

Blockchain, Cryptocurrency, and Smart Contracts: On the Cusp of Historic Change

by Hon. Mimi Tsankov



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The FBA is leading efforts to train the first iteration of lawyers in the emerging field of blockchain law. With two stellar panels at the 2018 FBA Annual Meeting & Convention in New York exploring the basics of blockchain and the emerging regulatory environment, conference attendees were treated first to a step-by-step on the fundamental concepts of cryptocurrencies and the blockchain technology that underlies them, and then to a deeper dive into the regulatory environment in which innovators currently find themselves mired in uncertainty.²

For those new to the space, the story begins with Bitcoin—a decentralized digital currency that enables quick digital payments.³ These payment transactions are recorded on a public ledger called a blockchain, which is a decentralized database that enables trustless peer-to-peer transactions without the need for any intermediaries.⁴ As panelist Alex Tsankov of Block Reaction LLC says, think “double-entry accounting—on steroids!” A blockchain is really just a type of “ledger” with copies of its data entries spread around the world.⁵ But what makes it really unique is that the ledger entries, or “blocks,” are forever and permanently recorded.⁶ Moreover, the technology offers 100 percent transparency.⁷

The hype around blockchain is that a permanent and transparent accounting-like system that records transactions can effectively displace middlemen and thereby change the way businesses and consumers interact.⁸ Billed as the newest technological advance since the internet—yes, it’s that revolutionary—Tsankov says that “what the internet was to communication, blockchain will be to financial transactions.”

Then how does Bitcoin fit into the picture? Bitcoin is a currency that uses blockchain technology to record its financial transactions.⁹ Like its name implies, Bitcoin is a type of coin.¹⁰ But this coin presents some challenges when compared with fiat currencies that are, as we know, highly regulated.¹¹ Because its use transcends borders and country limitations, and can be used for good purposes as well as illicit purposes, Bitcoin and other similar coins are often referred to as “cryptocurrency.”¹² It is the “crypto” part of the

currency equation that has been causing concern.

Blockchain technologies can be used as a means of transferring wealth in a broad swath of industries.¹³ As a result, multiple regulatory oversight authorities are implicated from a regulatory standpoint.¹⁴ First, to the extent that cryptocurrencies are considered securities, the Securities and Exchange Commission thinks it has an oversight and regulatory role.¹⁵ To the extent that some of the blockchain technologies consider tokens as commodities, the Commodity Futures Trading Commission sees an oversight role.¹⁶ In addition, state regulatory authorities see an oversight role.¹⁷ Moreover, to the extent that these currencies are used internationally, they are subject to regulatory oversight in countries around the world.¹⁸

To be clear, the range of potential regulatory authorities is extremely broad. However, since the technologies are so new, they don’t fit nicely into standard sets of definitions. Almost as fast as the technologies are being created, government entities are trying to figure out what the extent of its regulatory oversight authority is and should be.¹⁹ It is against this backdrop that in February 2018, the U.S. Congress called for coordinated effort across the U.S. federal agencies to build a regulatory framework that oversees cryptocurrencies.²⁰ At the FBA convention, panelist Felix Shipkevich of Shipkevich PLLC, noted that this uncertainty is extensive, explaining that while virtual currencies and the financial technology industry are driving innovation in financial markets around the world, blockchain technologies are raising fundamental questions for regulatory bodies in the United States and abroad.²¹ This regulatory uncertainty is, in some cases, pushing innovators in the space offshore to less regulated climes.²²

But, blockchain technology isn’t just about currency. One of the most valuable aspects of the technology is the notion of the “smart contract.”²³ As Tsankov explained, “A smart contract is nothing more than a glorified ‘if-then’ statement. If a certain set of conditions is met, the contract says ‘do something.’ For example, if house burns down, and homeowner has a valid insurance policy, then pay out the proceeds.

