Demetri Kofinas: What's up everybody? Welcome the to this week's episode of Hidden Forces, with me, Demetri Kofinas. My guest for this episode is Brian Kelly. Brian is founder and CEO of BKCM LLC, an investment firm focused on digital currencies. He is the portfolio manager of the firm's digital asset fund, a regular on-air contributor to CNBC, [00:00:30] and the author of *The Bitcoin Big Bang: How Alternative Currencies are About to Change the World*.

Brian, welcome to Hidden Forces.

Brian Kelly: Thanks for having me. Great to be here.

Demetri Kofinas: Yeah, it's good having you on. I also must say to the audience, this is the first time I have to say this, this is not financial advice. I don't know what the disclaimer is, the official disclaimer is on podcasts, maybe, Brian, you know. But I want to make sure that that's the case because with our episode on Ari Paul I think we veered very close to that area, and I don't want to misrepresent anything. So this is not financial advice. Don't sue me.

Brian Kelly: Yeah, [00:01:00] or me either. I'm happy to talk about crypto, but when people do invest, as with any other asset, they need to make sure they're doing their own research, make sure that they understand that this asset class is extremely volatile, we're early days. So this is not by any means financial advice, this is just simply my opinion about the crypto market.

Demetri Kofinas: So, what were we talking about before? I wanted to ask you about your background, that is kind of my first question. But let's get right into that because I was telling you that I did some research for you before you came on. I knew that you'd be a sure bet because you're on [00:01:30] air all the time at CNBC. But I heard about one interview, one podcast that you did, you said you've done a couple, and I told you that I think you should do more because you don't hold back, you don't reserve in your talking. That's probably because you're not from media, so what's your background? How'd you get into media?

Brian Kelly: Yeah. So my background is investing. I started as one of those annoying cold callers at Lehman Brothers back in the early '90s. That was a horrible job and a wonderful job all at the same time. I learned an awful lot, but you're making 700 phone calls a day, and it's kind of mind-numbing. But I've been in [00:02:00] and around-

Demetri Kofinas: That's got to be a brutal, brutal, brutal thing to do.

Brian Kelly: I was 19 years old when I started in college. It's brutal. You get a really thick skin from it, and you learn a lot about sales.

Demetri Kofinas: What are the worst things people have told you? Do you remember some of the worst things?

Brian Kelly: You know what, it's not really even that people say bad things, they just hang up on you. This was the '90s, too, and that's very different.

Demetri Kofinas: Late '90s?

Brian Kelly: Early '90s.

Demetri Kofinas: Early '90s.

Brian Kelly: Early '90s, yeah, like '92 or so. This was the big thing, and I was a 19 year old college kid.

Demetri Kofinas: That's kind of right at the recession.

Brian Kelly: Yeah. I was 19 years old. [00:02:30] I saw these stock brokers making all kinds of money by calling people on the phone, and I was just fascinated that, you know, what was going on with it. I loved investments just from the get-go. I've just always been fascinated with it. So to get into a job like that, I just wanted any job that I could get. So I took this job. I did it for a summer and a little bit more after that. It was a great experience, but, boy. I had two phones going at once. I dialed 700 phone calls a day-

Demetri Kofinas: Analogue lines.

Brian Kelly: Analogue lines. [00:03:00] My job was only to get the person on the line. I couldn't pitch investments, couldn't do anything like that. So all I would do is dial. My job was to get the prospect on the line, and then hand it off to a broker.

Demetri Kofinas: You're an Eskimo, you'd break the ice.

Brian Kelly: Yeah, exactly. Exactly.

Demetri Kofinas: So what fascinated you about finance? I mean that's interesting, that's an interesting thing to say, you always found it fascinating.

Brian Kelly: You know what, yeah, I've always just been curious about economics, finance. I've always just been, even when I was a little kid, I always was curious about incentive systems, [00:03:30] right? How do you incentivize somebody to do a job that you might not want to do?

Demetri Kofinas: That's really interesting. That's kind of highbrow for, how old were you when you were thinking about incentives?

Brian Kelly: I was three. I was three years old.

Demetri Kofinas: That's pretty highbrow thought. That's a pretty philosophical, existential idea.

Brian Kelly: It's always fascinated me, right? What is an economic system? An economic system is we have all these jobs that need to be done. Some of us like to do some, some of us like to do others, but what's the incentive mechanism to get all these things done besides just pure pleasure or need, like, "I need food, [00:04:00] I need water"? Once you get above that level, why do I need my lawn mowed? I want my lawn mowed, so what's the mechanism to get either my lawn mowed by me or by somebody else? To me, that's what the economic system is. Again, that goes even further into Bitcoin and digital currencies and why I found those so fascinating because it's a new incentive system.

Demetri Kofinas: So, we did an episode on the moral economy, and behavioral economics, and incentives. It was with Sam [00:04:30] Bowles, who's an economist, but it was really interesting because we took Hayek's work on the price mechanism and the information problem, and we merged it with some of the work that Bowles and others have done with moral philosophers and moral philosophy and trying to rethinking about incentives, and that's exactly correct. In fact that episode was popular among the crypto community, in retrospect, because of the fact that, in particular with engineers, because it dealt with the issue of incentives. That is so central in engineering, in engineering these currencies.

So, tell me how you got into this space? [00:05:00] So you're a guy from Wall Street. You're kind of like a jock type, a bro-

Brian Kelly: So, yeah. I was a broker for a while, then I was an equity trader. Then I started an institutional brokerage firm where we traded big blocks of stocks. As part of that process, I traded a lot of merger arb, risk arbitrage. That turned into, at the time, what was called cross-border arb, or 80R arbitrage, so you're trading in foreign countries. IBM might be trading in Germany in the morning. It's mispriced versus the US, so you've got to do the currency conversion, all that. [00:05:30] That's how I fell in love with currencies. To me, that's just pure economics and pure macroeconomics.

So, kind of segwayed into global macro investment strategy. Ran a global macro fund for a number of years.

Demetri Kofinas: When did you start the fund?

Brian Kelly: Let's see, so the strategy ... I started in 2009 with the global macro strategy.

Demetri Kofinas: Well, that's interesting. You were like, "Some shit's going down across the globe."

Brian Kelly: Yeah, exactly.

Demetri Kofinas: "Something's happening."

Brian Kelly: Exactly. "I need to be involved in this."

[00:06:00] So, yeah, I was doing that and-

Demetri Kofinas: Where did you focus? Did you focus on currencies?

Brian Kelly: On currencies. That's really my specialty.

Demetri Kofinas: That's your specialty? What did you focus on, which currency?

