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Virtual Event Series

DeFi Derivatives

Guest Speaker:

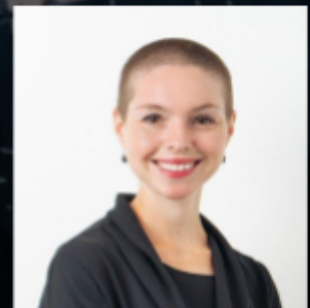


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Founder & CEO
Volmex Labs

Hosts:



Kenny Estes
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COO & Co-Founder
Diffuse



DiffuseTap: DeFi Derivatives

Last time on DiffuseTap, Cole Kennelly, Founder & CEO of [Volmex Labs](#), talked to us about what DeFi derivatives are and how they differ from traditional derivatives, why composability in smart contracts will become a game changer in the derivatives space, and whether the U.S. is opening up to DeFi derivatives soon.

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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



Cole Kennelly is the Founder of [Volmex Labs](#), a DeFi company that offers VIX-like indices for crypto assets and trading functionality. Volmex Labs created [volmex.finance](#), a protocol for tokenized volatility built on Ethereum. It is backed by leading market makers: Alameda Research, Three Arrows Capital, CMS Holdings, Orthogonal Trading, Robot Ventures, IOSG Ventures, and more.

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KENNY ESTES: Today, we'll be hearing from Mr. Cole Kennelly. Cole, would you mind telling the good folks a little bit about your background what you're up to?

COLE KENNELLY: Absolutely. Thanks, Kenny. Thanks a lot. It's great to be here and to tell everyone about what we're building. A quick background on Volmex. At Volmex, we build Volmex implied volatility indexes, which are similar to the VIX index but for Bitcoin and Ethereum. These indexes are also quite novel in the way they're calculated. Our indexes generally allow market participants to track implied vol and engage the markets' implied volatility.

We also build DeFi derivatives around the Volmex implied volatility indexes, including our volatility token products and other products in the future. These volatility derivatives allow users to hedge and speculate on crypto volatility, which is a very compelling product and something that's widely unavailable in the market.

Our first product, Volatility Token v1, has seen some early traction and early market validation. It's an ERC20 token that is linked to the reference index. We're really excited about that. We've also got some really compelling new products and releases coming soon. We're backed by some of the leading crypto options market makers, like Ledger Prime, Orthogonal Trading, Alameda Research, and a handful of others. That's a little bit about Volmex.

Quickly on my background. I got into the crypto space in 2016, and professionally in 2017. I discovered the DeFi space early on. I met Hayden and the folks from MakerDAO and Uniswap, and got really interested. I started doing a lot of research and writing, and I started a meetup called DeFi NYC and grew it. I had a bunch of meetups in the early days. It was a lot of fun.

I joined Staked at the end of 2018 as their second employee and first business hire. I helped them lead TenPlus go to market and get a tremendous amount of market share before it was acquired by Kraken. I've been trading derivatives in my personal account in crypto and a little bit in the equity space, and I've been following the U.S. equity options market structure for a long time. That's partly because my dad works at U.S. Options Exchange and has spent some 30 years working at a few different exchanges. That's a little bit about my background and the genesis of Volmex. I'm really excited to be here today.

AYLA KREMB: Thank you so much for hopping on the call. We'll drop you right off the deep end to help people understand a little bit more about what DeFi derivatives are. To help explain DeFi derivatives, how would you put them into different buckets?

COLE: Great question, Ayla. I'm sure everyone here is familiar with derivatives. Generally, a derivative is a contract which derives its value from an underlying asset, or the performance of that underlying asset. That includes futures, options, forwards, and swaps. There are various fixed income derivatives. There's a whole long tail of derivatives out there.



DeFi derivatives utilize smart contracts and blockchain to automate a lot of the backend process, counterparties, and things like that, and really automate that with a set of smart contracts. DeFi derivatives take the legacy analog derivatives and codify them into smart contracts, and make them permissionless, transparent, and composable.

Some of the reasons that DeFi derivatives are extremely powerful is that not only can traders use these derivatives for speculation, hedging, and risk management, but there's also a number of benefits to them including, like I mentioned, they're composable with the broader DeFi ecosystem. They're composable of stable coins that can be audited in real time.

They're also transparent and permissionless. Anyone can interact with them with no minimums or maximums. Generally, DeFi derivatives are a step function improvement to the CeFi system. It's a really big innovation, and it's something we're really excited about. This is how we think about DeFi derivatives at Volmex.

KENNY: I'm going to jump on Mitchell's question from the chat there, which speaks to the core value of prop smart contracts. He's questioning counterparty risk and how that's managed. Do you want to explain a little bit about how on-chain smart contracts are fundamentally different from more centralized derivative issuers?

