UNSTOPPABLE: THE DIGITAL ASSETS TRAIN HAS LEFT THE STATION

Announcer 00:00

Thank you for joining us. Please welcome the panel to the stage.

Michael Piwowar 00:23

Alright. Hello and welcome to the session: "Unstoppable: The Digital Assets Train Has Left the Station". My name is Mike Piwowar,and I'm the executive director of the Psaros Center of Financial Markets and Policy at Georgetown University, and a senior advisor here at the Milken Institute. Digital asset markets are undergoing a significant transition. What was once a hobby for crypto enthusiasts is now a diverse ecosystem that includes trillions of dollars of investments by sophisticated firms. Our panel of experts represent the sophistication and diversity of digital asset market participants. They are the architects building our financial future. But before we explore the future, let's start with where are we and how did we get here? And by we, I mean each of our speakers individually as well as the collective 'we' as market participants in a multi-trillion-dollar industry. Now, all of our speakers come from traditional finance backgrounds. And for each of them, I have two overarching questions: How did you become interested in digital assets? And from your perspective, what have been the major changes that you've seen in the digital asset markets in the past five to 10 years? Brett, let's start with you. Coinbase has been part of the evolution of digital asset markets from the beginning. And what began as primarily a retail crypto trading platform has evolved into a diversified digital assets financial services firm. Your title, co-CEO of Coinbase Institutional, speaks to that evolution. So tell us your story and give us the Coinbase perspective on digital asset market development.

Brett Tejpaul 02:00

What a warm intro. Thank you so much. So, I was at TradFi—this is really loud, no? JPMorgan for my first 10 years, and Barclays for my next 17 years. And so I learned a lot during the financial crisis. In fact, I was managing global businesses, eventually all the businesses in markets across fixed income, equities, loans, public, private, et cetera. Went through the financial crisis in 2008 and still spent many years putting Barclays back together again. With the wave of new regulation, I spent my career always on the forefront of derivatives and structured products and always the new thing, opening up new asset classes to institutions. When Coinbase came knocking, truth be known, I was actually a bit reticent to even consider it. I had looked at crypto and dismissed it as not ready yet. And Brian—after having met Brian, I said, "Well, I think he's taken whatever vision I have of innovation in the future and he's supersized it." And it came with a commitment from him to actually build things from scratch. So I started six years ago. Today, my job's evolved into three things. I run four exchanges. We have a US spot exchange, a futures exchange here that actually trades 24/7, an exchange in Bermuda that trades something called perps—which you all need to know what that is—and an options exchange that's principally based in Dubai. Those are all the places, the marketplaces.

The next thing is the prime business, and it's just like, you know—it's a prime brokerage business, so you can buy, sell, store, stake, finance. You can trade our complete set of products, and you can get margin efficiency, capital efficiency. And then the last platform is a small but hopefully growing asset management business. To get to where we are today, I used all the lessons learned from the financial crisis and building things properly. And so I was really the slowest horse in the race in the first couple of years because all I had was custody, and then I incrementally added things. And if you all remember, we went public and we had the main suite here. We were all the rage. There were other firms that were throwing products out quite quickly, and I couldn't figure out how they were doing it. And well, we found out how they were doing it later. Unfortunately, that burned a lot of capital. So I kept building slowly and building under a regulated umbrella. And so having spent my whole career bringing regulated institutions into this world, I built things in the proper way, so they were all separately capitalized, they were all regulated, and we earned the trust of our long invest client, which is Grayscale, sitting right next to me. And now we're lucky to have 90 percent market share in the US ETF business. We've got five of the top 20 banks in the world on our platform. So we've come a really long way. The last thing I'll say is that the catalyst that brings us to this moment—that probably got the title of the second wave or the train's left the station—is actually the implementation of the GENIUS Act. So when the GENIUS Act was approved, and soon we'll have a market structure bill, that was the moment that the big banks, financial institutions, payment providers, all the businesses that do a combination of retail and corporate payments have recognized that this is the moment. Jamie Dimon even has said, "Oh, I've always been blockchain, not Bitcoin," but this is the moment that all the payment infrastructure gets radically changed. And so that's the moment that the second wave of my institutional business is growing by using all the things we've built, wallets and staking and custody, and providing it to you all to then in turn share that to your clients. Sorry, that was a long intro.

Michael Piwowar 05:54

No, that's perfect. Thanks, Brett. So let me turn to Tom Lee. Tom, you're a well-known macro strategist, nearly 30 years of experience in macro strategy and equity research. And last year, you were appointed chairman of Bitmine Immersion Technologies. So what led you to this opportunity, and how has Bitmine evolved along with digital assets?