Brian Kelly: I mean, the major ones. But, you know, so the G7 currencies, mainly, and then interest rates after that. Stocks is kind of the last thing. To me, when I look at the financial system, where you start to see the flows first are in the currency markets, so to me that's the first mover. You start to see, "Okay, money's moving into this country, or moving into this asset class." A lot of times, you can see that in currency markets [00:06:30] first, so that's what I thought was my edge and that's kind of how I approached the financial markets as a whole.

Demetri Kofinas: It's super cool and interesting that that was your background, and your focus was forex and then you got into Bitcoin. So, let's talk about that, because you are an example, if we can sort of generalize about how different groups of people, demographics, backgrounds, psychographics, whatever, get into crypto currencies. Because in your case, you kind of dipped your toe but you didn't really do anything, then you came back, right? Something like that. How did you get in? What was that sort of ...

Brian Kelly: Yeah, so around 2012, [00:07:00] I read about Bitcoin. I think I stumbled on an article in the Financial Times or something like that. My thought was, "Well, that's kind of cool, and that's really fun internet money for a bunch of geeks, and that's good luck to them. That's not going to work."

Demetri Kofinas: You're like, "Those idiots."

Brian Kelly: Yeah, I'm like, "That sounds fun, but there's not a shot this works." So, I ignored it. I thought, "Okay, let me just kind of keep an eye on it as a hobby."

Demetri Kofinas: Did you read the white paper at the time?

Brian Kelly: No, I didn't read the white paper at all. I did exactly what every other Wall Street person does. I looked at it for 30 seconds and said, "Can't work. No way. Can't [00:07:30] work. It's a currency, so it needs to have a government. It needs to have an army that backs it. You've got to be able to pay taxes." All these preconceived misconceptions I had in my head.

So, it took about a year for me to break through all of those old kind of thoughts about what a currency is, what an economy is. In that year, obviously Bitcoin went from 30 to 150, or something like that. But in 2013 is when I really started to dig into it. I finally had that kind of "Ah-ha" moment that this is something special. [00:08:00] Ended up writing a book which was published in 2014, and since then I've been investing in both the currencies, and then companies in the space.

Demetri Kofinas: That's still pretty early, I mean, relative to the guys in your space and gals in your space. Do you work with Josh, Josh Brown?

Brian Kelly: Josh Brown, I'm on CNBC with him.

Demetri Kofinas: Was Josh aware of it back then?

Brian Kelly: No. I mean, I'll tell you what, Josh has been-

Demetri Kofinas: Because he had that Reformed Broker, he had the blog for a very long time, so he was in the blogosphere world. He wasn't, obviously, on Reddit.

Brian Kelly: He's been aware of it. And actually, a friend of mine sent Josh, and this must have been, [00:08:30] maybe 2015 or '16, a friend of mine gave Josh some Bitcoin as a Christmas gift. Just a little bit of dust. I remember Josh and I talking about it then, so he was pretty early in it. But, going back to 2013, '14, it was a very different landscape. There weren't a lot of financial people in it at all.

Demetri Kofinas: Right, yeah, yeah, yeah. So you wrote the book. Personally speaking, what were you doing in terms of investing? It sounds like you kind of touched, if I remember correctly from hearing a previous interview, you bought in [00:09:00] close to one of the interim tops. So then you kind of kicked yourself in the ass a little bit after-

Brian Kelly: Yeah. Well, I felt, I felt-

Demetri Kofinas: Better to lose a small amount early than to lose a bunch later.

Brian Kelly: Right.

Demetri Kofinas: So that was a good lesson for you. Then, during that period when it was going through a bear market, you wrote the book. That's when you wrote the book, right?

Brian Kelly: Yeah.

Demetri Kofinas: Which is excellent. That, sort of, in some ways, doesn't that also parallel the development of Ethereum and the utility protocols?

Brian Kelly: Right, right. So that was about that time where you started to get two and three other currencies. I mean, there was the [00:09:30] Omni protocol. There were probably 10 or 20 different currencies at the time. But, yeah, to your point about when I first bought it, it was in the 600s. I still didn't believe it, but I started my book off with this quote too, is, "I looked at this, said, 'This thing is a bubble. It is going to be a huge bubble, but it is going to end in tears. It's not going to work.'"

But, guess what, I read a quote from George Soros and he said, "When I see a bubble, I buy in, because that's how I make money." So, I was like, "Well, listen. I want to be George Soros. He [00:10:00] does pretty well." So I bought in, without knowing what it really was. It went from 600 to 1200. I thought I was the greatest trader who walked the face of the earth. Went from 1200-

Demetri Kofinas: What did you cost-average in at?

Brian Kelly: About 600. So, within a couple weeks it doubled, and I thought, "This things going to the moon, everything." I didn't even really know what I bought. It was one of those, "Oh, let me go pick out what my private jet's going to look like, because in a couple weeks I'm buying one." Then, China decided to crack down on their banks [00:10:30] for the first time, and it dropped.

I tell this story all the time. I made every mistake that I tell traders and investors not to make, right? I turned a trade into an investment. I didn't do my research. I didn't have any risk management. I did everything wrong about it, and I had this Bitcoin, which I didn't know what it was.

Then, I said, "Well, you know what, I own it. I better figure out what it is." That's when I did my deep dive, and then it really hit me, like, "Wait a second. This is something pretty special."

Demetri Kofinas: [00:11:00] There's a similar analog story from our friend, Jim Grant, who was on the show, which I've recited once before. Of course, listeners who have heard that episode will know it, but it refers to his experience buying gold at the peak in 1981. He goes, "I physically stood in a line, stood in a queue to buy gold." He's like, "I learned, on that day, Demetri, I learned never stand in line to buy anything."

Brian Kelly: Very much, absolutely. Absolutely.

Demetri Kofinas: But of course, who was a bigger bull on gold than Jim? So he bought it at the peak, and yet, so that's just [00:11:30] a parallel.

One of the things that I've struggled with and I think people struggle with in general, whether we're talking about data, backwards looking data in order to make forward projections, which is something that we covered with Ari. And Ari made a good point, which is that in some ways looking into the past, in many ways, can be detrimental to forwards investing. But, separate from that, I mean more generally, trying to understand the size and scope of this market.

People have told me go to CoinMarketCap, just go to CoinMarketCap, you see what prices are. [00:12:00] How reliable is that data? Bitcoin's data, I'm sure is more reliable than the data of like Monero or whatever, all these other coins, I imagine. Tell me. What does this ecosystem look like? How do I get my head around it?

Brian Kelly: So, it's kind of interesting. I mean, what I find fascinating, coming from the macroeconomics side of it is that all of these blockchains, for Bitcoin every ten minutes, but for some of those other ones that have blocks that are less than a minute or a minute, you get this wealth of economic [00:12:30] data. Every time a block is produced and processed, you get to know how many transactions were in there, what the value of it was, where it was sent to and from. So you just have this huge database of economic data about this ecosystem.

Demetri Kofinas: Reliable data you wouldn't have anywhere else.