COLE: Sure. That's a great question, Mitchell. On-chain derivatives are fully transparent. I think some systems work towards being fully decentralized, and maybe there are some progressively central decentralization. I think centralized exchanges like Binance or FTX are really amazing companies that have done a lot for the space. However, nobody really knows what goes on behind closed doors in terms of margin rules, risk management rules, and those types of things.

With DeFi, everything including how the product works, the market makers' relationships, and all these things is fully transparent. I think that DeFi is really about the entire surface area of the system being transparent, available, and easy to understand for the broader community. Whereas with a centralized exchange, it's just a black box. Nobody really knows how the rules work exactly, how it's coded, or things like that.

I think every DeFi system works a little bit differently in terms of the mechanics under the hood. But generally, that's how we think about it. DeFi is just fully transparent, and it keeps an equilibrium. It's a better alternative to the CeFi system.

AYLA: How come it took so long for DeFi derivatives to come into the world? It's been about two years since the DeFi summer. Is there a specific reason, like crypto's growing popularity? Did it need a certain amount of volume? What's the reason for it taking so long?



COLE: Great question, Ayla. To give everyone some context, crypto derivatives and CeFi have grown pretty substantially over the last few years. With Perpetual, there's about 20 billion of open interest and 100 billion dollars of trading volume recently. Options are an order of magnitude smaller. In 2015, the PERP markets popped up in the derivatives space in crypto with BitMEX and OKX, and in the options space in 2017 or 2018 with Deribit.

It was only until the last run in 2017 or 2018 that stable coins other than Tether really came on the scene. I would say that DeFi derivatives started coming on the scene in 2015, generally with some of the more professional exchanges. I think they've been growing in the CeFi space, but broadly speaking, a lot of the tooling and infrastructure for DeFi derivatives were not in place.

I'd say stable coins were a big thing there. The growth of USDC to tens of billions of dollars is definitely beneficial to the DeFi ecosystem. I think DEXs and other composable primitives that need to be utilized for DeFi derivatives and other cases were simply not built out then.

But now, with a lot of this tooling and other composable primitives, there's a lot more that a smart contract engineer, DAP engineer, or DeFi engineer or team can build. There are a host of tools, products, and primitives that are in the market today. It's been a slow rollout with a lot of the DeFi primitives, but stable coins have also grown prolifically over the last few years. I think we're getting to a point where we're about to cross the chasm and really see DeFi derivative adoption.

KENNY: That's great. I think composability evokes an image of legos. All the Legos are gradually coming together, and it gets more and more complex as you build it out. Scotty has a very practical question for you. Who is your typical client? Are they mostly in the U.S.? Offshore? Are they doing these derivatives for hedging, or for speculation? What does the market look like there?

COLE: Great question. At Volmex, we don't offer our derivatives products in the U.S. We offer the index as data that can be consumed for market insights and things like that, but the link derivative products are not available in the U.S. We're working towards an offering that will be available in the U.S., but currently that's how we've approached things based on the market structure.

Users that we're focused on include both institutional and retail. A number of our existing investors, as I mentioned at the beginning of the call, include Ledger Prime and Orthogonal. These folks have used some of our products and they're nascent. They will continue to support us on new product launches. Crypto native quant shops, market makers, and prop desks are a big bucket for us. We make a concerted business development effort to acquire those users. And on the retail side, we have DeFi power users and smaller users on layer 2.

We think that both are very important for us. Outside the U.S., to answer your question, people are generally using the index for the products that are linked to it for some speculation or hedging, and then using the index as an indicator to follow volatility, and to track it and understand how the market is pricing and feeling about implied vol. That's what makes our products compelling to users.



AYLA: In the process of building out the business over the last year or so, what are the learning lessons you've picked up? Maybe one of them might be to not have U.S. customers for regulatory reasons, but what are some of the other insights and learning lessons that you've learned in the last few months?

COLE: That's another great question. DeFi is a very fast-paced industry. I think it's extremely important for DeFi teams to balance security as their top priority, while also moving fast. Security in crypto, smart contracts, Ethereum, and dApps cannot be understated. It's the most important thing. Often, like every other day or week, you see that there are new exploits or issues. Bad security ruins projects. Therefore, it's paramount to have top notch security, to do multiple audits, and to have a bug bounty program.

It's not necessarily something we've learned through an issue, but something we've observed broadly in the ecosystem that a lot of our other peers in the industry have had issues with. The lesson is how important it is to invest in security, through audits, and again, through bug bounty programs, and lots of testing. I think that's a lesson that is very relevant to the space.