Tom Lee 06:15

Thank you, Mike. Many of you may know me as Fundstrat's head of research and the founder of a macro strategy firm. Prior to that, I was the chief strategist at JPMorgan. And for most of the last 10 years, since 2017, our work in crypto has been focused on Bitcoin as digital gold, as a store of value. And our work showed that over 90 percent of the price of Bitcoin can just be explained by the number of wallets and activity per wallet. Last year, we noticed a change in the digital asset market, and this is before the GENIUS Act, but it really was the proliferation of stablecoins. And so for us, that was the ChatGPT moment for digital assets, because we realized stablecoins were really the front spear of a transformation of the financial system, and that led us to become quite bullish on Ethereum. So in June of last year, I partnered up with MOZAYYX, Xuan Yong and Matt Gefter to do a transformation of a company called Bitmine. And the goal was to accumulate Ethereum because we thought that this was going to be really the settlement layer for the future financial system, and it had a very big tenure run rate similar to Bitcoin, because when we first talked about Bitcoin, it was under 1,000. Currently it's 80,000, and so we think there's similar exponential upside for Ethereum. And that's when we created Bitmine, which today now is the largest holder of Ethereum in the world with over five million ETH, which is roughly 4.3 percent of the total network supply. And our staking revenue, and we actually stake about 80 percent of it, generates close to $300 million a year today. So just about a million dollars per day.

Michael Piwowar 08:16

Wow. That's great. John, let me come to you. John Koudounis is the president and CEO of Calamos Investments. You're a global diversified investment firm offering an array of strategies in traditional asset markets like equity, fixed income. You've been a pioneer in convertibles and alternatives. How did you find your way to digital assets? And for traditional asset managers, how important are digital asset markets?

John Koudounis 08:43

Well, Bitcoin was very interesting to me, and I'll tell you why. One of the reasons that got me going was I was vacationing, actually, in Greece, with my family in late June of 2015. And those of you that remember during that time, Greece and Italy and Portugal were having some economic issues. And they had installed capital controls while we were there. What does that mean? It means that at that time, it didn't matter how many euros, how many millions of euros that you may have had in your bank account, you're only allowed to take 60 euros a day. And in some countries, like Cyprus, they were actually taking your money. How could this happen? And it's not a third world country. And these capital controls, they weren't there just for a day or a week or what have you. Now, they eased up a bit, but they lasted for a good part of four to five years. So when banks can control your money, when you try to close on a piece of property or anything, when you look at the banking system, having run one of the largest banks in the world, it's very antiquated. So when Bitcoin came around and you're able to control your own asset, trade it 24/7, unlike the SWIFT system—if you're trying to close on something and it's Friday afternoon, good luck. The bank's going to keep your interest over the weekend. Right? And then try doing it after hours. So it was an incredible type of product with incredible technology that was something that was, to me, very easy to buy into. And then afterwards, you hear about people getting debanked, and it became political. And so even more, that was something that we need to get involved in this product because I really believed that it was going to be something that everybody at some point is going to have. And sure enough, it's starting to become mainstream.

Michael Piwowar 11:00

Thanks for sharing that story. So Peter Mintzberg, let me come to you. You're the CEO of Grayscale, a leading digital asset management company, probably best known for leading the way on crypto spot exchange-traded funds. You literally had to sue the Securities and Exchange Commission to allow offering exchange-traded funds in the last administration. So what's your personal story about how you came to the digital asset markets? And in the past few years, we've seen a rise in new platforms, protocols, and technologies. Give us a sense of the size and scale of the market opportunity that's grown out of those digital assets.

Peter Mintzberg 11:37

Well, first of all, Mike, thank you for having me. It's a pleasure to be here with my fellow panelists. It's interesting. It seems like all of us up here came from traditional finance into digital assets. In my case, the short answer is growth. So my career has been about 20 years in asset and wealth management. I was mostly head of strategy and head of M&A. I was at Goldman before Grayscale, and it was very clear to me that digital assets was going to be the next wave of growth. That's essentially what you do as a head of strategy in an asset manager, trying to see where growth is going to come from. I wanted to be part of it, and I joined Grayscale. For me, that was a no-brainer. Grayscale is the largest crypto-native asset manager in a business where scale matters. It is also the one with the longest track record in the asset class in a business where clients value longevity quite a bit. So I joined about a couple of years ago. And I'll also say, Mike, that was kind of the analytical answer to your question, listening to John talk about Greece. I'll also say there were personal reasons if I were to connect the dots backwards. I grew up in Brazil. My early career was in Brazil. And I remember going to the supermarket early in the morning because groceries were cheaper than in the afternoon with hyperinflation. I also remember being on my first year out of college and having my assets, whatever savings I had one year out of college, confiscated by the government together with the rest of the population. So currency debasement for me is not a concept, it's a memory. And I feel very thankful to be working on asset class today that aims to protect investors from the challenges and bad acts that I experienced myself firsthand. And that's why all of us at Grayscale wake up in the morning.

Michael Piwowar 13:32

Thanks for sharing your story too. So Mary-Catherine Lader, let me come to you. You're currently the CEO of Native Markets, a stablecoin company. And you were previously the president and COO of Uniswap, a leading decentralized finance, or DeFi, crypto exchange. So tell us about your journey. What first led you to digital assets in the DeFi space, and then what has led to your increasing interest in stablecoins?

