce purchases (be material to them), and that has a tendency to deceive a “substantial” number of persons. Thus, “adspeak” and other claims that lack a specific, “inherent” meaning may be unregulated by laws on advertising on Internet-based services.

The First Amendment’s protection of scientific studies that boost demand for commercial products may be relevant to crypto coin white papers. It has been held that the “publication and dissemination of a scientific study that had the effect of touting a company’s product is noncommercial speech and [is] thereby immune from the false advertising provisions of the Lanham Act.” One court has articulated an even broader principle: “Statements of opinion are not generally actionable under the Lanham Act.” The FTC once adopted a similar standard in regulating deceptive acts and practices in interstate commerce. Moreover, the publication of boastful
claims is frequently classified as noncommercial speech, because such claims are not sufficiently specific or measurable.\textsuperscript{316} Similarly, the many projections and assertions that crypto coin ecosystems will disrupt or revolutionize some industry, are likewise general and not specific.

The trademark tort arose as an application of fraud or deceit as a cause of action at common law.\textsuperscript{317} It was not a deceit at common law to make boastful claims upon which no reasonable person would rely.\textsuperscript{318} As the Restatement (Second) of Torts put it, or seize profits from even if opinions stated in said books are misleading or deceptive).

\textsuperscript{316} See Greater Hous. Transp. Co., 155 F. Supp. 3d at 692, 695–96 (finding Uber's “taking the necessary steps to...build the safest option for consumers” was mere puffery, not a specific or measurable claim that could be false); XYZ Two Way Radio Serv., 214 F. Supp. 3d 179 at 183, 185 (similar). As one court discussed:

The patchwork of district court decisions in such cases discuss, but do not create, a workable test for puffery. This Court, however, discerns several factors on which these decisions rely: (i) vagueness; (ii) subjectivity; and (iii) in ability to influence the buyers' expectations. . . . See Castrol Inc. v. Pennzoil Co., 987 F.2d 939, 945 (3d Cir.1993) (“Puffery is distinguishable from misdescriptions or false representations of specific characteristics of a product.”). . . . General descriptions about the product—e.g., high-speed internet service as the “fastest, easiest way to get online”; a truck as the “most dependable, long-lasting”; or an insurance policy as providing that its policyholders are “in Good Hands”—can constitute puffery. See Fink v. Time Warner Cable, 810 F.Supp.2d 633, 643–44 (S.D.N.Y.2011); Hubbard v. Gen. Motors Corp., No. 95 Civ. 4582, 1996 WL 274018, at *7 (S.D.N.Y. May 22, 1996); Loubier v. Allstate Ins. Co., No. 3:09cv261, 2010 WL 1279082, at *5 (D.Conn. Mar. 30, 2010). . . . The “subjectivity” factor applies when the disputed statements may not be measured on an objective basis, such as by reference to clinical studies or comparison with the product's competitors. See Lipton v. Nature Co., 71 F.3d 464, 474 (2d Cir.1995) (“Subjective claims about products, which cannot be proven either true or false, are not actionable [for false advertising claims].” (quotations omitted)); . . . [A] statement that “you can grow thick, beautiful grass ANYWHERE” with a specific type of grass seed is “so exaggerated as to preclude reliance by consumers.” In re Scotts EZ Seed Litig., No. 12 Civ. 4727, 2013 WL 2303727, at *7 n. 3 (S.D.N.Y. May 22, 2013) (quotations omitted). Likewise, “consumers know that vehicles that are 'rock-solid' will be dented by an impact that would not dent a rock.... A fiberglass roof may be 'strong' enough to withstand a hard blow, a falling tree branch, or the weight of an elephant, without being guaranteed to be indestructible.” Jordan v. Pacar, Inc., 37 F.3d 1181, 1185 (6th Cir. 1994). See also Leonard v. Abbott Labs., Inc., No. 10-CV-4676, 2012 WL 764199, at *22 (E.D.N.Y. Mar. 5, 2012) (Spatt, J.) (finding that a statement concerning a baby formula manufacturer's aim to “comply[ ] with all applicable laws and regulations”—which, taken literally, would entail every single law in the hundreds of “countries where it operates”—embodies the sort of exaggeration that no buyers could take seriously).