Such a schema reduces the need for middlemen, which in turn reduces costs. But, along with these benefits, blockchain technology offers greater certainty.”²⁴

Given the hype and money that seems to permeate any blockchain discussion, some governmental bodies are seeking ways to attract investment. Recently, some state legislatures are now passing legislation that officially recognizes “smart contract” technologies often aimed, at least in part, at attracting investment and entrepreneurs.²⁵

The possibilities that these new technologies portend, Tsankov says, is the ability to disrupt any number of global industries ranging from financial services and supply chain, to real estate, energy markets, and health care.²⁶ Yet, as Convention panelist Steven Masur, Partner, Masur Griffiths + LLP said, “Blockchain technology can drive change as radical as we have already seen in ecommerce, media delivery, and transportation. But these tokens can be programmed to do whatever you want them to do, so lawyers and regulators puzzle over which regulatory regime(s) should apply, and how. The lack of regulatory clarity and legal and financial risk has innovators running offshore to what they perceive to be less complicated regulatory environments.”²⁷

Panelist John Wise, CEO of Loci, shared his experience as a technology innovator who has created a platform for intellectual property discovery and a marketplace for ideas using blockchain technology. He is concerned that, with so much legal and regulatory uncertainty, “why take the risk of establishing your product and market here in the U.S. when other countries, such as Malta, Gibraltar, and Switzerland, are willing to work with industry to develop laws and regulations that encourage technological development. I can work with governments in these countries to create laws that are not only business-friendly, but which offer a framework that supports innovation. At this point, I can’t get that in the U.S.”²⁸ Panelist Rob Griffiths of Masur Griffiths + LLP, agrees and notes that: “Rarely have we seen such a sophisticated group of entrepreneurs who are essentially begging for regulation, oversight, and, above all, certainty—a legal certainty that we oftentimes simply cannot offer given the widely disparate oversight bodies and lack of a central overseeing authority that understands and is tailored to this industry.”²⁹

Another major area of concern surrounding the use of these technologies is the cybersecurity exposure, said panelist Rachel Rose, principal of Rachel V. Rose PLLC, a leader in the field of blockchain and health care law. “Cybersecurity is fundamental to any business. In the emerging world, which includes blockchain, implementing technical, administrative, and physical safeguards is paramount. A good place to start is with the National Institute for Standards and Technology (NIST) publications. NISTIR 8202 is specific to blockchain: ‘Blockchains are immutable digital ledger systems implemented in a distributed fashion (i.e., without a central repository) and usually without a central authority.’ While this new technology may have benefits, like all technologies, it must be utilized in accordance with various laws and regulations. For persons involved in the health care industry, blockchain should be evaluated in relation to HIPAA, the HITECH Act, and the Final Omnibus Rule, as well as other state and international laws.”³⁰

And, while the technology is definitely in its infancy, as Tsankov sees it, “This uncertainty offers a unique opportunity for the legal and technology communities to work toward a common objective,” such as “educating legislators to build workable laws and regulations that drive greater certainty.”³¹ “We are seeing a real opportunity for

the legal community to work with technologists to define the ‘smart contracts’ that will underlie much of blockchain technical development, and with the regulators to help define the legal environment. A smart contract is, by definition, a contract, and it can be not only legally binding, but also self-executing. However, since smart contracts are only able to execute what they’ve been encoded to do, there is an important role for legal practitioners to work with the technologists to translate contractual principles into legally binding language that appropriately incorporates legal nuances. That’s something technologists are not trained to do, and the value that lawyers can bring to the smart contract drafting process is not an easily developed skill.”³²

Conclusion

It seems that we are at the cusp of this emerging new field of blockchain law, and the only thing certain seems to be vast uncertainty. However, as the regulatory environments begin to flesh out their oversight roles more clearly, legal advisers will be in a better position to provide advice about how best to navigate the contours of this evolving field in support of financial technology innovators, developers, and entrepreneurs. ☉

Endnotes

¹The blockchain law CLE programs held at the FBA National Convention were “Blockchain 101: For Lawyers Dabbling in the Area” and “Blockchain: From Innovation to Regulation.”

²See *Some Bitcoin Words You Might Hear*, BITCOIN PROJECT, <https://bitcoin.org/en/vocabulary> (last visited Jan. 22, 2019).

³*Id.*

⁴*What is Blockchain Technology? A Step-by-Step Guide For Beginners*, BLOCKGEEKS (Sept. 13, 2018), <https://blockgeeks.com/guides/what-is-blockchain-technology>.

⁵*Id.*

⁶*Id.*

⁷*Id.*

⁸Arjun Kharpal, *Everything You Need to Know About Blockchain*, CNBC (June 18, 2018, 2:18 AM), <https://www.cnbc.com/2018/06/18/blockchain-what-is-it-and-how-does-it-work.html> (updated June 29, 2018, 6:18 AM).