Mary-Catherine Lader 13:58

So I also became interested in changing the financial system during the financial crisis. I was a distressed debt investor at Goldman Sachs Special Situations Group during the crisis, and felt like inevitably in the course of my lifetime, the rails of the financial system would change, that the internet should change the way the system operates to some extent, make it cheaper, more instantly global, more accessible. And then I bought Bitcoin in 2011. It was just sort of a passion and a hobby of mine. I started digital assets at BlackRock in 2015, which was very early. There really wasn't much to build on Ethereum. It was very hard to build even—I mean, we did a CDS, a credit default swap, Ethereum smart contract. It was expensive, it was slow. But that piqued my interest. I built different fintech businesses at BlackRock that were all in the direction of trying to have cheaper, faster and more accessible financial services. So a wealth management business, trying to change the user interface to help people make better savings decisions and investing decisions, sustainable investing, trying to think about the cost of capital and data, and really felt like if you want to make a real change in the system, you have to change the rails to really change incentives, and that brought me back to crypto. So in 2021, I joined Uniswap, which was 10 people, but had tremendous product-market fit. It's a smart contract protocol that basically disintermediates market makers and exchanges, so you can have peer-to-peer transactions for any asset that's represented on Ethereum, any asset that's represented as a token. And as for the last four years, that meant crypto-assets. Today, as digital assets are expanding into other asset classes, that market structure, I think, can be much more broadly applicable. And then last summer, when the GENIUS Act passed, I decided to leave Uniswap and start my company, Native Markets, because I agree with what's been discussed and the importance of stablecoins. This is a platform shift that can start with payments and stablecoins. We are now living through this regulatory update, but there are some important product changes and also market structure changes that have to happen to deliver on the promise of digital assets. Stablecoin transactions still have somewhat high transaction fees. I think they need to be free. They still make it difficult to have levels of customized transparency and privacy. That's very important in most financial markets. So there's a bunch of product innovation on very basic elements to make stablecoins more competitive with what you can do in off-chain or traditional financial services rails, and that's like a fundamental building block that's necessary for collateral, it's necessary for payments, it's necessary for institutions and retail, and so that's what we're building now.

Michael Piwowar 16:22

So, thank you, Mary-Catherine. So, you started moving away from the past and so a little bit into the future, and that's what I'm going to go to next. So where are we going? So, let's talk about the future of digital assets, and I'd like each of you to look into your crystal balls and tell us what you think the future looks like for digital asset markets overall, and what success will look like for your firms in the next three to five years. And Mary-Catherine, let me go ahead and just start with you. So, what do you think the future holds for stablecoins and where does Native Markets fit in that future?

Mary-Catherine Lader 16:56

So, I don't think the future is as certain as posts on LinkedIn would suggest. I do think that it depends on the people who are building, and it depends on the companies that choose to collaborate to bring all these products to market. So, for example, for digital assets to realize the potential people are so excited about, like I said, we do need to have stablecoins be less frictional than they are today. I'm optimistic that's going to happen. So I think it means free transaction fees, free mint and redeem. The two biggest players today don't offer that. It means that you need to be able to go between a bank and a brokerage account onto a blockchain much more easily and seamlessly. We need to have private transactions or at least some selective transparency. So I think those are coming, but they aren't certain yet. What is almost certainly happening now is a shift to 24/7 markets. You see the competitive pressure that digital assets are putting on other asset classes and other market infrastructure. So I think we'll start to see that sooner. But as Chair Selig said before us, that's complicated depending on what the asset class is. So I think some of the excitement is dependent on a lot of building and also, frankly, competitive collaboration to come to light.

Michael Piwowar 18:03

Thanks. So Tom, let me come back to you. You're a longtime research expert. Your success has been driven by how you interpret data and statistics. So give us some numbers that you think are helpful in predicting the future of digital asset markets. What are some of the emerging trends you're seeing, and how do you see Bitmine capitalizing on these trends?

Tom Lee 18:25

I do think digital assets are really one of the most important enablers of what looks like to be an AI world. Elon Musk recently said future currencies will be based on mass and compute. And what he means by that is that what's truly scarce in the future is going to be silicon compute and then the power to operate them. Digital assets can only serve as that settlement layer because it turns both of those things into software that can then be used in real-world transactions. Imagine trying to turn gold into compute, for instance. I think the insight of what's going to happen happened already in many industries that were disrupted. For instance, in the mobile industry, when I started covering that industry in the early '90s, the biggest companies in media and telecom were AT&T, which was long distance, and there were local phone companies, and there were cable businesses. And wireless was a startup that most people thought would never survive and actually be bankrupt. Today, wireless companies are bigger than the combined size of local telephony, media, and gaming. In financial services, I think the same transformation is going to happen today. Today, the biggest financial institutions in the world are banks. JPMorgan makes $50 billion a year. The fifth largest makes about $10 billion a year. Last year, Jane Street, which is a trading firm, which is just moving the value of assets around, earned $40 billion, which is almost as profitable as JPMorgan with 3,000 employees, compared to 300,000 for JPMorgan. And Tether, which is the largest stablecoin operator, is going to earn somewhere between $12 and $20 billion, which would rank it as the third largest financial institution in the world with about 300 employees. Bitmine wants to enable this transformation on financial infrastructure by holding Ethereum, which we believe is the settlement layer there. But of course, another big future is compute and agentic activity. AI agents aren't necessarily going to want to use traditional rails like Visa, MasterCard, ACH. They will carry private wallets, do micropayments with the size of the payments smaller than 16 digits. Governments want to collect tax payments, and we want to have composability and decentralized identity to verify these transactions. And again, that's why you need smart contracts. So to us, we think Bitmine will enable and be a platform by holding a lot of Ethereum, working with the DeFi community to help enable both financial transactions and agentic activity.

