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Written Testimony of

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Subcommittee on Capital Markets, Securities and Investment

“What Should Be in an ICO White Paper?”

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What Should Be in an ICO White Paper?

Chairman Huizenga, Ranking Member Maloney, and Members of the Subcommittee:

Thank you for inviting me to testify at this hearing. My name is Chris Brummer. I am the Agnes N. Williams Research Professor of Law at Georgetown University Law Center, and the Faculty Director of the Institute of International Economic Law, where I teach courses in securities law and international financial regulation, among other topics.¹ I am here today solely in my academic capacity and am not testifying on behalf of any entity.

The rising popularity of Initial Coin Offerings—and an accompanying spate of fraud and market volatility—has prompted an important debate here in Washington, D.C., and indeed around the world, about proper government responses to ICOs and cryptocurrencies more generally.² Some of the most pressing questions involve the appropriate division of authority between the CFTC and SEC, and whether their authority should reach deep into the heart of the cryptocurrency ecosystem, the spot market.³ Still others contemplate whether or not an entirely new or alternative regulatory regime is needed for cryptocurrency and token fundraises, not only here but also in Europe and elsewhere.⁴

My task today is a comparably more modest venture. Given the complexity and heterogeneity of ICOs, and the limitations of our time, I believe it's important to start with the basics, and contemplate just what kind of informational features, backstops and

¹ Georgetown's Institute of International Economic Law is the focal point for the study of law and international economic policy at Georgetown University, and hosts dialogues, lectures, conferences and executive training for senior government officials and private sector professionals on issues relating to financial regulation, trade, tax and monetary affairs. For more, see <http://iielaw.org>.

² See, e.g., Jason Rowley, *ICOs delivered at least 3.5x more capital to blockchain startups than VC since 2017*, at <https://beta.techcrunch.com/2018/03/04/icos-delivered-at-least-3-5x-more-capital-to-blockchain-startups-than-vc-since-2017/>; Oscar Williams-Grut, *Only 48% of ICOs were successful last year — but startups still managed to raise \$5.6 billion*, at <http://www.businessinsider.com/how-much-raised-icos-2017-tokendata-2017-2018-1>.

³ Brian Fung, *U.S. regulators say they don't have enough power over cryptocurrency*, at <http://www.chicagotribune.com/business/ct-biz-sec-cftc-cryptocurrency-exchanges-20180206-story.html>.

⁴ Chris Brummer, *Whatever challenges the US faces in regulating cryptocurrencies, the EU has far more*, at <https://chrisbrummer.com/whatever-challenges-the-us-faces-in-regulating-cryptocurrencies-the-eu-has-far-more>.



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rigor one would like to see in an ICO fundraise, and then reflect on the sufficiency of existing regulatory tools.

With that in mind, my written comments below focus on *disclosure*. Evidence of fraud is rife in many ICOs, necessitating welcome responses by regulators,⁵ but an awareness of the need for better policing of these markets is not in itself sufficiently instructive as to what one would like to see affirmatively disclosed in ICOs, whatever the overlying regulatory architecture. And this is a critical issue for this subcommittee, and the greater regulatory community. Disclosure has long been the bedrock of U.S. securities laws, which have relied on information to serve as the primary tool with which to empower investors to make appropriate, informed risks with their life savings, and by extension allocate capital efficiently in the economy.

The disclosure system embodied in the Securities Act of 1933 is largely one where promoters share, among other things, material information publicly about their company, management, and securities being offered, as well as their intended use of proceeds. This information is then filed with the Securities and Exchange Commission. Most ICO disclosures, by contrast, are facilitated via currently unregulated “white papers” focusing largely on the existing technology or technology under development or to be financed via the offering.⁶ There is, as a result, a large gap between the disclosures required in an S-1 (and arguably Form 1-A) and that which is provided in most white papers.

