

*diffusetap*  
Virtual Event Series

# CBDC: Oppression or Opportunity?

*Guest Speaker:*



**Chris Kameir**  
Managing Partner  
Sustany Capital

*Hosts:*



**Kenny Estes**  
CEO & Founder  
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COO & Co-Founder  
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## DiffuseTap: CBDC Oppression or Opportunity

Last time on DiffuseTap, Christian Kameir, Managing Partner of Sustany Capital, talked to us about the real implications of CBDCs on financial economies, how self custody unlocks financial freedom, and the problem with regulators' guidance on crypto and blockchain technology.

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### DiffuseTap

This networking session is part of our weekly virtual events series. Networking (you'll bump into at least a dozen high caliber fund managers) meets purposeful (you'll tap into brand-new sources of ideas)... straight from your armchair like a boss.

### Meet the Speaker



Christian Kameir is a managing partner at Sustany Capital, a blockchain venture fund and thesis-driven investment firm. Sustany employs scientific methods to assess investments in technologies that are reshaping the foundation of the internet and global economic activity. To expand a successful investment strategy, they are currently raising capital from strategic partners for their \$100 MM second venture fund.

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### About Diffuse®

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**KENNY ESTES:** You're here today to hear from Mr. Chris Kameir. Mr. Kameir, do you want to talk a little bit about your background and what you're up to over at Sustany?

**CHRIS KAMEIR:** A little background. First, my accent originated in Germany. I was a software developer for a brief period of time in the late 80s and early 90s. I went to university to get a degree in linguistics and classical literature before attending law school. After law school, I wrote some of the deregulation papers for the German telecommunication markets and became general counsel for one of the first internet service providers in Europe. We were selling Internet dial up services, and we got lucky to sell that company at the height of the dot com era.

I immediately retired from the law and moved to Southern California. Twenty years later, I'm still in SoCal, still doing the same thing. We are focused on disruptive finance solutions, and what people call Web3. There are a lot of unfortunate marketing terms, and that is one of them. Web3 is a term we've been using on and off since 2001, the same year we made our first "metaverse" investment.

As a fund, we are applying the scientific method as much as possible to the topic of investments, which expresses itself in our thesis papers that we share for peer review. We perform our own experimental development and work closely with academia. I'm largely responsible for structuring Harvard's fintech program, where I teach CBDCs and do many other things for schools around the world. We are also writing a book with the working title "Streaming Money" to be published in the fourth quarter of 2022.

**AYLA KREMB:** Lovely to have you. I'll kick right off with the questions. What is the difference between money and currency? During our prep call, we chatted about the many misconceptions around that.

**CHRIS:** I use a fairy tale to explain this to people because otherwise, it might be too esoteric. And people tend to remember stories better anyway. If you walk along the sidewalk in New York City and you see a \$10 note on the ground, you pick it up, and you might use it to buy yourself a hotdog or coffee. And then, the person that accepts it as payment can use that same note in a different context. But if it was in the sand of Sub-Saharan Africa and a goat herder picks it up, he might not recognize this as a currency and an instrument of payment. He might use it maybe as an origami tool, or to start a fire at night.

The point is, to conflate money and currency is to conflate technology and law. Money is whatever another person accepts as a form of payment. First, we need to speak the same language. It could be U.S. dollar, Yen, or maybe Pokemon cards, cigarette butts, poker chips, or something else. And then, we agree on a medium of exchange. It could be a check or paper note, or a certain number of cigarette butts. If you went to business school, you learned the definition from this little pamphlet (*holding up a book*). It's called "Money and the Mechanism of Exchange" written by William Stanley Jevons in 1875. It defines money as a unit of account, a medium of exchange, and a store of value.



But actually, that definition was always wrong as it narrowly describes a particular type of commodity money. Oftentimes, you hear stories about the history of money as an evolution from barter. That's utter nonsense. At any given point in time, money was just an agreement and recorded using ledger technology. We started out with social contracts, and ultimately moved to paper, and then to databases. And now, we're going to replace those databases because they simply are not a very good tool for network technologies. You have to cut me off, by the way, because I typically talk about all of these topics that I touch on for an hour, separately.

**KENNY:** Okay. So, money and currency are different things. Cigarette butts is a medium of exchange that can work just fine. But what is crypto? What do digital assets bring to the table here? Is that money? Talk about the nuance there.

**CHRIS:** These are five different things. Let's start with cryptocurrency, which is a very unfortunate term. As we just discovered, money is a decision at the moment in time when I want to facilitate an exchange. Ultimately, money is the tool that solves the coincidence of "wants" problems. For cryptocurrencies, that means you can't actually ever know WHY the control over a set of bytes changes. I can requisition a set of bytes, for example, Ether, to run a dApp and I can write a script to do that. Or I can send it to you as payment, or send it to a null address to reduce the overall supply.

