***The Crypto Exchange* – S02 Ep02, Crypto Year in Review 2022: Federal Reserve and Central Bank Digital Currencies and FDIC/OCC Regulatory Developments**
Recorded January 2023
Hosts: Rene McNulty, Carlin McCrory, and Ethan Ostroff

Rene McNulty:
Welcome to another episode of *The Crypto Exchange*, a Troutman Pepper podcast focusing on the world of digital assets and payments. As longtime leaders in the intersecting worlds of law, business, and government regulations, our lawyers go beyond the buzzwords and headlines to make sense of the emerging legal and regulatory frameworks for operating in the digital asset and payments industries. I'm Rene McNulty, one of the hosts of the podcast, and an associate at Troutman Pepper.

Before we jump into today's episode, let me remind you to visit and subscribe to our blog, consumerfinancialserviceslawmonitor.com. And don't forget to check out our other podcasts on troutman.com/podcasts.html. We have episodes that focus on trends that drive enforcement activity, consumer financial services, the Fair Credit Reporting Act, cybersecurity, hot button labor and employment law issues and more. Make sure to subscribe to hear the latest episodes.

Today I'm joined by my colleagues, Carlin McCrory and Ethan Ostroff for part two of our four-part series. It takes a look back what we have seen from the world of crypto in 2022, and also what we can expect in 2023. There are many noteworthy events that took place in 2022 related to cryptocurrency. We saw numerous regulatory agencies weighing in throughout the year.

This four-part series will focus on the actions and insights we have seen from the CFPB, FTC, OFAC, FinCEN, FDIC, OCC, Federal Reserve, and various states. In this week's episode, we'll be focusing on the Federal Reserve and its research and experimentation on Central Bank Digital Currencies, as well as recent regulatory developments with the FDIC and OCC. Carlin and Ethan, thank you for joining me. Let's jump right in.

While the Federal Reserve has made no decisions on whether to implement a Central Bank Digital Currency, a CBDC, it took significant steps in 2022 toward potential implementation by exploring potential benefits and risks of CBDCs from a variety of perspectives, including through technological research and experimentation. To begin with, for those unfamiliar with a CBDC, Carlin, could you explain what it is?

Carlin McCrory:
Yeah. Sure, Rene, and glad to be back on the podcast. A CBDC is the digital form of a national currency that uses blockchain technology to maintain an electronic distributed ledger just like Bitcoin and other cryptocurrencies and exists only in electronic form. In the US, a CBDC would be the digital form of the dollar. So like existing forms of money, a CBDC would enable the public to make digital payments. And the Fed defines it as, and I quote, "A digital liability of a central bank that is widely available to the general public."

Rene McNulty:
Has the Fed decided to issue a CBDC at this point?

Carlin McCrory:
The Fed has stated that it doesn't intend to proceed with issuance of a CBDC without clear

support from the executive branch and from Congress, ideally in the form of a specific authorizing law. However, on January 20th, 2022, the Fed released a paper called *Money and Payments: The U.S. Dollar in the Age of Digital Transformation*, which examined the benefits and risks of a potential CBDC. And the paper, which was not intended to favor any policy outcome, was the first step in a discussion on whether or how a CBDC could improve the safety and efficiency of the US payment system.

Rene McNulty:
Now, what were some of their findings in this paper?

Carlin McCrory:
So it basically outlined four things that would serve the needs of the US. And they said that the CBDC would need to be, one, privacy protected, two, intermediated, three, widely transferable, and four, identity verified.

Rene McNulty:
Could you elaborate on those four factors a little bit?

Carlin McCrory:
Yeah. First is privacy. And the Fed found that a CBDC would need to strike an appropriate balance between safeguarding the privacy rights of consumers and affording the transparency necessary to deter criminal activity. In terms of being intermediate, the paper noted that the Federal Reserve Act does not authorize direct Federal Reserve accounts for individuals, and these accounts would represent a significant expansion of the fed's role in the financial system and the economy.

So, under an intermediated model, the private sector would offer accounts, or digital wallets, to facilitate the management of CBDC holdings and payments. The potential intermediaries could include commercial banks and regulated non-bank financial service providers, FinTechs, and would operate in an open market for CBDC services.