Michael Piwowar 21:18

That's great. Peter, you talked about how Grayscale led the way for crypto spot ETFs. Where do you see digital asset markets headed, and what's the next frontier in digital asset markets for Grayscale, and what's the next major innovations in your mind?

Peter Mintzberg 21:33

Thank you, Mike. It's true Grayscale led the development of ETFs, crypto ETFs, but it goes beyond that. So the company has a track record of 13 years in the space, and for every year of our existence, we launched a first to market, starting with the first publicly traded Bitcoin fund, the first publicly traded Ethereum fund, the first ETF that holds multiple tokens, the first ETF that stakes, and so on. So, we're going to build on that DNA of innovation on the forward. And I'll say for 2026, we have three priorities. Number one is finding more interesting, compelling tokens and technologies out there and offering them to our clients in the appropriate format or wrapper they want to consume the tokens. The number two is launching more ETFs that hold multiple tokens and have different weights or allocations across these tokens. And the third is active management. The Blackstone of digital assets has not been invented yet, and we see that there is an enormous amount of opportunity for alpha creation in digital assets relative to, say, public equities today. Our clients are asking for us to get into the active business, so we're very focused on this in 2026.

Michael Piwowar 22:52

Thanks. So John, as I mentioned at the beginning, Calamos already offers a broad array of products across a number of asset classes. So for investment firms like yours, what does the future of digital assets look like? What products—mutual funds, ETFs, closed-end funds, interval funds, et cetera—are most suitable for investments in digital assets?

John Koudounis 23:13

First of all, I think that digital assets—let me be more specific to Bitcoin because that's what we play in—it's unstoppable. That's the name of the panel, but it really is. If you look at what's happening here, if the US government is using Bitcoin for part of their strategic reserve, right? You see stablecoins now getting adopted more in regulations. And then you look at the ETF market and whether it's approximately 100 billion in size, which is actually nothing compared to where this is going. If you look at the assets that asset managers control for retail, the number is astonishing. It's $146 trillion. And do you know how much Bitcoin they recommend to their clients? 0.008. Nothing, because they can't, because compliance won't let them, because it's way too volatile right now. So at Calamos, what we've done is we've been able to create products in Bitcoin where they're 100 percent protected on the downside, 90 percent protected, and 80 percent protected. And why did we do that? Because people now are scared of the volatility. They can't hold it in their portfolios. Advisors won't advise for people to get it. But we looked at a portfolio and said, "Hey, if you buy 100 percent protected, the volatility is like a money market or cash, or even AAA corporates." You could put some in your portfolio with a lot more potential upside. We have cap rates, and when we launched a year ago, those were around 11.5 percent, where you cannot get in a money market. Then we launched 90 percent protected, which the volatility is similar to commodities or gold. And if you look at the record, our cap rate when we launched was mid-20s upside percentage. Gold has not returned that over the course of the last 12 years, where Bitcoin has done a lot more than that. And then if you look at 80 percent protected, which we did, the volatility is similar to equities, which are a big part of most portfolios. So you look at that, and the upside, when we launched a year ago for that, the cap rate was in the mid-40s, and up to almost 50 percent. So you have a lot more upside. What's the S&P in the last 10 years? Returned just under 10 percent. The upside is much higher. The volatility is the same. You transition people who can't go long just Bitcoin into the space by buying some of our ETF products. Now, how big is the space going to be? We haven't even talked about the transfer of wealth. And if you look at the generational transfer of people like Baby Boomers like ourselves, we hold less than 5 percent in Bitcoin. You look at the Gen Z, they hold closer to 20 to 25 percent. All right? And then the Millennials hold between 25 to 35 percent. They're much more adapted to buying Bitcoin. So when you have the numbers—approximately $124 trillion that are going to transfer of wealth in the next 20 years into the hands of people that want Bitcoin, that want to diversify their portfolios—it's going to be a huge product, it's going to be huge, and it is clearly unstoppable.

Michael Piwowar 26:55

Wow. That's some good statistics and really neat innovation you guys are doing there. So for the record, I'm Gen X, not Baby Boomer. Okay. Wanted to put that out there. Brett, let me come to you. So Coinbase, you guys sit right at the center of the digital asset market ecosystem. You interact with virtually every market participant. What are you most excited about in the next three to five years, and what projects can we expect from Coinbase in the near future?