\textsuperscript{318} Cf. Vulcan Metals Co. v. Simmons Mfg. Co., 248 F. 853, 856 (2d Cir. 1918) (L. Hand, J.) (“There are some kinds of talk which no sensible man takes seriously, and if he does he suffers from his credulity. If we were all scrupulously honest, it would not be so;
a seller's attempt to “exaggerate the advantages of [a] bargain” is a well-known tactic that should not deceive.\textsuperscript{319}

The First Amendment protects a great deal of nonfiction commentary and creative world-building from prior restraint or subsequent punishment under the Lanham Act and similar state laws. Thus, using the trademark of another person in a political statement or campaign may not create trademark infringement liability.\textsuperscript{320} In addition, creatively evoking a trademark in an artistic or musical work may be shielded from injunctive relief or damages by the First Amendment.\textsuperscript{321} For similar reasons, crypto coin white papers that are dominated by socioeconomic or techno-political commentary deserve protection.

3. State Consumer Protection Law

Other courts have construed state law protections against false or misleading advertising to require a consideration of basic reasoning techniques available to potential consumers, which might dispel potential deception or confusion as to promotional content.\textsuperscript{322} For example, the prohibition of false advertising under California law immunizes puffery and relatively pure statements of opinion from liability.\textsuperscript{323} Although advertising need

\textsuperscript{319} Restatement (Second) of Torts § 539 cmt. c (Am. L. Inst. 1977).
\textsuperscript{320} See Lucasfilm Ltd. v. High Frontier, 622 F. Supp. 931, 934–35 (D.C. 1985) (holding that public interest group's use of "star wars" to persuade the public of views about the Reagan Administration's strategic defense initiative did not infringe upon filmmaker's STAR WARS trademark because "[i]nvestigating points of view is not a service" and because it was a "descriptive, non-trade use"); see also Tax Cap Comm. v. Save Our Everglades, Inc., 933 F. Supp. 1077, 1081 (S.D. Fla. 1996) (concluding that although not passing judgment on use of trademark to solicit contributions, its use to promote environmental group was not marketing of a service but rather "political activity").
\textsuperscript{322} For example, when a few steps of reasoning from publicly available data could dispel the falsity or misleading character of the defendant's speech, it is not actionable. See MacDonald v. Thomas M. Cooley L. Sch., 880 F. Supp. 2d 785, 794 (W.D. Mich. 2012) (finding no claim could be pled based on misleading employment statistic because "[b]asic deductive reasoning[] informs a reasonable person that the employment statistic includes all employed graduates, not just those who obtained or started full-time legal positions."); Gomez-Jimenez v. N.Y. L. Sch., 956 N.Y.S.2d 54, 59 (App. Div. 2012) (finding where defendant was arguably not fully "candid and []complete" in making disclosures of data plaintiffs allegedly relied on, not to be material); Austin v. Albany L. Sch. of Union Univ., 957 N.Y.S.2d 833, 842–43 (Sup. Ct. 2013) (holding that "a reasonable consumer acting reasonably under the circumstances" would not be materially misled by data disclosures that claimed a certain number of law school graduates were employed without disaggregating part-time jobs).
\textsuperscript{323} See Atari Corp. v. 3DO Co., No. C 94-20298 RMW (EAI), 1994 WL 723601, at *2–3
only be “unfair, deceptive, untrue or misleading” under California law, federal courts interpret a key provision (California Business and Professions Code § 17200) as requiring proof similar to that needed in a false advertising claim under the Lanham Act.324 Likewise, false advertising law and warranty law in other states provide a safe harbor for boastful claims that a product is great or the best.325 Similarly, the protection of products from “trade libel” does not regulate opinions or personal judgments.326