For a third point, with respect to transferability, the Fed found that for a CBDC to serve as a widely accessible means of payment, it would need to be readily transferable between customers to different intermediaries. And of course, that just makes logical sense there. And lastly, as to being identity verified, the paper noted that financial institutions in the US are subject to robust rules designed to combat money laundering and the financing of terrorism. And therefore, a CBDC would need to be designed to comply with these rules. We had a prior episode on BSA/AML, so we've discussed that before, but similar thoughts here with a CBDC.

Rene McNulty:
Now, I'm assuming the paper discussed the pros and cons of a CBDC. So what were some of the benefits discussed?

Carlin McCrory:
Sure, Rene. The Fed found that as a liability of the Federal Reserve, a CBDC would not require mechanisms like deposit insurance to maintain public confidence. It also would not depend on a backing by an underlying asset pool to maintain its value. So CBDC would be the safest digital asset available to the public with no associated credit or liquidity risk, which is an interesting thought as well. The paper also listed five main benefits of a CBDC. The first would be safely

meeting the future needs and demands for payment services, the second being improving cross-border payments, the third supporting the dollar's international rule, fourth, promoting financial inclusion, and lastly, extending public access to safe and central bank money.

Rene McNulty:
Now, were there any drawbacks or risks that the Fed mentioned in this paper?

Carlin McCrory:
Of course. According to the paper, one of the main risks of a CBDC is that it could fundamentally change the structure of the US financial system because it would alter the roles and responsibilities of the private sector and the central bank. So the paper noted that a widely available CBDC would serve as a near perfect substitute for commercial bank money. This substitution effect could reduce the aggregate amount of deposits in the banking system, which in turn, could increase bank funding expenses, reduce credit availability, or raise the credit costs for households and businesses. And the paper further found that an interest-bearing CBDC could result in a shift away from other low-risk assets. And what we're talking about here are shares in money market, mutual funds, T-bills, and other short-term instruments, which could reduce credit availability or raise credit costs.

Rene McNulty:
In addition to the paper, the Fed also explored CBDCs through experimentation. Ethan, could you tell us a little bit more about this?

Ethan Ostroff:
Yes, of course. Happy to be with you, Rene and Carlin, again today. The Fed has engaged in a number of different experiments related to digital currencies. So starting back in 2020, the Fed launched phase one of a multi-year research project that it's dubbed Project Hamilton, that's being conducted by the Federal Reserve Bank of Boston in collaboration with MIT's Digital Currency Initiative, to investigate the technical feasibility of a general purpose CBDC that could be used by an economy the size of the United States.

Rene McNulty:
Could you tell us a little bit more about phase one of Project Hamilton?

Ethan Ostroff:
Basically, they explored the use of existing and new technologies to build and test a hypothetical digital currency platform. The project's first phase produced the research and code, which was released to the public for a high-performance transaction processor. And the code is the first contribution to open CBDC, which is a project maintained by MIT, which will serve as a platform for further CBDC research. Project Hamilton basically aims to inform contributions to the code and inform policy discussions about a CBDC.

Rene McNulty:
Now that phase one is complete, is phase two underway?

Ethan Ostroff:
Yeah, exactly. The second phase is currently ongoing. It's exploring alternative technical designs to improve the already robust privacy, resiliency, and functionality of the technology

outlined in the first phase. Research topics might include things like cryptographic designs for privacy and auditability, programmability and smart contracts, offline payments, secure issuance and redemption, other new use cases and access models, techniques for maintaining open access while protecting against Denial-of-Service attacks, and other new tools for enacting policy in the future.

Rene McNulty:
Now, you mentioned that there were a number of experiments going on with the Fed. Could you tell us a little bit more about the other projects going on?

Ethan Ostroff:
Yeah. The Fed also launched what it's calling Project Cedar, which was the inaugural project of the New York Innovation Center at the Federal Reserve Bank of New York. It's a multi-phase research effort to develop a technical framework for a theoretical wholesale central bank digital currency, or a WCBDC in the Federal Reserve context. In phase one of Project Cedar, a prototype for a wholesale central bank digital currency was developed to demonstrate the potential of blockchain to improve the speed, cost, and access to a critical element of the wholesale cross-border payments market, like a foreign exchange spot transaction. Phase one was completed last year, and the related report was released in November of 2022.