Brett Tejpaul 27:20

So, the best answer to that question of what the future will bring is good for Elon Musk and Brian Armstrong and the real visionaries. I'd rather answer the question like this, which is just taking stock of the present, in the here and now, of what's actually already happened. So just the things that pop in my mind, because everyone always, in crypto panels, talks about what's going to come. I'd rather just land it with you in terms of what's actually happened. Alright. So what's actually happened is—we talk about this thematic of democratization of assets. Okay. So Mubadala—does everyone know who Mubadala is? I hope so. We just did a tokenization of their credit fund. Okay? It's actually funding this week. We announced it in December. So what that allows them to do is take a token, which represents money invested in the Mubadala credit fund, which has trophy assets, which are not accessible to rest of world except for the sovereign wealth fund. And they're going to have an opportunity to actually open that investment up, at first to those in the UAE. That's a big deal. Okay? That happened. Another thing that's already happened, and most people haven't registered, is that notwithstanding any headlines that come out of the corporate office at JPMorgan, they're an incredible firm that's doing incredible things. And so one of those things is that JPMD, which is a JPMorgan deposit—which represents a dollar in a JPMorgan account—they've actually put that on a public blockchain, not a private one controlled by JPMorgan. And they've allowed customers—actually their clients—to actually transfer JPMorgan deposits in between themselves. Okay? So what's important about this, is a couple things. The crypto infrastructure now can transfer one cent in one second anywhere in the world. So just think about the world we live in now. We already heard about capital controls. We have all sorts of different things. And I won't go through the whole of what exists today in terms of how long it takes for a payment to get from X to Y. But in today's world, right now, I'm helping facilitate things like the purchase of crude oil that can transfer across borders instantaneously enabled by stablecoins. That's already happened. Okay?

Another thing that already happened, again, through JPMorgan, was that we had an issuance of corporate debt. It happened in Abu Dhabi. It happened with Galaxy, who happens to be another crypto firm. They issued corporate debt. Coinbase, along with others, bought some of the debt. We put it in our treasury portfolio. We custodied the asset. And very interestingly, to facilitate all this, you had to pick a blockchain. Again, JPMorgan, in this case, selected Solana. Okay? Not operated by JPMorgan. And to settle the trade, we used a stablecoin, USDC. So I'm trying to help you put together the world that you see around you. You had Larry Fink say, "Everything's going to be tokenized." You've had the New York Stock Exchange, NASDAQ, others say, "Everything's going to be tokenized," and you're waiting for it to happen. I'm telling you it's happening. It's happening right here and now. So you don't need to look that far into a crystal ball to actually appreciate how quickly your world is being disrupted. Last example. I won't say who, but I'll give you a hint: in the top five payment providers in the world, okay? And you probably won't guess—I don't want to lead you to a guess—but not exactly what you would say at the forefront of technology, okay? This firm's decided that their entire payment system globally—one of the biggest top 20 banks in the world that facilitates payments—is going to more quickly adopt blockchain technology to facilitate those payments in order to keep their corporate clients and their retail clients and make life good, fast, easy, efficient, and keep their business and continue banking. This is in the process of happening. So you don't really need to look very far in this world to understand that the ground underneath your feet is changing, and it's changing really fast. So this is the year, this year, that finally—I've been talking about payments since I joined Coinbase six years ago, but now we actually have the infrastructure. I told you we were externalizing that when Amazon went to AWS and offered their services. We're doing the same. And this is the moment, this is the year that so many of your businesses are going to start seeing giant changes in your revenue mix, your ability to retain clients, because those that adopt this technology first for their core businesses are going to be the long-term successors.

Michael Piwowar 32:10

Thanks, Brett. So let's stick with you for a second. So in your first answer, you said "perps" and everybody needs to know what those are. I assume you don't mean perpetrators like in the law enforcement context, right? You're talking about perpetual futures. Could you just spend a moment on what perpetual futures are and why you think that's so important?

Brett Tejpaul 32:29

Okay. Personal anecdote—it's not on brand, but I'm just going to say it anyway—but I got invited to Snoop Dogg's compound yesterday. Surprise invitation. Perps is a different meaning over there. Okay, perps. So anyone that's ever traded futures—dated futures—all of you have, what happens? You have a roll date, okay? You have a roll date that comes up, and it's on, whatever, the 15th of March, and at that point, you have a new price. You have to roll into a new contract, okay? So the funding rate, okay, it's the cost of money, the cost of keeping that capital. You have this event, okay? And there's this weird stuff that happens in markets. The price of futures changes, and there's an embedded friction cost of keeping your futures trade on. So what happens to interest rates and collateral availability, all that stuff, you have this cost to keeping a long or short futures position on. The biggest innovation that came from crypto came in the form of a perpetual future. So what that means is you have a perpetual contract that doesn't end so long as you have whatever initial collateral you put up for it. So there are no roll dates, okay? So this contract, if you're not excited, you should be. If you're a derivative trader, you should be. This is the single most actively traded derivative there is in crypto. In fact, it trades at like 100X what the volumes are in spot. We've launched perpetual futures on our Chicago exchange, so you can now begin to trade perps on things like gold and futures and other things. Perps are now going to come to the traditional capital markets. It is the preferred tool of anyone that is a TradFi or a derivative trader, understands what I'm talking about. This is the tool that you will want to adapt to actually run risk, whether you're hedging, you're going long, you're doing anything, okay? And that contract allows for capital efficiency as well. So if you have a bunch of capital sitting on different futures exchanges, they don't net with each other. So at Coinbase, what we're doing is in one place, you can access the ability to buy spot or options or now perps, so you know exactly when you're going to get liquidated on your position. You have a chance to up your capital, and we can do position recognition, so I can see a long and a short, and they net each other. Crypto, up to this point, has been enormously capital inefficient. You have to pre-fund your trades. There's a big cost to cash of actually deploying a strategy. So perps gives you the ability to tailor up, dial up, dial down your leverage. There's different contracts with different leverage in them, and it gives you the ability to sort of know what your funding rate is as you go into the contract. So it's a little bit of a nerdy thing—But I'm just telling you that perps is going to be the thing. It will be the thing that all of you will trade the most in a few years.