The idea of putting a label on this as money, currency, or commodity is an exercise in futility. The discussions around that are very similar to discussing what colors a byte should have. The only people that can know the legal nature of that particular change of control of a set of bytes are the participants of that transaction. Just like my earlier example of the Federal Reserve note, if you find one, you might use it to make an origami or set it on fire. But you can only use it for payment if you know that it is a form of currency, and the other party accepts it as such.

The other part is about phone numbers. The problem with instant settlement finality has been solved for 30 years. As I mentioned, my doctorate thesis was on number regulation. We have something that we call prepaid calling cards for transnational networks for the past 30 years, and that works just fine. That is why, in the early presentations we made on the topic of blockchains 10 years ago, we always used the example of M-PESA, which works along those lines. From that perspective, everybody already has a payment address. It's called your phone number or your DID, which is the term that we're using in telecom law.

Again, you always have to stop me because otherwise I will go on for the next hour to explain that. For me, explaining these concepts to you is like explaining that the sky is blue. For us, all of this has been very obvious for over a decade. That's why it's very unfortunate to revisit all these discussions. They're entirely vacuous and useless. It's mostly a conflation between what are functions and use cases. The function of a hammer is simply to centralize centripetal force. The use case primarily might be to put a nail into a wall, or something else – i.e. harming a person. It doesn't change the *functions* of the hammer whatsoever. That is why whenever you hear motivated reasoning and propaganda messaging like crypto regulation, or even the term cryptocurrency, it's simply a conflation of use cases and functions. It's the difference between natural law and rules, essentially.



**AYLA:** Talking about another set of rules, what role will CBDCs play in the financial ecosystem? What is the fantasy of it, and then what is the reality and limitations of it?

**CHRIS:** First, it's important to establish what type of currencies we have today. The Federal Reserve Bank only issues Federal Reserve Notes right now, and they're great, right? I hand it over to you, I don't have it anymore. It's a settled transaction with finality, without fees, and without you needing to see my passport. However, it's not a useful tool anymore in economies that are largely mitigated by digital technologies. As a frame of reference, a Federal Reserve Note turns over maybe four times a year. It's entirely useless for economic activity at scale.

That leaves you with commercial bank money. When you put money into your account, you call it a deposit. But legally, it's not really a deposit. You are entering into a new contract, which is a demand deposit contract, and or you might move it into a savings account or money market account, which creates a certificate of deposit. These are all separate contracts. You can take it out as currency, as a Federal Reserve note.

You have those two kinds of forms of currency, which are Federal Reserve notes and commercial bank money. But then, you also have nonbank money, which is the money that you're sending around using PayPal and Venmo, and so forth. The problem is that you are still only left with commercial bank money for digital transactions. And, the average fees on moving money digitally last year was more than 1.9%. That means if you move any amount 50X, the entire value has been absorbed by middlemen – that's essentially the maximum velocity of commercial bank money before it's gone.

If you translate this to overall economic activity last year, GDP stood at just under \$95 trillion, and financial services revenues was at \$22.5 trillion. If you want to do simple math, it's almost 24% that's been extracted from the real economy to something that should just be facilitating the real economy. If you translate this to the United States, banking fees paid by U.S. citizens on average last year were \$2,700, from the backdrop of the average household making \$72,000. By default, almost 4% of a citizen's income is just being moved to these intermediaries.

The other obvious thing that most people on this call probably know is that in principle, a digital bearer instrument can move money instantly with settlement finality, and without a middleman. That is why when the Federal Reserve System pushed out its discussion paper, we obviously read it with great interest. I put out a list of a dozen logical fallacies in that, and I encourage everybody to find those in the paper. You'll find many of those, including this conflation that I mentioned earlier.

The main point is that not implementing this digital bearer instrument primitive into our system of currency is akin to forcing everybody to still put stamps on emails, or forcing you to pay phone calls by the minute. We have had these technologies for decades. There are a lot of unhelpful discussions around cryptocurrencies, guided by motivated reasoning. People do not understand what's really going on because they always assume this is an account-based system, where everybody is establishing an account with the Federal Reserve. That's actually not – and has never been – part of the Fed's proposal.

That actual discussion is about issuing a digital bearer instrument. The other part of that is people are largely ignoring the actual technology infrastructure. The unit of account itself is obviously largely



irrelevant, from a technology perspective it is simply an interface function read. Money doesn't have to exist at all in a state of debasement. You can readily move it from one yield-bearing state to another. Most people on the call probably already do this. Our entire team has already been doing this for years.

It's also important to realize this discussion to attach these functions to the actual standardized smart contract, token, coin, or whatever. It shows the actual digital bearer instrument. That's obviously a design flaw. You want to attach it either to the wallet or to digitally native credentials. The latter is another important thing. One of the groups I chair is the Banking and Finance SIG at the [Decentralized Identity Foundation](#), where we closely monitor the development of digitally native credentials (i.e., Arizona is now issuing digital driver's licenses). Ultimately, all value is only value in the context of the owner.