Rene McNulty:
Now, what were your main takeaways from the related report that was released?

Ethan Ostroff:
The report revealed that a WCBDC can deliver faster and safer payments. For example, phase one revealed three key findings that showed cross-border payments supported by blockchain technology can deliver faster and safer payments. First, the payments are faster. The transaction on the blockchain enabled distributed ledger systems settled in under 15 seconds on average. Second, the simulated ledger network enabled atomic settlement, meaning both sides of the simulated transactions were settled either simultaneously or not at all. This greatly reduces the various risks we've talked about that counterparties incur in the current environment.

And third, there were safer and accessible transactions in the experiment. The distributed ledger system design enabled payments on a 24/7, 365 basis and supported objectives related to interoperability by enabling transactions across homogenous ledger networks, representing a variety of financial institutions, including central and private sector banks.

Rene McNulty:
Now that phase one is complete, what are the next steps for Project Cedar?

Ethan Ostroff:
Phase One revealed key questions in highlighted areas for further research, specifically around ledger platform design, interoperability of security. As part of its continued WCBDC research, they announced Project Cedar Phase Two, a joint experiment with the monetary authority of Singapore, to explore questions related to interoperability in ledger design, including how to achieve concurrence and best enforce atomic transactions across different blockchain based payment systems.

Rene McNulty:
Now, what is the main purpose of phase two?

Ethan Ostroff:
It's intended to enhance designs for atomic settlement across border cross currency transactions, leveraging WCBDCs as a settlement asset. The effort, which entails establishing connectivity across multiple heterogeneous simulated currency ledgers, aims to significantly reduce settlement risk, a key pain point in cross-border, cross-currency transactions.

Rene McNulty:
Now, Carlin, are there any other experimental projects the Fed is engaged in right now?

Carlin McCrory:
Yes. In November of 2022, the Federal Reserve, through the Federal Reserve Bank of New York, launched phase two of its CBDC development, which encompasses a 12-week pilot program with the nation's largest banks.

Rene McNulty:
What is the purpose of this pilot program?

Carlin McCrory:
The Federal Reserve Bank of New York, through its New York Innovation Center, will participate in a proof of concept project to explore the feasibility of an interoperable network of central bank wholesale digital money and commercial bank digital money operating on a shared multi-entity distributed ledger. This US proof of concept project is experimenting with the idea of a regulated liability network. Ultimately, the idea here is that it will test the technical feasibility, legal viability, and business applicability of distributed ledger technology to settle the liabilities of regulated financial institutions through the transfer of central bank liabilities. The project will be conducted in a test environment and only use simulated data, and the findings of the pilot project will be released after it concludes.

Rene McNulty:
You mentioned that the Innovation Center would be working with the nation's largest banks. For what purpose are they doing this?

Carlin McCrory:
The Innovation Center is collaborating with a group of private sector organizations to provide a public contribution to the body of knowledge on the application of new technology to the regulated financial system.

Rene McNulty:
This was phase two of the project. What did phase one consist of?

Carlin McCrory:
Oh, right. In general, during phase one, the prototype for a CBDC was developed, which is now being used in phase two.

Rene McNulty:
Okay. So was the pilot program launched based on support from Congress or the White House?

Carlin McCrory:
The Federal Reserve has yet to receive authorizing legislation from Congress or an executive order from the Biden administration to issue a CBDC, which we discussed a little bit earlier in the episode. But the pilot program seemed at odds with the Federal Reserve's prior stance on the development of a US CBDC, stating that it would not proceed with the issuance of a CBDC without that clear support from the executive branch and from Congress, as we discussed.

Rene McNulty:
Interesting. Switching gears a bit, there were other federal regulatory developments in the crypto space, specifically the FDIC and the OCC weighed in this year. Ethan, could you tell us a little bit more about these developments?

Ethan Ostroff:
Sure. So back in August of 2022, the FDIC issued cease and desist notices to five companies that had suggested crypto-related products were FDIC insured. Notably, one company published an article on its website titled “List of FDIC Insured Crypto Exchanges.” Although as the FDIC noted in its cease and desist letter, the FDIC insurance does not cover cryptocurrency.