Michael Piwowar 35:18

Mary-Catherine, did you want to jump in on this?

Mary-Catherine Lader 35:19

Yes, I think that's a great example of how just having this 24/7 global infrastructure has enabled perps to finally come alive. It's a Robert Shiller concept. It's been around for a long time, but didn't really take shape in traditional markets. And all you need is a stablecoin and a price. So it's become a fast path for tokenizing real-world assets, as people in crypto and digital assets say—which is really just other asset classes—that now it's much easier to create a derivative on gold or oil than it is to have other representations of that asset or spot markets. And now I think if derivatives are leading the way, I think spot markets will start to follow and lots of other asset classes.

Michael Piwowar 35:52

So, I mean, you all are painting a very bright future for digital assets overall. But you all have made the transition from TradFi to digital asset markets. There's some still in the community, the TradFi community, that don't see things the same way. And even within the crypto community, there's all kinds of multiple factions that don't even agree on what DeFi means. So I want to ask you sort of how do we get to this future that you all are talking about? So in an ideal world, how do you see TradFi and crypto interacting, and how can these worlds effectively converge? Tom, let me come to you first.

Tom Lee 36:32

Well, one of the ethos of crypto is "code is law." Because the idea is you're turning assets and money into software, into code, and into contracts that settle, and this is very easy for intelligent and qualified people who securely manage this information can trade asset value. But the problem with that, of course, is that crypto is a bearer instrument, meaning somebody who loses their private keys will lose their money. And there's many famous cases of that. And in fact, on the Bitcoin blockchain, the estimate is as much as 20 percent of the Bitcoin that has been created is actually lost in that manner, even including death. Because if someone dies and no one has access to those private keys, that Bitcoin is now lost with that death. And as a result, crypto doesn't have great protections for novice users. And so I think it is one of the reasons you see some big exploits happen, and there's already been two very large ones recently. One was the Drift Protocol, and that was a couple of hundred million dollars. And then more recently was the Kelp DAO, which had basically a problem with their code and a couple hundred million dollars was lost. All of this to say that the TradFi industry has done a very good job of working on consumer protection. That's why I think Michael Selig's job is incredibly important because crypto solves a lot of problems, but it really needs to be not only a level playing field, but protect consumers and of course, keep scammers and bad actors out and protect people's wallets.

Michael Piwowar 38:23

Thanks. John, love to get your perspective on this.

John Koudounis 36:26

Well, like everything else, it's evolving, right? If we go back to the history, what's really unique about crypto: most innovative products in the past have started in institutional markets and then have gone into retail. Whereas crypto, for the most part, started in retail, and then it's going into institutional. And now you have people like Larry Fink, when they're talking to Mubadala or anywhere else or any of the big sovereigns, it's not necessarily, "Are you buying Bitcoin?" It's, "How much Bitcoin are you buying?" And that's a fact. That's happening right now. Those are the conversations you guys are having. Those are the conversations that I'm having. Now, to what Tom spoke about, like everything else, it evolves. And there were definitely—at the beginning, it was tough putting crypto—Bitcoin—in your wallet and losing it and everything else, and doing it, and the amount of steps. It's become a lot easier. And unfortunately, you guys at the other side were the leaders in doing that. But now it's become adopted. Then Fidelity came in and made it a little—I don't know how much easier—but they're also in the game. And now Schwab is about to enter the game where they're going to hold Bitcoin, too. And so, like everybody else who's second, third to the thing, it's going to become a lot easier and adopted a lot quicker and a lot less opportunity for Bitcoin to get lost, whether someone dies and everything else. So that's going to evolve. It's evolving in front of our eyes, and it's going to be a lot smoother tomorrow than it is today.

Michael Piwowar 40:11

Yeah—Brett?