(PLA 1994) (holding that a video game system was the “most advanced” video game system available was puffery under state law of false advertising) (citing Cal. Bus. & Prof. Code §§ 17200, 17500). See also Anderson v. 1399557 Ontario Ltd., No. 18-CV-1672 (PJL/S/LIB), slip op. at 11 (D. Minn. Nov. 4, 2019) (suggesting that claim of providing a “lifetime” warranty might be true or subjectively believed to be right even if warranty lasted a “very limited” time); Fair Isaac Corp. v. Experian Info. Sol., Inc., 645 F. Supp. 2d 724, 763 (D. Minn. 2009) (it protected as puffery under the Lanham Act to claim that a credit score service determined creditworthiness with “significantly greater precision,” is “more predictive than what’s in the market,” is “the most accurate scoring algorithm attainable,” and uses “most up-to-date information available”).


326 See, e.g., Coastal Abstract Serv., Inc. v. First Am. Title Ins. Co., 173 F.3d 725, 730 (9th Cir. 1999) (equating commercial libel’s protection of opinions with that under Lanham Act, which requires false statement of existing fact); Cook, Perkes & Liehe, Inc. v. N. Cal. Collection Serv. Inc., 911 F.2d 242, 243 (9th Cir. 1990) (stating that no cause of action would lie for disparagement or libel of a corporation by publishing an ad suggesting its fees or costs would eat customers alive, or that ad’s publisher are “low cost commercial collection experts” in comparison to it); Blatty v. N.Y. Times Co., 728 F.2d 1177, 1181, 1183 (Cal. 1985) (affirming demurrer to action for trade libel and holding: “Statements of opinion, [i] however pernicious,] are immunized by the First Amendment in order to insure that their ‘correction [depends] not on the conscience of judges and juries but on the competition of other ideas.’”) (citation omitted); Hofmann Co. v. E.I. Du Pont de Nemours & Co., 248 Cal. Rptr. 384, 388 (Cl. App. 1988) (stating trade libel plaintiff may not hold speaker liable for expressing speaker’s “view, judgment, or appraisal . . . [a] belief stronger than impression and less strong than positive knowledge.”). Cf. Sullivan v. Conway, 157 F.3d 1092, 1095 (7th Cir. 1998) (finding statement that lawyer is “very poor” was an “opinion that is so difficult to verify or refute that it cannot feasibly be made a subject of inquiry by a jury”); Levinsky’s Inc. v. Wal-Mart Stores, Inc., 127 F.3d 122, 126–27 (1st Cir. 1997) (finding statement that store is “trashy” could not be basis of tort liability as it was merely expressing “a subjective view, an interpretation, a theory, conjecture, or surmise”); Moldea v. N.Y. Times Co., 22 F.3d 310, 312, 316 (D.C. Cir. 1994) (finding statement that journalist was “sloppy” and unprofessional could not be grounds for tort liability because “reasonable minds can and do differ” on what these terms mean); Chapin v. Knight-Ridder, Inc., 993 F.2d 1087, 1093 (4th Cir. 1993) (accusing a charity of “charging hefty mark-ups on goods it ships” was a statement that was immune from tort liability as it stated an opinion); Phantom Touring, Inc. v. Affiliated Publ’n, 953 F.2d 724, 727–28 (1st Cir. 1992) (holding statements that stage play was “fake,” “phony,” “a rip-off, a fraud, a scandal, a snake-oil job” were not tortious as admitting “of numerous interpretations”); McCabe v. Rattiner, 814 F.2d 839, 842–43 (1st Cir. 1987) (holding reference to the plaintiff’s real estate development as a “scam” to be non-actionable because of the “lack of precision”); Della Penna v. Toyota Motor Sales, Inc., 902 P.2d 740, 751 (Cal. 1995) (holding expression of opinion should not result in liability
4. Protecting “Ecosystem Speech”