Brian Kelly: Reliable data that you don't get ... It's a real-time report on the GDP.

Demetri Kofinas: That's interesting.

Brian Kelly: So it's every piece of data that we wait at 8:30 every morning in the stock market to find out about, happens every ten minutes in Bitcoin and less in some other currencies. [00:13:00] That data's recorded in the blockchain, so you can pull, you can extract that out. So that's the core data that's going on. When it comes to pricing, pricing is still a bit scattered, because we have fragmented exchanges trading in multiple different currencies. There's a lot of-

Demetri Kofinas: Thin trading.

Brian Kelly: ... friction. Yeah, thin trading, although these things trade pretty well.

Demetri Kofinas: Yeah, Bitcoin.

Brian Kelly: Yeah, I mean, most of the major currencies, particularly with Bitcoin, but they trade as much as the GLD ETF does.

Demetri Kofinas: So, let's separate that, right? [00:13:30] Because, first of all, are we going to say tokens and currencies all together, because they're all listed on CoinMarketCap. We've differentiated for the purposes of asset allocation or thinking about taxonomy on the show. But just in terms of the price quotes we're getting, how many tokens and currencies are listed on CoinMarketCap?

Brian Kelly: I think there's about 1500 to 2000, right now.

Demetri Kofinas: Okay. If it's not listed on there, what does that mean? You shouldn't buy it?

Brian Kelly: Yeah, I mean, you probably shouldn't buy it. Listen, that's like-

Demetri Kofinas: That's like going to a burning theater.

Brian Kelly: That's a blanket statement, but generally speaking, [00:14:00] the better projects, the better currencies, tokens, or assets are listed on multiple exchanges, have reliable data on them. They have a website, and you can talk to the people. That's not to say there aren't some out there I might have missed, but generally speaking-

Demetri Kofinas: They're pretty dark pools.

Brian Kelly: Yeah, exactly.

Demetri Kofinas: Pretty dark.

Brian Kelly: I generally stick in the top 20 to 50 coins listed on CoinMarketCap.

Demetri Kofinas: Okay. So, within those 20 to 50 coins, all those 20 the 50, you think, are sufficiently [00:14:30] liquid?

Brian Kelly: Sufficiently liquid. It depends on how big your portfolio is, right? If you have $100,000 that you're investing in this as part of your portfolio, all of those coins are sufficiently liquid, you're not going to have any issue.

Demetri Kofinas: So then, let's talk about this. You kind of look at the top 20 to 50, that's sort of how you ... because there's so much stuff to look out there. You've got to look at all those white papers.

Brian Kelly: Right.

Demetri Kofinas: And that's another question I've got for you. I had a whole rundown here, this happens sometimes with some guests, where I literally just scratch the whole thing. So, you're a [00:15:00] forex guy. How much do you rely on technical trading and how much do you rely on the fundamental analysis where you're actually going through the company, looking at team, looking at the white paper, etc.?

Brian Kelly: I use every tool available, and I've always used every tool available to get an edge. So, generally the way I look at it is technical analysis, to me, is really just looking at human fear and greed, and where these extremes in human behavior are. You want to use Bollinger bands, you want to use moving averages, whatever works for you.

Demetri Kofinas: How useful are those, and how useful [00:15:30] are the tools that-

Brian Kelly: I look at technicals as a map, right? So I look at it and say, "Here's all the technicals that are flashing red. Okay, this might be a turning point. This is a point where a corner is coming." So then I look around the landscape and say, "Okay. Fundamentally, where are we?"

For Bitcoin, for example, and actually for quite a few of them, we have an internal model that tells us what the fair value is based on number of transactions, velocity, and stuff like that. So, I'll go, and let's just say, give [00:16:00] you an example, right? Bitcoin's trading at somewhere around $11,000 right now, and I don't have the numbers on me exactly. Let's say my internal model says the fair value for Bitcoin's $9000. We're at $11,000, we've had quite a run. We're up against multiple different technical indicators.

That might be a point where I'll say, "Hey, you know what, we're above my fundamental fair value. We've now hit technical points where it might be a good time for this market to turn. People are getting really excited about it. Sentiment's very high. Let me sell some." [00:16:30] That's kind of how I think about the process.

Demetri Kofinas: How do you calculate fair value, for, let's say, Bitcoin?

Brian Kelly: Yeah, in Bitcoin, in particular, our model has about four or five different inputs. But the biggest ones are velocity of money, so how much the money's turning around; the number of transactions. My model is inspired by Metcalfe's Law, which is the rule or how do you figure out what the value of a network is, right? It was designed back in, I think it was the '70s or '80s for telecommunication networks. So that's [00:17:00] number of nodes squared gives you Metcalfe's law, what a network is worth. I plug in transactions, so number of transactions squared. If you do that, you throw some velocity in there, do a regression on the price of Bitcoin, you come out with a fair value, and that's how I look at it.

To really get it super simple, the one way to think about it is every quarter when we look at Facebook or Twitter's earnings, we ask what are their monthly average users, MAUs, right? How much engagement is there? I think transactions on the Bitcoin network or any of these [00:17:30] currencies is like MAUs. How much are people using this thing? Do people want to use it at all? That's kind of a comparison metric, if you will.

Demetri Kofinas: So that touched on a few things. One is how much people are using it, the question of adoption. I am curious because you work in media, and because so many of your colleagues are from the financial industry, how have institutional investors, and how do you feel the public -- too, I think, demographics that you're uniquely qualified to talk about -- have adopted this? [00:18:00] And how do you feel that they may continue to adopt it? And what are the risks to dissuading people from actually getting into it in a significant way? One of, for example, is exchange risk, which we're kind of getting into there.

Brian Kelly: Right, so it's kind of interesting because this asset class has been adopted as an investment by the general public way ahead of institutions.

Demetri Kofinas: Right, it's the first time-

Brian Kelly: First time, absolutely.

Demetri Kofinas: It's crazy.

Brian Kelly: Usually that's the sell signal, right?

Demetri Kofinas: The public's ahead.

Brian Kelly: Joe Public comes in, that's your sell signal. But, it's not the case here and [00:18:30] I can tell you the conversations that I've had. Almost every major institution in the world is looking at this seriously now, and looking to allocate capital to this space. So that's on the investment side. On the actual use case side, Bitcoin is finding its use cases. Earlier it was the dark web, that is not so much of the case anymore. But now it's starting to be used in cross border trade. If you're in Brazil and you're doing a transaction in China, instead of giving a letter of credit and waiting a week for your money to transact, people are just sending Bitcoin. [00:19:00] Ten minutes later you get your money. So, it's finding where it needs to be.

Demetri Kofinas: How much of that business is moving to Bitcoin, because I would be concerned about the volatility in the market to do any kind of serve significant business with it.