Brett Tejpaul 40:13

I think the best example—I'm going to totally front-run your answer, by the way. I'm going to talk about your business a lot. So the best example of the old world and the new world coming together is actually

Peter's business. So you have to think of something to say. I'm giving you time. So he lobbied for an ETF to come into the market. So all of you now, everything that was just discussed has been solved for, because all you have to do is go on any one of your private wealth platforms and just press a button and subscribe to an ETF. When you do that—the Grayscale ETF. So if you pick the Grayscale ETF instead of IBIT—I promised I wouldn't say BlackRock—problem solved. In that moment, what you have is actually you have a T+1 experience where you've got some cash in your brokerage account, you subscribe to a fund, it settles tomorrow. What's going on in the background is that at that moment that Peter gets subscriptions for the Grayscale ETF, or his ETH ETF, they're in-market immediately. And they're buying in a great way in that moment, real-time, instant settlement, into Coinbase custody. You don't have to worry about your keys, and all your estate planning and all your wills and all that stuff is solved for. So if you subscribe through Peter's product, you don't have to deal with any of this stuff. It's the same thing. It's the same experience as buying a stock. So that's the best current example. Now, was it successful or not? I don't know. Does anyone know the answer? The ETF launch was the most successful—the Bitcoin ETF launch—the most successful launch of all time, ever. Ever. Individually for BlackRock, individually for all of them. It's the fastest-growing product ever. So we debated about whether retail's interested or not. I think the proof is in the pudding. It's right in front of you. So that's example one. Example two is old world, new world. Remember what I said before about stablecoins and payments. So the most active payment platforms in the world—either those that just do payments—PSPs they're called—or maybe really big retail firms that do an enormous amount of retail activity—are going to begin shifting and having a button where you can say, "I can actually execute." You may not know it's actually crypto or blockchain behind it. That's the cool part. So if we do a really, really good job—and it's in the process of happening now—you're going to actually be able to instantly buy the thing or instantly settle money, instantly message your friend and have money transfer borders. It's happening right now. So it's a great example of the existing world we live in, the future we're coming in, and having an amazing experience where you don't have to worry about all the things discussed before.

Michael Piwowar 43:13

So you didn't just front-run Peter, you also front-ran Mary-Catherine, too. So Peter, go ahead.

Peter Mintzberg 43:19

I would say this topic of adoption is a big thing in digital assets, and my perspective is, the governor of adoption is twofold: access and education. Access has, for many years, been a real problem in digital assets. The interface is clunky. The taxonomy is different. Most mainstream investors do not want to spend time or deal with that. Now, that problem has largely been resolved now with the ETFs that Brett was talking about, or digital assets treasury companies like Tom's firm. Any investor with a brokerage account today can access the asset class. The current focus is, at least for us at Grayscale, education. So over the last two years, for instance, we've done road shows throughout the US with hundreds and hundreds of advisors, helping them understand what this asset class is all about, how to incorporate asset class in their clients' portfolios, how to talk to their clients about this asset class, giving them product marketing, analytics on how much is accretive to risk-adjusted returns, among other things. And that is the type of work that we're focused on now. It's work that takes a long time, but it's the type of work that moves the needle from curiosity about digital assets into sustained adoption.

Michael Piwowar 44:41

Thanks. Mary-Catherine?

Mary-Catherine Lader 44:43

Well, I think the convergence is not just between TradFi and digital assets, it's also fintech. So I think you're now seeing whether it's Robinhood, Coinbase, New York Stock Exchange, or something like Hyperliquid—the decentralized platform for perps—people are launching pretty similar. I mean, the roadmaps and the announcements start to sound reasonably similar, and access is a big theme, including private market access. We haven't talked about that yet, but there are now perpetuals on private stocks that there's huge demand for. There's a number of companies with eagerly awaited IPOs that retail want access to and institutions want access to. So the convergence is happening very fast. I don't think it's a question of what's going to make it happen. The last thing I did at Uniswap before I left was a partnership with BlackRock, where they're using Uniswap's automated market maker to basically make markets in their tokenized money market fund. And so I think that there's plenty more coming, but it's happening extremely quickly. And to me, the question is: Who's going to benefit from it? How will it benefit users? Will we get access to more products? I think it's definitely happening—more financial products, more of a sort of convergence between what retail can access relative to institutions. But are they going to be cheaper, more transparent? And will we solve some of the consumer protection and risk management problems that we've been talking about?

Michael Piwowar 45:59

Alright, great. So for our last round of questions, I want to ask you about artificial intelligence. And for each of you, what challenges and opportunities does AI present in the digital asset markets? And we'll just go down the line here. John?

John Koudounis 46:15

Look, I think that we're using AI in every aspect of our business, and I think even AI is used in mining Bitcoin to ways to distribute it in terms of which clients are more apt to buy it and whatnot. So, in everything we do, AI is going to be integrated. It already has. It's just the beginning.

Michael Piwowar 46:44

Tom?