Like the print press or social media, crypto coins create ecosystems. Instead of readers/browsers, writers/uploaders, editors, and advertisers, crypto coins often have four “constituencies,” in addition to their own founders and promoters: subscribers who use or pay with the coin, other subscribers who accept payment with the coin, “miners” who verify the authenticity of transactions and maintain distributed ledgers, and software developers and other creative businesses who make new uses of the coin possible. The creation of a forum for speech, edited by the founder or current manager, implicates First Amendment interests. Even the organizers of a public parade, the Supreme Court famously held, have a right to shape the message conveyed by the various floats and marchers who participate. Whatever the merits of the Court’s ruling, its analysis of the First Amendment problem posed by forced conformity to an ideology is pertinent to crypto coins and banking norms: the right to articulate “public viewpoints” deserves protection against “forced inclusion” in another viewpoint.

It matters not that crypto coin white papers are lower-quality speech, for some, than the Miami Herald or CNN. The freedom of expression does not depend on the quality of a speaker’s viewpoint. Promoting oneself in the marketplace of ideas and touting one’s platform on social media are important entitlements under the First Amendment doctrine.

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327 See Andreessen, supra note 101.
331 See Kleindienst v. Mandel, 408 U.S. 753, 769 (1972) (“The dangers and the undesirability of making [free speech] determination[s] on the basis of factors such as the size of the audience or the probity of the speaker’s ideas are obvious.”).
C. Allowing Forward-Looking Statements in and After Coin Offerings

In First Amendment cases, the narrow-tailoring or less-restrictive-means inquiry involves whether Congress or the states could have been more careful and discriminate in regulating speech.333 Yet, how is one to determine that a “substantial number of [a rule’s] applications are unconstitutional” so as to conclude that it is overbroad?334

An obvious less-restrictive and narrowly-tailored alternative to the obligation to preregister coin offerings is to punish false statements of fact with civil and criminal liability after harm is done. This should not be too difficult to achieve; there seems to be an enormous range of harms involving cyberthefts, insider trading of cryptocurrencies, and garden-variety frauds that could be prosecuted or enjoined under a variety of theories.335

Focusing on actual harm and factual misstatements would liberate startups to participate in the blockchain revolution. According to a senior attorney to ICO founders, the SEC has declared “war on cryptocurrencies.”336 One entrepreneur told a

researcher: “If you’re just starting up, you’re almost forced to break the [criminal] law and hope that you can get away with it long enough to produce some traction to secure investors’ money, after which you can try to meet regulatory requirements.”337 As another entrepreneur stated: “We’re all forced to break the law until someone calls us out.”338 If a crypto coin is a security, simply discussing the value of owning it via impersonal online publications might be enjoirable, or even criminal, if such an act is widely known to be illegal.339

Pursuing the true perpetrators of investor harm while leaving other coins alone would ameliorate this problem. A well-known and workable framework for such a regulation results from application of the “bespeaks caution” doctrine and “safe harbor” for “forward-looking statements” as well as the falsity and materiality requirements of securities fraud law.340 This would shield good-faith statements that have a basis when made or that are so “rosy” that no one would reasonably rely on them. Such a framework properly distinguishes between false statements of existing fact or fraudulent promises or projections on the one hand and genuine but controversial aspirations communicated publicly to potential share purchasers or business partners.341 Participants in high-technology