Brian Kelly: Yeah, but actually, it's increasing. It's not a huge portion of the transactions today. But in terms of the volatility, you just pick a US dollar amount, or a Brazilian real amount. So we say if I'm in Brazil, we're doing business with China, we say, "Here's the value we want to exchange." Okay, at this point in time, here's the Bitcoin. [00:19:30] There's plenty of payment processors that will give you a ten minute window and guarantee you a price.

Demetri Kofinas: Oh, I see. Okay, cool. All right. So, going back to my point about exchange risk, and you were talking about fundamentals, one of the variables that's in there, regardless of Metcalfe's law or velocity, or anything else, are these existential risk factors. One of which is your exchange being hacked. Another one is government regulation, right? Those two and any other, how do you incorporate those events, those risks in your models? [00:20:00] And, in the wider picture, how do you incorporate them, like what would be a like a big sell signal for the intermediate long-term? And then, also just on a trading basis, how do you trade around them?

Brian Kelly: So, in terms of those, those are very almost impossible to model, so you just have to have risk mitigation. So in terms of exchanges, we rarely leave any coins at exchanges. Our procedures are within 24 hours we get everything off that we can.

Demetri Kofinas: You put it in cold storage.

Brian Kelly: And put it in cold storage.

Demetri Kofinas: How do you do that?

Brian Kelly: How do we put it in cold storage?

Demetri Kofinas: Yeah, I mean, I know. Explain to me and [00:20:30] to our audience what is your sort of process with that?

Brian Kelly: So the process is once we've done a trade on an exchange or with an OTC broker, it is sent directly to our cold storage wallet. I don't touch it. Nobody else in my firm touches it. It goes right to our third-party custodian. That-

Demetri Kofinas: So they get it digitally and then they put it in a hard drive and they put it off the internet?

Brian Kelly: Exactly, exactly. Yep, and-

Demetri Kofinas: That's so interesting. And you actually go and do physical audits of the hard drives, ever? Because I mean, it's just like, it's very comparable in many [00:21:00] ways to taking physical delivery of gold, right?

Brian Kelly: Absolutely.

Demetri Kofinas: And you do physical audits at bullion banks. I'm just curious.

Brian Kelly: So we use an SEC qualified custodian for this. They are audited by the SEC and this is kind of an institutional level of custody. If you're an individual out there and you're doing it, I would suggest just using your own cold storage. You can get, there's devices called Ledger or TREZOR and you can basically put it on, it's a thumb drive, effectively. You put it on there and you put it in a safe. That, for the individual, is probably okay.

Demetri Kofinas: [00:21:30] So this is interesting. I touched on it myself. We were going to get into it later, but we can jump ahead to it. It has to do with gold, right? This is really fascinating. It's fascinating, what do I mean? There's such an interesting cross-over and then also hostility. It's almost like Mets versus Yankees or something like that, or Islanders versus Rangers. It's like this sort of fraternal hatred and also competition, and yet there's the common creed of the Bitcoin and gold community. Some people that have been self-described, or others would call them gold bugs have been early adopters [00:22:00] of Bitcoin. Others have and remain hostile to it. Just interesting, sort of culturally speaking.

Again, one of the things that I think you're qualified to talk on is because you work in media you get so much exposure of this stuff, guests coming in, producers, professionals. What is the culture of, particularly, Bitcoin and gold? What's that cross over? And how does that whole thing work?

Brian Kelly: That's great. I'm glad you brought that up because the Bitcoin and gold battle, if you will, it really shows [00:22:30] the generational rift that's out there. I've said on TV before, if you are a baby boomer you buy gold, if you're a Millennial you buy Bitcoin. That's really the shift, right?

Demetri Kofinas: I'd say that's pretty accurate.

Brian Kelly: Guys like me, I'm in my 40s, right? We're kind of caught in the middle. I feel fortunate because I have the experience enough to trade in this asset class, but I'm not entrenched in my ways enough to say, "Gold is the only way to go." So, yeah, it is really this divide. The gold bugs will tell you, "Okay, great. Well, [00:23:00] if we lose electricity, then how are you going to move your Bitcoin around?" That's a very fair point. Although, if I'm walking around the world shaving off ounces of gold to pay for food, there's other things that I'm worried about at this point in time.

Secondarily, the Bitcoin people will tell you, "Well, there's plenty of ways to have a network that we can operate, and Bitcoin's more useful today." There's 100 to 200,000 stores that you can buy something with Bitcoin on. There's none that I know of that you can buy something with gold.

[00:23:30] So, there are benefits to both. What I say to people is, "Just buy both. If you're worried about it, just buy both."

Demetri Kofinas: So, a few things. One, neither gold nor Bitcoin ... I mean, yes, people will say gold has intrinsic value. One big difference between Bitcoin and gold is gold actually has industrial use cases. But let's put that aside. Really, what we're talking about here is what is the value proposition for owning this asset. I think the value proposition for both is similar for really owning it, for not industrial use cases, which is you're buying it as a hedge against [00:24:00] financial market risk, or credit risk, and systemic risk. Like, you're looking to get outside the financial system.

The only, I think, value to owning gold is to own physical gold. I've always thought that. I've always been of that mindset. I have the same sense on Bitcoin, as well, which is that you can certainly make a ton of money speculating on it. I want to talk about that, and we can talk about cash settled futures, too, because I want to know if you're trading them, how you sold that as a hedge against your long positions, and physical, or whatever else, and what the correlation between the cash settled and physical markets are, I'm curious.

[00:24:30] But, when I first started to delve into blockchain in late ... actually it's not even fair to say late 2012, it's fairer to say early 2013. The thing that I thought was most obvious was why wouldn't someone create a blockchain ledger that is attached to gold? Like, some kind of like gold blockchain currency.

I looked around before this interview, and there are some companies that do that. I wonder, A, [00:25:00] what do you think about that, this idea? Because, of course, this goes back to my point, which is one of the really great things about gold is that it's a physical asset, it has 5,000+ years of network effects. There are many people around the world that will look at you like you're nuts if you want to take Bitcoin over gold.

But, at the same time, it's so difficult to account for it. It's very costly to move it. Auditing it is very difficult. Putting a paper trail around your gold on a blockchain seems to me like an incredible sort of value [00:25:30] add. Tell me what you think about that.

Brian Kelly: Yeah, I would disagree with that, and it's because I've tried it. I went and said, "Okay let me take a digital currency and try to back it with gold. The issue that you run into is that you ultimately have to trust that somebody's holding your gold. You still have this trust problem, which is exactly what Bitcoin solved, is the problem of trust.

The Royal Mint is doing it. They're probably the most trustworthy out there. But, again, if I'm holding a gold backed digital currency, and I want to get my gold, I still have to go to [00:26:00] a third-party and say, "Please sir, can I have my gold?" And you have to trust that it's there and that's audited and all of that.