⁹*Id.*

¹⁰The Securities and Exchange Commission (SEC) has stated that blockchain “coins” may need to be registered since “Companies and individuals are increasingly considering initial coin offerings (ICOs) as a way to raise capital or participate in investment opportunities,” *Initial Coin Offerings (ICOs)*, S.E.C., <https://www.sec.gov/ICO> (last updated Aug. 21, 2018).

¹¹Jay Clayton, SEC Chairman, Testimony Before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate: Virtual Currencies: The Roles of the SEC and CFTC (Feb. 6, 2018), <https://www.sec.gov/news/testimony/testimony-virtual-currencies-oversight-role-us-securities-and-exchange-commission> [hereinafter Clayton SEC Testimony].

¹²*Id.*

¹³*Id.*

¹⁴Helen Partz, *Report: SEC Expands Crackdown on ICOs, Regulatory Ambiguity Remains* (Oct. 12, 2018), COINTELEGRAPH, <https://cointelegraph.com/news/report-sec-expands-crackdown-on-icos-regulatory-ambiguity-remains>; Daniel Roberts, *SEC Tightens the Noose On Ico-Funded Startups*, DECRYPT (Oct. 10, 2018),

<https://decryptmedia.com/2018/10/10/sec-tightens-the-noose-on-ico-funded-startups> (“The SEC sent out a slew of initial information-seeking subpoenas at the start of 2018. Now the agency has returned to many of those companies, and subpoenaed many more—focusing on those that failed to properly ensure they sold their token exclusively to accredited investors.”).

¹⁵LABCFTC, A CFTC PRIMER ON VIRTUAL CURRENCIES (Oct. 17, 2017), https://www.cftc.gov/sites/default/files/idc/groups/public/%40customerprotection/documents/file/labcfctc_primercurrencies100417.pdf.

¹⁶Kevin C. Desouza, Chen Ye, & Kiran Kabtta Somvanshi, *Blockchain and U.S. State Governments: An Initial Assessment*, BROOKINGS (Apr. 17, 2018), <https://www.brookings.edu/blog/techtank/2018/04/17/blockchain-and-u-s-state-governments-an-initial-assessment>.

¹⁷UNCITRAL, CRYPTOCURRENCIES: INTERNATIONAL REGULATION AND UNIFORMIZATION OF PRACTICES, https://www.uncitral.org/pdf/english/congress/Papers_for_Congress/29-DOLES_SILVA-Cryptocurrencies_and_International_Regulation.pdf (last visited Jan. 22, 2019).

¹⁸Clayton SEC Testimony, *supra* note 11.

¹⁹Taylor Hatmaker, *Senate Cryptocurrency Hearing Strikes a Cautiously Optimistic Tone*, TECHCRUNCH (Feb. 6, 2018), <https://techcrunch.com/2018/02/06/virtual-currencies-oversight-hearing-sec-cftc-bitcoin>.

²⁰CLE Presentation at the FBA Annual Meeting & Convention: Blockchain: From Innovation to Regulation (2018) [hereinafter Blockchain CLE].

²¹*Id.*

²²CLE Presentation at the FBA Annual Meeting & Convention: Blockchain 101: For Lawyers Dabbling in the Area (2018) [hereinafter Blockchain 101 CLE].

²³*Id.*

²⁴Mike Orcutt, *States That Are Passing Laws to Govern “Smart Contracts” Have No Idea What They’re Doing*, MIT TECH. REV. (Mar. 29, 2018), <https://www.technologyreview.com/s/610718/states-that-are-passing-laws-to-govern-smart-contracts-have-no-idea-what-theyre-doing>.

²⁵Connor DiGregorio, *Blockchain: The 2018 Disruptor of the Year*, INDUSTRY WEEK (Feb. 4, 2018), <https://www.industryweek.com/supply-chain/blockchain-2018-disruptor-year>.

²⁶Blockchain CLE, *supra* note 20.

²⁷*Id.*

²⁸*Id.*

²⁹Blockchain 101 CLE, *supra* note 22.

³⁰*Id.*

³¹*Id.*

³²*Id.*



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