338 Id.
340 Slaton v. Am. Express Co., 604 F.3d 758, 768–70 & n.5 (2d Cir. 2010). The safe harbor for forward-looking statements is statutory, being modeled on the “bespeaks caution” doctrine and added to the Exchange Act. Id. at 770 & n.5 (citing, inter alia, 15 U.S.C.A. § 78u-5(c)(1)(A)(i) (West)).
341 See, e.g., Tongue v. Sanofi, 816 F.3d 199, 214 (2d Cir. 2016) (holding that “no reasonable investor would have been misled by Defendants’ optimistic statements regarding the approval and launch” of their new drug); Shaw v. Digit. Equip. Corp., 82 F.3d 1194, 1217 (1st Cir. 1996) (holding no securities liability for “rosy affirmation[s] commonly heard from corporate managers and numbingly familiar to the marketplace—loosely optimistic statements that are so vague . . . that no reasonable investor could find them important in the total mix of information available”); In re Syntex Corp. Sec. Litig., 95 F.3d 922, 926 (9th Cir. 1996) (distinguishing statement that turns out not to be true from one untrue at outset); Kline v. First W. Gov’t Sec. Inc., 24 F.3d 480, 486 (3d Cir. 1994) (holding forward-looking projections actionable as securities fraud only if “[they are] issued without reasonable genuine belief [in their accuracy or truth] or if [they] ha[ve] no basis”); Gregory v. ProNAI Therapeutics Inc., 297 F. Supp. 3d 372, 398–417 (S.D.N.Y. 2018) (distinguishing “sincerely held views” from “historical statement” that is not “correct”) (quoting In re Int’l Bus. Machines Corp. Sec. Litig.,
markets are familiar with this framework as courts have routinely applied it to them.\textsuperscript{342} Although a special-purpose law on fraud involving crypto coin offerings might need to modify aspects of the framework, its fundamental distinction or premise would be helpful.\textsuperscript{343}

Regarding regulatory and jurisdictional competition, other countries will move forward aggressively with their token-based businesses whether or not the United States falls behind. Several European countries are establishing legal frameworks that facilitate crypto-coin inventions and platforms.\textsuperscript{344} China is taking numerous moves, including creating state-owned crypto coins, to become the world leader in virtual currency and blockchain technology.\textsuperscript{345} As of late 2019, Japan had not clearly defined ICOs as securities. Europe and the United Kingdom may not regulate payment mechanisms on blockchain platforms as investments.\textsuperscript{346}


\textsuperscript{342} See Slayton, 604 F.3d at 770, 772 (distinguishing “historical fact” from “future projections, estimates or opinions”) (citations and internal quotation marks omitted).

\textsuperscript{343} In particular, the safe harbor for forward-looking statements appears to require a warning list of factors that could cause projections or intentions not to materialize such as one might find in a registration statement or prospectus, which typically has a different and much more formal organization and tone than a white paper about a token. See Slayton, 604 F.3d at 770–72 (indicating cautionary statements should be “substantive” about such “important factors”) (citing 15 U.S.C. § 78u-5(c)(1)(A)(i); H.R. Conf. Rep. 104-369, at 42 (1995), as reprinted in 1995 U.S.C.C.A.N. 730, 742); Inst. Invs. Grp. v. Avaya, Inc., 564 F.3d 242, 256 (3d Cir. 2009) (discussing specificity of statements in prospectus); Gregory, 297 F. Supp. 3d at 405 (indicating cautionary statements must have “specificity” about risks).


\textsuperscript{345} See Arjun Kharpal, With Xi’s Backing, China Looks to Become a World Leader in Blockchain as US Policy Is Absent, CNBC (Dec. 15, 2019, 6:30 PM), https://www.cnbc.com/2019/12/16/china-looks-to-become-blockchain-world-leader-with-xi-jinping-backing.html [http://perma.cc/223L-C9K7] (“Since March, over 500 blockchain projects have been registered with the Cyber Administration of China. Some of China’s largest internet companies from Tencent to Huawei have registered projects.”); id. (stating a partner at ‘Blockchain Valley Ventures’ claimed “that China’s blockchain push could put other countries behind, to the point where the world’s second-largest economy could dominate the technology and the way it’s developed.”); Coie, supra note 35 (warning blockchain technology could cluster abroad).

\textsuperscript{346} See Cooke, Denisenko & Cohen, supra note 229.
D. Increasing Remedies for Factual Fraud

The Securities Act and/or Exchange Act could be amended to award treble damages, punitive damages, and/or statutory damages in cases of willful misstatements of existing fact in connection with the purchase or sale of a security. The breadth of a law is not the only measure of its effectiveness; its deterrent and remedial strength may also be relevant. Investment law would be more forceful if it offered the relief available under other federal laws, such as those governing counterfeiting ($2 million per willful offense type), copyright infringement ($150,000 per willful offense type), false advertising (treble damages), or competition law violations (treble damages). As one court has observed: “Undeniably, punitive damages would deter violations of the Act and punish those who did commit violations.”