For our purposes today, I would like to highlight some of the key disclosures one would expect, and likely need to have for buyers of ICO tokens—whether they are investors seeking to profit or technology users seeking to support and participate in an innovative product—to make a purchase in an informed manner.⁷ These disclosures are especially relevant, I believe, as ICOs transition from technical expert ecosystems to the distribution of instruments that are ever more likely to attract everyday investors and the retail public:

- Promoter’s Location and Contact Information
- Problem and Proposed Technology Solution
- Description of Token
- Qualifications of Technical Team
- Industry Risk Factors

⁵ See, e.g., *Joint Statement by SEC and CFTC Enforcement Directors Regarding Virtual Currency Enforcement Actions*, at <https://www.sec.gov/news/public-statement/joint-statement-sec-and-cftc-enforcement-directors>.

⁶ I note “mostly” since disclosure can also occur outside of the white paper, in “virtual” public roadshows—for example, Ask Me Anything (or “AMA”) sessions on Reddit, Telegram, or Slack—where the development team answers questions submitted by the public in real-time.

⁷ Importantly, these are not concerns relegated exclusively to realm of law professors and regulators. At least one entrepreneur has ventured similar observations. See Andrew J. Chapin, *What to Look for in an ICO White Paper*, available at <https://hackernoon.com/what-to-look-for-in-an-ico-white-paper-successful-token-54eba3787139>



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Promoter's Location. At least one academic study has noted that in roughly 32% of ICOs, it is not possible to identify the issuing entity's or promoter's origin.⁸ This creates serious information asymmetries on the part of the investor. Without knowing the issuing entity's or promoter's origins, it becomes impossible to know or identify what rules and legal protections might be afforded to investors. Further, investors have few means by which to contact relevant public authorities in case of fraud, theft or loss. ICO white papers should, therefore, set out a detailed statement (beyond a simple P.O. box) of where the issuer as well as its key management are located. Without a verifiable geographical address, ICO white papers should not be permitted for use in raising funds.

Problem and Proposed Technology Solution. For most of the history of U.S. Securities law, no information was more important for investors than the issuer's financial statements. By being able to scrutinize balance sheets, cash flow- and income statements, investors could evaluate a company's past performance, make informed guesses about its future performance and profitability, and make an estimation of the value of a company's securities. And precisely because of the centrality of financial statements in securities offerings, an entire ecosystem of third party auditors, accountants and credit rating agencies were developed and relied on to ensure the accuracy of financial statements and their compliance with best practices.

ICOs tend to serve a different purpose from most traditional IPOs. Instead of funding industrial companies transitioning into a more mature cycle of development, ICOs involve products developed by startups identifying technology-based problems (like limited or volatile cloud storage needs) and proposing the sale or financing of technology-based "solutions" (like a peer-to-peer platform for buying and selling cloud storage space). In return for financing, promoters offer coins with varying currency, utility or securities features.

For most of these offerings, it is not a company's past performance, or even financial statements, that are the window through which value is perceived, but more the venture's technology proposition. Consequently, ensuring that investors (including retail buyers) understand the basic contours of the underlying technology solution is paramount as ICOs become more popular means of fundraising.

To that end, an optimal disclosure system for ICOs would require to the extent possible a "plain English" description of the technology problem and solution.⁹ Furthermore, for

⁸ Dirk Zetsche et. al, *The ICO Gold Rush, It's a Scam, It's a Bubble, It's a Super Challenge for Regulators*, Working Paper (Nov. 16, 2017), 12.

⁹ Securities Act Rule 421(d) requires issuers of securities to write the cover page (front and back, inside and outside), summary and risk factors section of prospectuses in Plain English. For shorter white papers, or Form 1-A, there should be consideration of extending the rule throughout the document for investors unfamiliar with the sector.



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larger fundraises, the more technical parts of the white paper would ideally be subject to a system of third party validation (what I will term a “technology audit”) confirming that the solution disclosed in the white paper complies with sound engineering and mathematical principles. ICO promoters could be required to disclose just what if any third party audit of their solution was conducted (and if there was no such audit, then this, would be affirmatively disclosed), the material features of that auditing system, and the results of the audit. Meanwhile, all code, regardless of the size of the fundraiser, would be posted to a public code repository, such as Github, so potential buyers can either diligence the code itself or other proxies for the strength of the code.