An interesting thought experiment, and it's brought up by Bobby Lee of Mobi, and he used to be BTTC, is that his contention is that Bitcoin shouldn't be backed by anything because as soon as it is, you then have to trust that third party. Because this is a trustless system, any time you insert an element of trust you destroy the value of the digital currency. It's an interesting [00:26:30] thought experiment.

In terms of backing it with gold, it sounds okay, but there's no way to do it without having that trusted third-party. Then, I'm not sure what the value of having a digital currency. I mean, you can have ... The Royal Mint is doing a digital representation of your gold certificate. That might be helpful.

Demetri Kofinas: That's kind of what I mean. What I'm really saying is adding value to the existing stock of gold and to your own particular bullion bank's operation, or your mint, or whatever?

Brian Kelly: It probably [00:27:00] adds more value to gold because you're adding liquidity. Right? That's probably what it does.

Demetri Kofinas: And accounting too, because ... Well, you still need to audit it.

Brian Kelly: You still need to audit, I mean, yeah. I'm not sure-

Demetri Kofinas: Easier to transfer, I guess. Maybe not, accounting's the wrong word. Easier to transfer, easier to translate-

Brian Kelly: That's what I'm saying. It makes-

Demetri Kofinas: ... it makes it more liquid.

Brian Kelly: If you have a bar of gold in the Royal Mint and now I have a digital certificate, digital token that represents it, and then somebody at the store down the street wants to take it, yeah, I've got liquidity.

Demetri Kofinas: But your point being is that you're still saddled with the [00:27:30] problem of a third-party, third-party verification and-

Brian Kelly: That's there.

Demetri Kofinas: It's an interesting point. So let's talk about the technology, because this is an appropriate moment to speak about the tech. What is your sense of the, makes you most bullish about, let's say, Bitcoin, specifically? How do you differentiate between Bitcoin and Ethereum, these utility protocols? You talked about velocity, that plays a role in that calculation. And then, also, what do you think the biggest challenges are to these currencies being adopted, technologically speaking? I'm [00:28:00] particularly talking about the problem of scalability and being able to actually use these currencies for real-world operations, or more importantly the utility protocols and the dApps that are being built on top of that.

Brian Kelly: Right. So in general when I look at the space, I'm making a bet on digital currencies and digital assets as a class. I don't know if Bitcoin will be the one. It has a massive lead. It has all the network effect. I get the arguments of why it should be the leader. But I remind myself every day that Myspace existed well before Facebook. [00:28:30] Myspace had that network effect. Yahoo and Netscape all existed before Google was even invented. So the history of tech tells you that it disrupts itself. So I want to make a bet on the entire ecosystem, rather than a specific currency.

I ultimately think that we'll probably end up with 10 or 20 core protocols that will operate the digital economy. What I mean by that is you say, if I am in Brazil and I'm using Bitcoin to send [00:29:00] to China to settle a contract, to settle an international contract that we've done, you know maybe I shipped some iron over to China, it solves a problem by sending Bitcoin. But then, what legal system do I use? What's the global legal system? Well, maybe Ethereum plays a role in that and I can write the smart contract.

But, what if we have a dispute? We're human beings. I know it's immutable, but we're human beings. What if we have a dispute? Well, now I need some sort of judicial system. Maybe one of these governance coins. So, I look at the real economy and say, "What needs to be replicated in the digital economy?" [00:29:30] Then I say, "These protocols that are replicating the real economy are probably the 10 or 20 that are going to stick around for a while, or at least the concept of them." So, that's how I look at the space in that terms.

In terms of scalability, it's being solved. People are working very hard on it and I think this year will be the year of scalability.

Demetri Kofinas: Let's talk about that. That's a very interesting definitive ... It's not a definitive statement. What is it called when you --

Brian Kelly: Pound the table.

Demetri Kofinas: Plant your flag. [Laughter] So, that's interesting. So what gives you the confidence ... [00:30:00] Well, first of all, why do you say it's being solved? Who is solving it, in your view? How are they solving it? And, why are you so confident that we're going to have it solved this year?

Brian Kelly: Well, a couple things. One, because we've seen atomic swaps, already, and that's a form-

Demetri Kofinas: Can you explain what that is?

Brian Kelly: Yeah, it's effectively, you're transferring coins between chain. To me, the idea of scaling on a single blockchain, so Bitcoin, for example, is better solved if I can use multiple different currencies connected together. So almost like [00:30:30] the internet of blockchains, right? So, each of these particular coins have their own future. You want really fast payments, you use one particular coin. You want a smart contract, you use another particular coin. They all have to interact together, to me, just like the internet did, that's how you get scalability, rather than trying to take one particular blockchain and scale that.

Demetri Kofinas: That's an interesting point.

Brian Kelly: That's how I look at the scalability issue. So, why is it being solved? You've got atomic swaps, which allow you to move coins from one [00:31:00] chain to another, technological way to do it. One that I'm an investor in is Cosmos, and that should be coming out in the next month or so. What they are literally calling themselves, the internet of blockchains. But they have kind of a hub system where anybody can spin up a Bitcoin hub, an Ethereum hub, within the Cosmos blockchain. What the Cosmos blockchain, is just keeps track of all the coins. So that's an infinitely scalable solution.

Demetri Kofinas: How deep do you get into the technicals? How deep do you get into the weeds?

Brian Kelly: So, I get [00:31:30] fairly deep. I'm a finance guy, though. I'm never going to be the coder, so that's why I have a CTO. His job is to dig into it. Then if we have questions, we have third-party auditors and stuff like that who'll go through it. So, I understand the tech. I'm certainly not a coder by any means. But, for me when I look at it, I look at it and say, "Okay, does this solve a real problem in this space?" Yeah, I rely on my CTO to tell me whether these guys and gals that are doing it actually have the technical chops to do it. Then we'll dig in as deep as we need to dig into it.

Demetri Kofinas: [00:32:00] Let's go back to the futures market. We were talking about futures, cash settled versus physical. How are these, CBOE and CME, they launched in late 2017, how has trading gone on the futures exchanges? And how useful have you found those as actual hedges against long positions and physical?

Brian Kelly: Yeah, so just for full disclosure, I'm on the CME's board of advisors for the futures, just so people know that. They started, I actually thought the launch was a home run [00:32:30] because people talked about Bitcoin futures blowing up the market, there'd be no liquidity, there'd be none of this. It's traded very well, and in the first days we had massive volatility in Bitcoin. So, I think both the CBOE and the CME have done a masterful job on the launch.

Liquidity is improving. It's not quite there yet, at least for an institutional level. Part of that is because not a lot of futures commissions margins, FCMs, are allowing you to trade these. The ones that are, you're putting up 50%, 80% margin. So, [00:33:00] as people become less frightened and understand the product, I think liquidity will improve.