KENNY: Makes good sense. Another very practical question for you from Aaron. From a technical perspective, how do you get liquidity? You have derivatives. Are there certain strikes and expiry-type stuff, and then you also have your market maker? What does the actual technical process look like?

COLE: Great question. Volmex's Volatility Token v1 uses an AMM architecture. We have some new products coming soon which improve on this architecture, but also introduce different ways to trade. We don't market-make on the products. That's the answer to your question there. They're AMM-based. Someone can go to the Quick Swap or Uniswap v3 pool and buy the token, or they can mint it via the contract. That's generally how it works.

We're going to improve the UX substantially in these coming releases. I do think that order books are very compelling for derivatives trading, and we're very keen on that topic, as well as on safety. We have multiple products that stem from our index, and we think that's very compelling. These different products have different use cases, and are different in different ways. Currently, that's our plan to expand the suite of products. Great question.

KENNY: That's great. I'm going to do a quick knock on it. What is an AMM? And how is that different from more traditional market making and just limiting books?



COLE: Excellent question. AMM stands for automated market maker. It's a very familiar term as it's been used in different contexts and stratified. But it was really a contract term that was pioneered largely by Uniswap. It's a new type of exchange that generally does not use an order book. Instead of having a bid and an ask, and mid price and convergence, there are reserves, a liquidity pool, and an algorithm which determines how the pricing works. Basically, it's an exchange with liquidity pools and reserves through the algorithm.

There's also trade-offs to it. With order books, you can be more specific with how you place an order. Whereas on an AMM, there is less flexibility. You just take what the market price is. You don't have the flexibility to place a limit order on an order book. AMMs have grown really large in crypto because they offer this really good UX around passive LPing for a lot of different types of altcoins and different things.

That grew pretty big with Uniswap v2 and v3. But I think centralized exchanges and DeFi exchanges that use order books are complementary. It's an excellent question that relates to market structure, which we pay a lot of attention to.

AYLA: Another question from the chat is, how do you structure your KYC? Yes, one can use a VPN and then just go around the U.S., fencing around the product. But how do you approach regulatory compliance, KYC, AML, onboarding, and all those things given the space has come under quite a bit of more scrutiny?

COLE: Yeah, great question from the chat. Our terms of service specifically spell out that if users use a VPN, they're breaking our terms of service. We do not allow U.S. users and users from a list of sanctioned countries. To be clear, if users from the U.S. are using a VPN, they're violating our terms of service. That's our stance on it.

We're working towards different offerings that use different architectures, and they will be available. That's how we approach this today. It's in line with the broader DeFi market standard, and we're paying close attention to the markets, the precedent around this, and things broadly changing in terms of enforcement and things like that.

This is how we currently approach it, and it's been in line with the best practices in the market. It's something that we invest a lot into legally, too. We have our finger on the pulse of that.

KENNY: As you're investing all that money in legal and regulatory, let's ask a more detailed question about it. What is the state of play? I know there's a big chasm in the U.S. to get to crypto derivatives. Do you see that changing soon? Where do you think those chips are going to fall?



COLE: Great question. I think it's really actually more about DeFi versus CeFi. A lot of these regulated entities are different funds and prop shops. Maybe they feel like it's too risky to interact with DeFi because they don't use the KYC requirements that they're used to. I think DeFi derivatives in the U.S. are generally hard to use for institutional investors. I think that with time, there will be solutions that reduce that gap.

I do think that we're not in that space yet, but it's something that we think is interesting and relates to us. FTX US is doing a lot on the policy side. They're in Washington, doing a lot of lobbying and meeting with decision makers. There are also other initiatives, like CME just launching their options initiative.

I do think the regulated derivatives industry around crypto will grow a lot in the U.S., and that there's going to be a continued trend for players making an entry in that space, like what we're seeing from Coinbase, FTX U.S., and other DeFi projects that are venturing into the regulated derivative space.

I'm very bullish on the growth of derivatives, but I think it's unclear exactly how DeFi derivatives will become widely available for institutions. But it's going to grow more, and that's how we see it. I also do think another thing is that CeFi derivatives are also very compelling for institutions that want to trade crypto, but don't have the mandate to custody spot.

They can go to a cash-settled derivatives dealer and buy derivatives, or do some sort of strategy, and they won't need to custody the Bitcoin or Ethereum. That way, they can still dip their toes and get into that space. I think that's been a prevalent trend over the last few years, and I expect that to continue. A lot of these shops already have the infrastructure to interact with these exchanges and dealers that provide them commodity derivatives and other assets.

It's something we think is very interesting. The derivatives market structure as it relates to CeFi and DeFi is something that we're paying very, very close attention to.



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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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