Tom Lee 46:45

I think AI, of course, is a big productivity story. I think that's a theme here at Milken, because AI is probably adding at least 2 percent to US GDP growth each year for the next few years, which is miraculous. But the dark side of AI, of course, is that it is now making it harder to prove what human work is. So, as you know, bots are now the largest source of traffic on the internet. They're the largest creator of websites. They're the largest source of emails. They are now taking over prediction markets—over 70 percent of trading—and even the majority of stock market trades are largely non-human systems. And so I think that one of the things that blockchain will solve is proving a human was involved at some point in that chain. Probably the best project out there today is Worldcoin, which was created by Tools For Humanity. But they have already proven that they can do multiple levels of proving human is part of that transaction, whether it's proof of human, proof of identity. In fact, I believe Zoom is going to be doing a system-wide rollout of Worldcoin's proof of identity, and that means when you have interviews, for instance, and you're interviewing a candidate, it's not a North Korean engineer that's about to hack you or an Instagram person you're following is not 800 pounds. And so I think it's going to really protect and make human endeavors even more valuable.

Michael Piwowar 48:32

Wow. So we have to get more sophisticated, so the bots are able to find crosswalks and bicycles and the captcha things, and we have to improve that?

Tom Lee 48:38

Yes. And we do want the robots to pay taxes, which of course, blockchain will collect the taxes so that people can actually have a standard of living improvement.

Michael Piwowar 48:47

That's great. Mary-Catherine?

Mary-Catherine Lader 48:48

Yes, I think the simultaneous explosion of AI and on-chain markets for digital assets is going to transform financial products. I think we'll have much more customized actual financial products. I think it'll change execution and then the way that, whether you're a corporate treasurer or a retail investor, the way that you interact with money. So I think it will totally transform how we interact with portfolios—again, whether you're managing the risk of a company or your personal finances. So, I also think agentic payments get a lot of buzz. They haven't really taken off yet, because the large language model stack and the stablecoin stack haven't really merged. But I think that'll happen in the next month, and will start to grow a lot.

Michael Piwowar 49:29

Peter?

Peter Mintzberg 49:30

My view is that digital assets and AI are made for each other. I think it's a match made in heaven. I think if we fast-forward a few years, we're going to see on the asset side most financial assets tokenized. We're going to see assets that not everybody can invest in today, tokenized and available for anyone to invest. And we're going to see assets that are not investable today become investable with tokenization as well. On the other side, we're going to see portfolios that are generic today, or model portfolios, or risk-based portfolios become portfolios of one. AI is going to be able to create for you, Mike, a portfolio that is just yours, and it caters to your risk profile, your needs, your goals and objectives. It's not going to look like anyone else's profile. And the bridge between these two things will be—whoever sorts that problem, the bridge—will own the next generation asset management business.

Michael Piwowar 50:30

Wow. Brett?

Brett Tejpaul 50:31

Okay, so three quick examples. This one happened last weekend. It actually hits to your human point. I did one of these things, came off stage, and I had sort of a very high-profile person—which happens quite a lot—say XYZ, "And I'm interested, and can you help me invest some money?" So I said, "Alright, that's fine. You can go to my high-net-worth team." So I call Nico in Miami and I say, "Nico, I've got this great referral. It's coming to you. It's a really important person. I want you to handle it. Seems like he's kind of motivated to do something sooner than later." So I hand it over to Nico, do the intro, send it off to one of my guys. It's Saturday, so he's like, "I got it, Brett, I do this all the time." And he does the account opening, he does a short call, and then he gets a prompt and says, "Exactly how does custody work, and what are private keys, and da, da, da?" And he's going, he's going, he's going, he's going. At 5:00 in the evening—so he's been at it all day, hasn't done anything—this guy on the other side just keeps coming back. There's no answer to the end of his questions. He kept going and going. It's 10:00 at night and I said, "Dude, I've never seen this." He said, "I've never seen it before either." I said, "Alright, take a break. Let me text the guy and see what's going on." Turns out he had created a Claude bot, and his Claude bot was conducting his diligence, and my guy was talking to a bot all day long, sweating bullets, answering questions, copying the right legal answer for all the things from the documents into this thing. And all of a sudden, we're trying to apply AI to client service elsewhere, and I'm on the receiving end of this thing. So AI's happening faster than, again, anyone can appreciate. Last thing I'll say—so the corporate answer AI Brian will give you is that a lot of the base code can be done quite quickly and faster. It needs to be double-checked, verified, all those things. So there are efficiencies, particularly at the junior end for our Coinbase coders. So we found a lot of those. But the thing I'm excited about is Coinbase Advisor. Coinbase Advisor is in the process of being launched, and it'll be a customized AI that has certain limitations and everything, and it'll begin to actually serve up recommendations for not just "how do I refresh my KYC," but "which of these strategies should I employ?" "What's my risk limits? How do I think about it? Where am I in the risk spectrum?" It's really cool. So I'm excited for that, and my guess is that thing will take off. It'll be the fastest thing to probably take off for us, faster than maybe I can keep up with it.

Michael Piwowar 53:11

Great. This is an end to a fantastic conversation. Brett, Peter, Mary-Catherine, Tom, John, thank you so much.

All panelists 53:11

Thank you. Thank you.

Announcer 53:23

We hope you enjoyed the discussion. Be sure to utilize the mobile app to stay up to date on the latest programming changes. As you exit the room, please remember to bring your belongings with you.

Disclaimer: This transcript was reviewed by individuals for accuracy and serves as a reference. However, it may still contain errors or omissions. Please verify any critical information independently.