To me, it is a game-changer for institutions because one of the biggest hurdles that institutions have is custody of these assets. With futures, they've already got futures custody. They've already got a futures broker-

Demetri Kofinas: Well, because they're also cash settled, they don't need to worry about that.

Brian Kelly: They don't need to worry about the custody at all. So, they're getting better. It's a necessary part of growing the ecosystem.

Demetri Kofinas: Is it unfair to say that [00:33:30] the only real connection it has to Bitcoin is that it's using it as sort of an anchor for its own price, but ultimately there is no real actual ... You could say that Bitcoin cash settled futures are not Bitcoin, in any way whatsoever. But they are a way that institutional investors and retail investors who are hesitant to get into a sort of wildcat banking era type asset can get an opportunity to bet against each other, basically, in a different market.

Brian Kelly: Yeah. I don't know [00:34:00] if it's fair to say they don't have any tie to Bitcoin, because ultimately, they do even though they are cash settled. We are still making an agreement that at some point in time I will pay you based on the price of Bitcoin, right?

Demetri Kofinas: Right, right, right.

Brian Kelly: So, as a market maker, what the market maker's going to do, if you come in to buy Bitcoin futures and I sell it short, I have two choices, I can either buy the futures or I can go and buy physical, and I can hedge my position that way. So, just like any of the other markets out there, there's plenty of markets that aren't really [00:34:30] tied to the physical. Would it be great to have a physically settled futures market? Absolutely.

Demetri Kofinas: Yeah, we have the same thing with cash settled gold futures.

Brian Kelly: Yeah.

Demetri Kofinas: But the point I've made before, and I made this point with Chris Burniske on our episode, is for me there's a bastardization, and that's not a judgment of it at all. I understand why it's happening. But there's an irony in creating a cash settled futures for a digital asset, a natively digital asset, you know what I mean? That's all. But I do understand why it's happening.

So, you're talking [00:35:00] about the price, and it is a derivative. So, let's say, how is the CME and the CBOE, how are they formulating their price? I've looked at some of the documentation. They're different on how they do it. I think CME uses more exchanges than CBOE.

Brian Kelly: Right.

Demetri Kofinas: How does that work? What's the deal, if you know?

Brian Kelly: As far as I know, the CBOE is based on the Gemini closing price, which is the Winklevoss twins exchange. The CME is based on an index developed by Crypto Facilities out of the UK, and it's multiple exchanges. I [00:35:30] think there's benefits and negatives to both. To me, the benefit of using an index, though, is that we do have price differentials on multiple exchanges. There's still a lot of friction in this market where you can't get accounts opened at all the exchanges, so you do have some price discrepancy. So, kind of blending it together, to me, gives you more of a true global price of Bitcoin.

I think everybody in this space, they want to have the benchmark index. Everybody wants this S&P 500. They're [00:36:00] all fighting for it, so having a futures based on your index is pretty good.

Demetri Kofinas: It's incredible to see how the space has been financialized so quickly. There's never been an asset that's been financialized this quickly.

Brian Kelly: Yeah. It's even shocked me. I thought we were three to five years away from that type of thing. It's really happened very quickly and people joke in the space it's Bitcoin time. Bitcoin time is sped up. No, it's really this year. With my fund in the beginning of the year, people would call me at the beginning of the year and say, "I'd like to invest [00:36:30] in Bitcoin."

I'd say, "Well, our fund invests in the top 20 to 50 currencies."

They said, "What? Wait, there's more than one Bitcoin?" That was what the institutional mindset was at that point in time?

Demetri Kofinas: So how did this person call you and not have that information? So that goes back to my point, right, how people are learning about this space, and then how they're actually working up the resolve to jump in and all that sort of stuff. On a qualitative level, what is that process that you're seeing from people? Like, what are we talking about here?

Brian Kelly: So, I mean, some of [00:37:00] the people are just like everybody else. You watch this asset. You think it's not going to work. You think it's going to fail. Then you just can't kill it-

Demetri Kofinas: So many people have made so much money, that's the painful-

Brian Kelly: Well, that's the other part, right?

Demetri Kofinas: That's the part. That's it.

Brian Kelly: I was trying to be, you know, very intellectual about it.

Demetri Kofinas: It's money.

Brian Kelly: But, really, the interest came when Ethereum went from 7 to 400, and you see your neighbor driving a new Ferrari, and you say, "Well, jeez. He's dumber than I am. I got to be able to make something off [00:37:30] of this." So that's where the real interest comes. Then, just like any other asset class, there are some people that come in and do a ton of research. And there's other people that just want to buy the next hot thing. That's a personal choice, let's call it that.

Demetri Kofinas: They're action guys.

Brian Kelly: Yeah.

Demetri Kofinas: So, what about ETFs and ETNs. As far as I understand, there are no Bitcoin or crypto public ledger based ETFs or ETNs in this space. There are blockchain based ETFs. What are those blockchain ones? Why are there no Bitcoin or cryptocurrencies ones? Do you expect [00:38:00] to see any?

Brian Kelly: So, in the US there are no Bitcoin cryptocurrency ETFs. You can get exposure that way through the Bitcoin investment trust, and the other products that Grayscale have. I don't expect a cryptocurrency ETF this year.

Demetri Kofinas: The regulations around those are what make it the most difficult.

Brian Kelly: I think the SEC is taking a very thoughtful approach on it.

Demetri Kofinas: Well, this-

Brian Kelly: Well, right.

Demetri Kofinas: I just wanted to point that out, and that is the CFTC, and that also has to do with the clients [00:38:30] that the CFTC serves, versus the SEC, right?

Brian Kelly: Yeah, and listen, this is a new product. We just got futures in it. We're just getting some standardization. So I understand the regulators saying, "Let's take a beat. Let's take a beat and make sure that we get this right."

I thought the meeting that was a week or two ago in front of the senate banking committee was a home run. It was exactly what the regulators should have done. They said, "Listen, this is a new technology. We recognize that its innovative and we want to support it. But at the same time, we want to make sure [00:39:00] the general public isn't getting defrauded, that we aren't messing with the capital markets," all the things that they should be doing. So, I think it's going to take a bit, and I think that's probably right to take a bit in terms or a cryptocurrency backed ETF.

Demetri Kofinas: Speaking of ETFs, and you had a global macro fund, and you were alive in 2008, 2009, what do you think about this rise of passive investment vehicles like ETFs, the challenges that active managers [00:39:30] have had all these years, and the success that people have had using these systemic trading strategies and going short volatility? There are a lot of questions wrapped up in that bomb of a statement, but what do you think? We finally got a spike in volatility recently, for the first time in forever. What is your general market outlook? Then we can loop that back into Bitcoin.