Rene McNulty:
Were there any other FDIC recent developments worth noting?

Ethan Ostroff:
Yes. In this same space with respect to FDIC deposit insurance, the FDIC issued an advisory opinion to FDIC insured institutions regarding FDIC deposit insurance and dealings with crypto companies.

Rene McNulty:
What were the main highlights from this opinion?

Ethan Ostroff:
The opinion outlined risks and concerns identified by the FDIC and risk management and government's considerations. So, taking risks and concerns first, generally, the FDIC stated it was concerned with the risks of consumer confusion or harm arising from crypto assets offered by through or in connection with insured depository institutions. They noted that these risks are elevated when a non-bank entity offers crypto assets to the non-bank's customers, while also offering an insured bank’s deposit products.

As for risk management and governments, the FDIC stated that insured banks need to assess managing control risks arising from all their third-party relationships. As we've heard many times for many years, specifically calling out those third-party relationships with crypto companies. And also stated that in the FDIC'S dealings with crypto companies, insured banks should confirm and monitor that these companies do not misrepresent the availability of deposit insurance in order to measure and control risks to the bank and should take appropriate actions to address any such misrepresentations.

Rene McNulty:
Now, it seemed like this was a hot topic. Is there anything else worth noting regarding insured banks and cryptocurrency companies?

Ethan Ostroff:
Sure. In April of 2022, the FDIC formalized a notification process by releasing a letter that requires FDIC supervised institutions prior to engaging in or if currently engaged in a crypto related activity to notify its regional FDIC director.

Rene McNulty:
What prompted this letter?

Ethan Ostroff:
The letter says that crypto related activities pose significant safety and soundness risks as well as financial stability concerns. And so based on these concerns and its powers under the Federal Deposit Insurance Act, where in the FDIC established in part 364, safety and soundness standards for all FDIC supervised institutions. The FDIC issued these reporting requirements.

Rene McNulty:
What does the FDIC intend to do with the information obtained through this?

Ethan Ostroff:
What we understand at this point is the FDIC is going to review the relevant information submitted by supervised institutions related to crypto-related activities and provide what it describes as relevant supervisory feedback directly to the institution as it deems appropriate. So practically speaking, what this is going to actually mean for FDIC-supervised institutions is still an open question.

Rene McNulty:
The OCC also weighed into the crypto industry this past year. Could you tell us more about these developments, Carlin?

Carlin McCrory:
Sure. During January of 2021, the OCC conditionally approved Anchorage Digital Bank's application for a National Trust charter making Anchorage the first federally charter crypto bank in the US. However, the OCC's approval of Anchorage Charter was contingent upon Anchorage's agreement to enter an operating agreement, which imposed certain BSA/AML requirements on Anchorage. In April of 2022, the OCC issued a cease and desist consent order against Anchorage for failing to devise and implement an effective BSA/AML compliance program in violation of the BSA and its implementing regulations.

Rene McNulty:
Were there any other items worth noting regarding the OCC this past year, Carlin?

Carlin McCrory:
Yes. In its semi-annual risk perspective report issued this past year, the OCC disclosed that it

continues to approach crypto asset products, services, and activities cautiously, considering the multitude of crypto related entities that have filed for bankruptcy and the network effects of the contagion generated by their collective demise. So according to the OCC, current crypto industry risk management practices concerning fraud and custodial services lack maturity. As a result, the OCC has stated that it remains primarily focused on whether banks are engaging in these activities in a safe, sound and fair manner.

Rene McNulty:
With that, this week's podcast is concluded. Carlin and Ethan, thank you for joining us, and this has been a great discussion. As a reminder to our listeners, this is part two of our four-part series. Next week, we will discuss state level regulatory activity relating to interest bearing cryptocurrency deposit products, which were the subject of many enforcement orders during 2022. Thank you to our audience for listening to today's episode. Don't forget to visit our blog, consumerfinancialserviceslawmonitor.com and subscribe so you can get the latest episodes. Please make sure to also subscribe to our podcast via Apple Podcasts, Google Play, Stitcher, or whatever platform you use. We look forward to next time.