Amendments to the securities laws would not help the purchasers of utility tokens and appcoins under the approach advocated in this article. To aid such purchasers and anyone else who buys a good or service, the Lanham Act could be amended with a few simple words that would create a federal remedy for interstate commerce fraud. This amendment would significantly impact

349 See 15 U.S.C. § 15 (LexisNexis) (treble damages); 15 U.S.C. § 1117 (West) ($2 million); 17 U.S.C.A. § 504(d) (West) ($150,000 per work). By contrast, the Supreme Court has rejected a theory that would allow securities fraud plaintiffs who cannot plead conventional investment damages to be able to recover for an inflated purchase price at the time of a transaction; absent actual damages, the Court apparently intends that securities plaintiffs receive nothing under federal law, in stark contrast to copyright or trademark plaintiffs. See Dura Pharm., Inc. v. Broudo, 544 U.S. 336, 346–47 (2005).
350 Globus, 418 F.2d at 1284.
351 The amendment to 15 U.S.C. § 1125(a) would have to state that the standing to sue for false advertising and the like under federal law extends to those “likely to be damaged by such act, regardless of the presence or absence of the person’s direct competition with the plaintiff or the plaintiff’s economic or reputational injury from such act.” This proposed amendment is based on language in 15 U.S.C. § 1125(c), which creates a federal injunctive remedy for dilution (and, which 15 U.S.C. § 1117 creates a damages remedy). For extensive arguments in favor of such an amendment, see Jeremy Rovinksy,
remedies in false advertising by granting consumers a private right of action for false descriptions of fact in connection with goods or services marketed in interstate commerce. In its discretion, the court could increase the damages award to three times those actually inflicted on the plaintiff. Similarly, consumers could obtain a private right of action for unfair or deceptive methods of competition under the FTC Act. Many consumers have such a cause of action under state law already, but the elements and remedies could be harmonized. Arbitration clauses that make class actions or punitive damages unavailable in fraud or false-advertising cases could be declared incompatible with federal law, or at least it could be made permissible under federal law for the states to prohibit or restrict such clauses. Frauds that inflict many minor economic losses are not economical to litigate individually.

E. Reducing the Burden Associated with Disclosure Requirements

In the House of Representatives, legislation has been introduced to exclude from the definition of a “security,” in the Securities Act and the Exchange Act, certain digital tokens based on a mathematical digital ledger or data structure that are not controlled as to their supply by any single person or group of


352 See Lexmark Intern., Inc. v. Static Control, 572 U.S. 118, 132 (2014) (“A consumer who is hoodwinked into purchasing a disappointing product may well have an injury-in-fact cognizable under Article III, but he cannot invoke the protection of the Lanham Act—a conclusion reached by every Circuit to consider the question.”); Halicki v. United Artists Commc’ns, Inc., 812 F.2d 1213, 1214 (9th Cir. 1987) (holding that to bring suit for false advertising, plaintiff must be a competitor injured in business that directly competes with false advertiser).


355 See CAROLYN CARTER, NATIONAL CONSUMER LAW CENTER, CONSUMER PROTECTION IN THE STATES 42 (2018), https://www.nclc.org/images/pdf/udap/udap-report.pdf. Among other divergences that could be harmonized, some states do not extend private standing to consumers, cap treble damages, impose procedural hurdles, or require proof of individualized reliance. See id. at 42–45.