Brian Kelly: Sure. All right. So, yeah, there's a lot to unpack there. Let's start with the passive investment theme. [00:40:00] I'll be controversial here. It's a complete misnomer and you're kidding yourself if you think you're being passively invested. If you are investing in an index you are making an active decision to buy these 500 stocks. You're making an active decision to not buy any other 500 stocks.

Demetri Kofinas: You as the investor buying the ETF, but-

Brian Kelly: You're buying the ETF.

Demetri Kofinas: There's no one actually actively manage that, there's systemic-

Brian Kelly: Well, but there is an index committee that says, "These are the 500 stocks that we believe should be out there." So, don't think of this as, it's [00:40:30] not passive where this works the best and it never goes down, because that's what people think. They think, "Oh, well active managers can't do anything. I'm just going to passive." You are making an active decision to say, "I am only going to buy these stocks." So, I find the whole passive/active argument to be-

Demetri Kofinas: The nomenclature-

Brian Kelly: It's silly. You're not passive investing. You are making an active choice.

Demetri Kofinas: Okay, so let's talk about this and you know more about this than I do because you've actually managed a fund. If I were managing my money and I [00:41:00] had a certain amount of it, and I made the active decision to put it into an ETF, that ETF ... First of all, there's also a calculation. There's a difference between being invested in the actual underlying asset or what the ETF is buying in. But then, from what I understand, these ETFs have systemic trading strategies that kick in at certain moments, which would be very different than if you're actually managing the asset yourself, actively.

Brian Kelly: Mm-hmm (affirmative).

Demetri Kofinas: That has raised a lot of concerns over the last few years, because there are many people that think that puts the market as a whole at [00:41:30] risk, because in the case of a liquidation it just becomes a mass herd effect in a way that you wouldn't normally have otherwise.

Brian Kelly: Yeah.

Demetri Kofinas: Something analogous to 1987.

Brian Kelly: Yeah, I would, a bit, saying it's '87.

Demetri Kofinas: Do you think it's overrated?

Brian Kelly: No. I think it exists. I think it's never been a concern of mine that it's going to be a system-wide issue. The system-wide issues, the systemic risks that we had in 2007, 2008 had nothing to do with algorithms, had nothing to do ... The fact that people got over leveraged and bought [00:42:00] stuff they shouldn't have bought, and we're all to blame for it. I'm not blaming anybody. Everybody should take blame for that.

Demetri Kofinas: Some more than others.

Brian Kelly: Well, not actually. You know what, listen, some people were selling a product that other people wanted, and we're all complicit in it. But that's probably for another podcast.

But in terms of that, what you get is you get these short-term dislocations. We saw it very recently with the VIX, right? Volatility spiked up. Now, the market started to sell-off, not because of volatility. The market started to sell- [00:42:30] off because we got a hot job sprint, and we got a hot wage print. So people had mispriced where the Fed was. Where you misprice interest rates, that filters into the equity market, so we had to re-price equities.

That sell-off was exacerbated because you have had a proliferation of short vol traders, not just ETFS, but short vol traders in the market. It's one of the biggest stealth strategies out there. So, when they had to unwind that, that caused the market to unwind a little bit more. [00:43:00] The market's prone to that. The market has always been prone to that.

Demetri Kofinas: What is your outlook for 20 ... and by the way, I hate ... In some ways I kind of ask these questions, they're shitty questions, because you're not a freaking oracle, you know what I mean? But there's something on this. But you work in media, so you know these questions. I hardly ask them. It's certainly the extent to which I ask a question like this on the show is minimal compared to what the media does. But, are you concerned that as this expansion, or recovery, in equities [00:43:30] goes on for longer and longer that it just becomes more and more dangerous to be in anything other than cash?

Brian Kelly: Yeah.

Demetri Kofinas: That's my way of basically saying going to the bunker, or running scared? How do I unleverage?

Brian Kelly: So I will tell you at some point, we, in the next five to ten years, it's my view, that we have another bear market. It could be a fairly nasty bear market. I don't think we're there today. I think, the way that I look at it is, and I say, "Okay. We have an improving economy. We have relative [00:44:00] peace around the world, that might change. We have a relatively stable dollar, although it's weakened a bit recently." So, all the signs out there is that we're having economic improvement.

Bear markets generally don't start when things are improving. When bear markets start, the risks out there are is the Fed too far behind the curve? I don't think we can say that yet, right? People have been running around with their hair on fire, "Oh, inflation's coming." Well, we're at 2.1 on the CPI. A year ago we were having discussion [00:44:30] about maybe raising the inflation target to 4% because we couldn't create any inflation. I think we need to take it in perspective.

Demetri Kofinas: You say people are saying inflation's coming, that's a recently --

Brian Kelly: Recently, right?

Demetri Kofinas: ... concern that inflation is coming?

Brian Kelly: Yeah, it's been part ... Probably about-

Demetri Kofinas: I've heard that more.

Brian Kelly: Yeah, so it's been, if you look at the rise in interest rates, about two-thirds of it are real rates, which are based on the economy, the real rate. Then the other one-third is inflation expectations. That has been rising. It's not out of control. If I look at inflation globally it's not out of [00:45:00] control yet. I can certainly come up with a scenario where it gets out of control, but we're not there today.

So that's my concern is that if I'm looking for red flags, I'm looking for a Federal Reserve that's too aggressive, or gets caught behind the curve. Obviously, the exogenous events like an incident in North Korea, or any other kind of hotspot around the world, I would be concerned about protectionism. We're certainly trending in that area. Those are kind of the events, to me, that would start to signal, "Hey, you know what, why [00:45:30] don't I take some off the table?"

In the longer run, we have a demographic issue, in that if you look at the Baby Boomers-

Demetri Kofinas: Structural demographics.

Brian Kelly: Yeah, the Baby Boomers are going to start taking money out of the market, right? And it's part of the reason why crypto actually appealed to me. Because if I look back-

Demetri Kofinas: Interesting.

Brian Kelly: Yeah, because if I look back and say, "Okay, let's look at in investment price-

Demetri Kofinas: Like, let the old people get in the boat.

Brian Kelly: Well-

Demetri Kofinas: I'm jumping in with these teenagers.

Brian Kelly: With the Millennials. But think about it, right. So, you look at the investment greats, Warren Buffet, guys like that, they all [00:46:00] came up during a period of time, and clearly, they're great investors and clearly, they're smarter than the average bear, but they also had this massive tailwind of Baby Boomers, every month, saving for retirement.

Demetri Kofinas: Right.

Brian Kelly: Every month, right?

Demetri Kofinas: I see what you're saying.