**KENNY:** Okay, there's a lot to unpack. I will pick up a specific question from Scott in the audience here. New York is releasing some commentary and guidance around stablecoins specifically. Obviously, stablecoins and CBDCs are not one and the same. There is a very big difference, but they're both trying to solve the same problem. What are your thoughts about that guidance in particular, and where the regulators are more generally going outside of the CBDC space?

**CHRIS:** It's generally just a confusion about function and use cases, and conflation of technology and legal concepts. The term stablecoin is utterly useless. Every token is just a standardized smart contract. How you build this into any client technology is up to you. To the extent that you can provide liquidity to any wallet, then that might be useful. But also, you want to always start with just taking a snapshot of what is happening. That is good scientific reasoning. If you look at how stablecoins are being used right now, they're creating [new use cases](#).

I think everybody should already know this, but you can also just go to [CoinMarketCap](#) and see what the most used stablecoin is being deployed for. And right now, you can see that Tether is the most used one. And then, you can just see that it is almost entirely used to exchange it against a mining reward such as BTC or ETH. Why do I do this? Because it solves a particular problem. It solves the problem of going into fiat, or going into a commercial bank account and incurring a fiat fee or time delay. That's the problem that it solves.

As an investor, what you do is you establish the problem, how it's being solved, and what is the total addressable market for these solutions. These discussions are typically not related to each other. The technologists don't understand the legal practitioners, and politicians don't want to understand the technology either. Yesterday I was listening to a recording that the Fed had with Congress, and they literally do not understand what settlement is.

The Congress person was claiming that his debit card settled faster than any blockchain transaction. But in reality, that's just not true. I assume that most people on the call here understand that these transactions don't settle for days, sometimes weeks and months, for various reasons. When you experience a payment function and have immediate control over a set of bytes in terms of whatever you



see in your account, that is a legal agreement between the participants. It has nothing to do with the technology.

It's important to understand the technology because if you have all these legal agreements, you obviously incur friction. The main friction is the entire overhead that banks must maintain for compliance, which essentially addresses the principal agent problem. When you give something that you own to someone else, he or she now has it under their control, and so they need to be supervised. But if I have self custody and a multi SIG wallet where someone else is just an additional party to secure my private key or funds, at that point, I'm mitigating against that problem.

**AYLA:** Double clicking on the custody piece, how do you envision self custody unlocking a lot of financial freedom across a lot of ecosystems, such as for countries that don't have access to their own kind of banking systems?

**CHRIS:** To fast-forward, I envision that most commercial banks will move to being essentially blind custodians. To provide a metaphor for that: If you open up a safety deposit box, what happens is you go in there, the bank employee leaves the room, you unlock the box with your key, and you do whatever you want with your valuables. Then, you close the box, and the bank employee comes back and double-logs the box with the bank's key. That's how I like to think about the future of commercial banking in the digital space.

It offers you a digital lockbox where you have one of the keys, but it doesn't give them ownership control and possession over your assets. That alleviates a whole lot of compliance issues. People have to actually realize that this is what the technology does. But as I said, by and large, people are just trying to reinvent what we already have and are deploying what I call linear one dimensional thinking. From our perspective, we do multi-dimensional analysis that is nonlinear on any investment that we're doing.

That's why we're focusing on disruptive finance solutions. We need to not only evaluate any solution from the perspective of whether it's technically viable, but also whether it's legally viable, has the right team, whether it has a good architecture, and how it fits into the bigger picture. About 99% of the solutions seem to not realize the actual topology that we're working towards.

The larger point is, we never built a world wide web. What you're using now is the commercial web. The real problem is we have database solutions that were never meant to be attached to network technologies. That's what we're fixing. Obviously, it's entirely coincidental that Satoshi called the set of bytes "bitcoins". You can call them pokemons or something else, and that would have served us better.

As a side note to that, people keep harping on the ledger. Ask yourself whether or not you get a ledger when you get cash. You don't. That's an important point. The Bitcoin white paper never mentions a ledger. And DLTs in particular are not blockchains. They are shared databases, which is another mistake that you will also find in the discussion papers of the Federal Reserve all the time.



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**Dennis Chookaszian**

Corporate Director, CME Group

DiffuseTap: Institutional Grade  
Governance

Sharing his decades-long expertise on corporate governance, Dennis talked about how to avoid a co-partnership going sour, the problem with overly idealistic CEOs, and the importance of keeping your board in check. [Read on](#)



**Susan Brazer**

CEO & Founder, LionShare Media

DiffuseTap: Media Metaverse  
2022

Susan described the 2020 digital media landscape; the evolution of media distribution; how converging, emerging technology points to the metaverse; and the prospect of having an open, decentralized, and free Web 3.0 marketplace. [Read on](#)



**Raj Mukherjee J.D.**

VP/Global Head of Tax, Binance.US

DiffuseTap: Crypto Taxes  
Decoded with Binance.US

Raj explained the complexities of the US crypto tax landscape, how he built a dynamic tax information system for [Coinbase](#) and [Binance](#) from scratch, and how investors can profit from crypto without getting caught in a taxation mess. [Read on](#)

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