356 Cf. American Exp. Co. v. Italian Colors Rest., 570 U.S. 228, 252–53 (2013) (Kagan, J., joined by Breyer, J., and Ginsburg, J., dissenting) (urging that class action waivers in arbitration clauses be declared incompatible with or at least unprotected by federal arbitration law when they threaten to deprive plaintiffs of “any effective opportunity” of challenging a violation of substantive federal law, due to cost of hundreds of thousands dollars in proving a claim worth tens of thousands); Br. of Am. Antitrust Inst. as Amicus Curiae in Support of Respondents at 16, American Exp. Co. v. Italian Colors Rest., 570 U.S. 228 (2013) (No. 12-133) (urging similar result when class action waivers undermine a role of a “private damages remedy” such as treble damages in antitrust law to “serve[] its intended function of deterring antitrust violations and compensating victims”).

357 Cf., e.g., Amchem Prods., Inc. v. Windsor, 521 U.S. 591, 617 (1997).
persons “under common control.”358 The Howey test is outdated and has generated tremendous uncertainty even as applied to traditional business enterprises.359 Its roots lie in a state supreme court decision from 1920, purportedly viewed by Congress as a helpful addition to the word “security” to cover “booster agent” contracts involving the sale of goods, i.e., “investment contracts.”360 While there are some similarities between cosmetics salespersons and crypto coin users, the dissimilarities are arguably more significant.

The cost of registering securities with the SEC has been called “tremendous” and disproportionate in the case of startups.361 According to two researchers at Tallinn Law School, smart contracts supported by crypto coins could replace modes of ecommerce or financial or insurance transactions that are “restrictive, antagonistic, contentious, competitive, divisive and costly, [with new modes that are] participative, responsible, responsive and collaborative.”362 For example, they could slash the transaction fees on micropayments, international remittances, and wire transfers, and reduce financial-industry collusion.363

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360 See SEC v. Koscot Interplanetary, 497 F.2d 473, 480 (5th Cir. 1974).
361 See Carol Goforth, Why Limited Liability Company Membership Interests Should Not Be Treated As Securities and Possible Steps to Encourage This Result, 45 HASTINGS L.J. 1223, 1285 (1993) (collecting sources).
ecosystems would arise, with new pro-democratic possibilities for promoting economic and environmental sustainability. Socially responsible investing objectives or automatic divestment upon specified breaches of corporate social responsibility principles could be encoded. In contrast to traditional forms such as private equity and the like, open-source smart contract investments could be examined by consumers, investors, and regulators to gauge compliance with various ethical or political norms. Unlike traditional financial firms and social media giants, crypto coins enable privacy preservation through emerging anonymous trading systems and applications.

There is reason to be hopeful about disruption when it comes to loans, interest on deposits, business capital, remittances, and even insurance, selling creative works, and renting out cars, devices, and houses. The fintech firm, SoFi, has saved borrowers about two billion dollars in what would have been excessive interest charges. The use of the Ripple token for remittances could save the poor and the middle class billions of dollars in interest charges.

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367 See Azgad-Tromer, supra note 272.

368 SoFi saved borrowers $1.45 billion by mid-2017, and has grown tremendously since then, more than doubling the total loan volume since the end of 2016. See Michael Bartlett, Digital or Doomed? What Credit Unions Need to Be Top of Wallet, AMERICAN BANKER (July 26, 2017, 8:00 AM), http://www.americanbanker.com/creditunions/news/digital-or-doomed-what-credit-unions-need-to-be-top-of-wallet [http://perma.cc/6K8R-FDS2].
excessive fees for international transfers of their own money to family members or others in need.\textsuperscript{369} The average interest rate on U.S. savings accounts was about a quarter of a percentage point at a time when a crypto account could offer a fixed rate of seven percent or more, and when investments in tokens such as Bitcoin earned well in excess of 100% a year.\textsuperscript{370} The average U.S. equity fund investor earns less than a five percent return per annum over 10 to 20 years, but the average crypto investor through mid-2018 earned double-digit returns in a matter of days or months.\textsuperscript{371} Based on a mid-2020 technical analysis, a $1,000 investment in Bitcoin in late 2016 might be worth $20,000 four years later, or a 210% annual return.\textsuperscript{372}