Promoters should avoid hyperbole when describing their solutions, an endemic problem in white papers—and should also be required to identify an objective basis for all forward-looking statements. Along these lines, disclosures should be made as to whether post-ICO financial statements will be provided to token holders.

Description of the Token. Just as a clear description of the technology should be required, so should an adequate description of the token. Tokens can have a variety of different qualitative and economic features.¹⁰ With such variety, token descriptions should indicate the intended use of the coins issued in the offering, their quantity, when and whether the founders or advisors will hold reserve coins, and how they may choose to liquidate them (including whether there are any restrictions on their ability to sell). If the tokens will be based on a technological format that must comply with certain rules, such as the ERC20 standard, the disclosures should clarify what that means to a typical holder. If special efforts will be made to list a token on a regulated exchange or alternative trading system (or ATS), or if there are trading restrictions on the security, those facts should be disclosed in a manner that is clear to the prospective token holder. Finally, promoters should be required to disclose the IP/ownership of the company’s protocol (including which elements have been borrowed from elsewhere), as well as detail with specificity what legal rights holders of the tokens enjoy.

Blockchain Governance. Investors should be informed as to how the supporting infrastructure operates, and how it will impact the governance of the token. Along these lines, the consensus mechanism for a virtual currency’s blockchain should be disclosed, along with an overview of how governance decisions and other decisions effecting the network (e.g., software upgrades) will be coordinated among the various stakeholders (e.g., developers, users, miners).

¹⁰ Some offerings more closely resemble traditional perks-based crowdsales, and offer tokens or coins that provide for access to specific services or features. These so-called utility tokens can also serve as the means to compensate or otherwise incentivize contributors, users, developers and other active participants in a network of like-minded technology users that is commonly called an ecosystem or community. Other tokens, by contrast, are built with more overt securities attributes offering participation interests, dividends, and promises of a management team to expend efforts in search of profits for the token holder. Still others, are adopting convertible characteristics that offer rights to vote on the technological direction of the token, or the right to exchange the coins for other coins in the future.



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Qualifications of the technical team. Information about the business experience of executive officers and directors is a common disclosure requirement in registered offerings.¹¹ They give investors a sense of the quality of management, and likely success of the company once a company goes public. In ICOs, where firms have limited histories and the technology at issue may be exotic, similar information about the offering's technical team can be especially valuable. Coders have varying backgrounds, with some more (and much less) qualified, credentialed or experienced than others. In order to provide investors with some sense as to the expertise and credibility of the white paper, founders should be required to provide all material information relating to key engineering experience, skills, qualifications and other relevant attributes. Where relevant, developers should also be required to provide links to their previous work on a public code repository.

Risk factors. ICOs should include disclosures concerning the most significant risk factors affecting token holders in the offering document. Although most investors likely realize that even successful ventures might be later disintermediated by more efficient upstarts, a token holder may be surprised to find that the product does not yet function as intended or may develop a new use or purpose altogether depending on the development of the technology or, perhaps even less predictably, the wishes of the participants in the ecosystem. Holders should also understand the larger sectoral risks as well, including changes in the industry that could relegate some blockchain designs to more niche roles in the sector, and render many tokens worthless. Critically, buyers must be made fully aware of their potential vulnerability to hacking, data-loss, and disruption, as well as legal issues like privacy concerns and data portability across borders.¹²

I want to stress that there are undoubtedly additional, somewhat more technical disclosure requirements that would make sense under U.S. securities laws, though I believe it useful to start with the most obvious first as a basis of our discussion today. I appreciate your time and look forward to your questions.

¹¹ 17 CFR 229.401

¹² See *Hackers Have Walked Off With About 14% of Big Digital Currencies*, available at <https://www.bgov.com/core/news/#!/articles/P2R7QI6S972B>