Blockchain-based asset trading systems could democratize value exchanges by disrupting the financial system’s models for extracting value from disempowered “users.”\textsuperscript{373} The Lightning Network and Hyperledger are examples of sustained, high-level collaboration among sophisticated players to achieve efficient and fairly reliable mechanisms of commerce over blockchains.\textsuperscript{374} In blockchain-based content monetization systems, artists or other creators designate rights information, which eMusic encodes into “smart contracts” so


\textsuperscript{370} See Mohammed v. Central Driving Mini Storage, Inc., 128 F. Supp. 3d 932, 956 (E.D. Va. 2015) (estimating an average interest rate of less than two-tenths of a percentage point between January 2011 and November 2014); Valerie Ashton, See Interest Rates Over the Last 100 Years, GOBANKINGRATES (July 14, 2017), http://www.gobankingrates.com/banking/interest-rates/see-interest-rates-last-100-years/ [http://perma.cc/PVK4-KVTS] (showing the rate has steadily declined to less than one-tenth of a percent); A New Way to Borrow and Lend Money http://nebeus.com, COMMUNICATIONS TEAM@NEBEUS (Apr. 25, 2016), http://medium.com/@Nebeus/a-new-way-to-borrow-and-lend-money-874a10754e97 [http://perma.cc/8P42-M44E] (claiming that peer-to-peer lenders could set their own interest rates, and borrowers could save with lower rates, with the platform taking a 10% cut).


\textsuperscript{372} See Thane, supra note 362; see also Benedetti & Kostovetsky, supra note 362.

\textsuperscript{373} TAPSCOTT & TAPSCOTT, supra note 31, at loc 61.

\textsuperscript{374} See id. at loc 69.
that streams or sales result in faster, more open and “autonomous” payments of both the streaming or download provider, the performers, the songwriters, and the label(s). The operation of such systems is rich with informative speech:

Rather than erecting walls and aiming to create artificial scarcity, we view decentralization as a means to break walls down and enable more open re-use that aligns with the way information propagates on the internet. Leveraging content identification technology we can make information about the work—who made it, where it was published, and what people are saying about it—discoverable anywhere media is found. This is a prerequisite to enabling value to flow. It starts with attention (attribution), gratitude, analytics, and can lead to financial exchange, directly through media itself.

Thus, content monetization systems express an idea about democratization, and implement that idea by attempting to multiply and propagate truthful information about the underlying speech. Another way of saying this is that such systems express opposition to intermediary interference in speech flows, and that they do so by conveying more information to the benefit of participants and by structuring that information in more efficient and transparent ways.

V. CONCLUSION

Blockchain-fueled software and Internet innovation have rekindled debate about how crypto coins are regulated. The global Internet lends itself to a combination of proprietary and multistakeholder governance strategies, with the corporate tech giants coexisting with a variety of foundations, consortia, and open source software and digital content projects such as the Linux Foundation, the Wikimedia Foundation, and Creative Commons. Cryptocurrencies incentivize Internet users to contribute processing power and applications to new economic and social networks. The laws governing the registration of investments, primarily securities investments but also commodities futures and other investments, could erect giant

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376 Howard, supra note 375.

hurdles to these incentive structures. By requiring the registration of crypto coin white papers and sales, they deter truly decentralized economic and cultural cooperation.

This Article has argued that the freedom of expression protects crypto coin software and related economic and technical speech from being treated like a simple offering of stock in a bank or an oil company. Crypto coin white papers are not strictly commercial speech, and blockchain networks are not traditional corporations or limited partnerships with passive investors in need of transparency and active managers who control the enterprise and dictate its future. Instead, crypto coins and their white papers promote information sharing, open source software, insights in computer science and peer-to-peer networking technologies, and new socio-economic and political models of decentralized collaboration. They promise alternatives to the often slow, costly, and unequal schemes by which corporations organize exchanges of value, whether on or off the Internet. Unless they are marketed using false statements of existing fact, crypto coins deserve to be exempt from civil liability and especially from preregistration requirements. By statute and under the Constitution, crypto coin promotion is a human right.