Brian Kelly: So, that's ending. The Baby Boomers, they're going to start taking that money out and start doing something with it. You say, "Great, well who's the next class in there?" My generation is and my generation is just getting by. The Millennials, they're the ones. Now, the bull case for the equity markets is that the Millennials are going to start saving just like the Baby Boomers. [00:46:30] However, the Millennials have not shown that propensity. They want to be in cryptocurrency. They want to be in that. So, if I look at my career, I'm 40... What am I, 46 now, 47? If I look at the next ten years of my career, where is the tailwind? Digital currencies, digital assets.

Demetri Kofinas: You brought up a lot of very interesting points. I'm going to enunciate them, right now, so I try not to forget them. But one thing deals with inflation.

I've always been apt to believe far more that we're at risk of deflation, and that feeds into the structural demographics and the debt, the private levels of [00:47:00] debt. I think that the crisis of 2008 and the prior ones, everything that basically, since 1971, where we really saw a ramp up in total debt. I think that remains a major outstanding issue, and I think it's a driver, in part, of the wealth and income gap. I think all those things feed into the deflationary argument.

This is really interesting, this point you bring up about Millennials, the difference between Millennials and older demographics and their adoption of cryptocurrency. I think there's something really real there, and true. I think it's probably [00:47:30] something that I would ... Not probably, most certainly something that I would like to delve in deeper to on this show, which is this phenomenon that I've witnessed, which is that my demographic and younger, my age and younger, we're not so enamored with the idea of stocks, bonds, equity, get my financial advisor. It just feels lame, and it also feels ... For me, personally, I don't want to trust this guy who doesn't really know much about anything, necessarily, to just take my money and invest it.

[00:48:00] There's also a change in terms of, I think, there's a moral, ethical, value system set change going on in our society where people have a different sense of what they want the future to look like. They're looking to find ways to invest in that future. So, in some ways, I think cryptocurrencies is a desire for "Millennials," whatever you want to call it, to express their view of the future financially, to invest in accordance with how they see the future unfolding.

I do think, though, it's interesting to ask and to [00:48:30] wonder to what extent that desire is aligned with the underlying reality of these assets and their value propositions. That's why I've done a bunch of these shows. For me, personally, where I'm most concerned about the value of cryptocurrencies, I started off thinking, you know, being like, "Bitcoin, I really don't see the value in this. I see the value in Ethereum and the utility protocols." But, as I've done more research and thought about it more, and interviewed people like Chris Burniske, I actually see the case for Bitcoin [00:49:00] as a store of value, based on the network effect and based on some other factors.

In the case of Ethereum, that is the thing that I remain the most bearish on. The reason I'm most bearish on Ethereum is not because I'm certain that it's not going to work or something. It's because I think it's the most at risk to being disrupted by the type of technological innovations that we've talked about here, today.

I think if a lot of these dApps, and this goes back to the point of the problem of scalability, and if proof of stake on a blockchain can work, and they can scale it, and all these things, that's not going to be an issue. But I do think it's interesting to focus on a lot of really interesting use cases and dApps, which one's might have the most promising teams? Then, if there can come a different utility protocol underneath that can scale the network, then they could scale with it. But that's just sort of my coming at this from the outside.

Brian Kelly: I think that's a fair criticism, because there are some competitors to Ethereum and they have gained quite a bit [00:50:00] of traction.

Demetri Kofinas: Are there any that you're looking at? So, we-

Brian Kelly: Well, yeah. If you look at EOS, and NEO, even Ethereum Classic, for that matter. Cosmos, the one that I mentioned, you can do smart contracts there. So there are definitely smart contract protocols out there that are challengers. It then comes down to, okay, what's going to be built on top of it, right? Just like Bitcoin has a massive lead on the payments area, store of value network effect, Ethereum, at this point, has a massive lead. That doesn't mean it can't be disrupted, but you look at [00:50:30] what Joe Lubin's doing at Consensus over in Brooklyn. I think he's got 600 or 700 people working 24 hours a day building something on Ethereum.

So, the bull case for me, there, is I don't know what's going to be built on it, but I do know that if only 10% of the stuff they're working on comes out, there's going to be the next Amazon or Facebook in there.

Demetri Kofinas: Although, they're being built modularly, so they would be able to build these dApps on a different protocol.

Brian Kelly: There's no question.

Demetri Kofinas: So, that really gets to another question, which is how do you keep your ear [00:51:00] to the grindstone, let's say, or whatever that expression is? Is it ear to the grindstone?

Brian Kelly: No, it's nose to the grindstone and ear to the ground.

Demetri Kofinas: No one uses their nose anymore to collect information.

Brian Kelly: Only dogs.

Demetri Kofinas: So, how do you stay on the beat, or whatever? How do you ... because it might not be something that you're aware of, something that's come out recently or that's about to come out that hasn't come out yet that's going to really be the winner in this arms race.

Brian Kelly: Yeah, that's my job every day is to be on the lookout for the next thing and what's happening out there. I certainly, [00:51:30] between me and my team, we're constantly on the road going to conferences, meeting with new teams, meeting with new ICOs. We use our network. We tap really smart people and ask them what they see going on. It goes back to, again, I am making a bet on the ecosystem, the digital currency/digital asset ecosystem.

I came up in the '90s during the internet bubble. Like I said, half of those companies don't exist today. Some of them were actually ... Saying to my wife the other day, everybody jokes about pets.com ...

Demetri Kofinas: [00:52:00] Everyone talks about pets.com, why is that? Everyone ... because that was like the biggest-

Brian Kelly: Because it was a poster child for internet excess, right?

Demetri Kofinas: Well, how much was it worth at its peak?

Brian Kelly: Oh, jeez, I forget. But it was the poster child for the bubble because it went to zero. But here's what's interesting, their business model was selling pet food online.

Demetri Kofinas: Yeah, they were just too early.

Brian Kelly: They were 30 years too early. Chewy got bought out for a billion dollars last year, right? So I look at that and say, "You might have a great idea today in crypto. You might be 30 years [00:52:30] too early." Some of these projects might be 30 years too early. So, the best part, to me, from an investor and a trader perspective, is this is like venture capital investing, but I have instant liquidity.

So if I take a typical venture capital mindset and say, "Okay, I'm going to invest in 100 companies." 90 of them are going to go to zero, 10 are going to be my huge winners. That's how venture capitalists look at it.

Well, in this space, I can say, "yeah, I'm going to buy 100 different cryptocurrencies." In five years, 90 of them might go to zero, but in the meantime, I can extract value from them. I can 50 cents on the dollar instead of zero. So, I think this model for venture capital investing is much better than anything that we've seen before.

I went a little astray from your original question.

Demetri Kofinas: No, no, no. Not at all. I moderated a panel last week for Celsius, that's Alex Mashinsky's company. On the panel, and Alex has said this before, and he's not the only one, a lot of people say this, that we haven't had yet and we need to have the Netscape moment, [00:53:30] the killer app. My question to him when he said that was, again, it brings it back to the question of scalability. Can you have a Netscape moment with a network that has such a low level of through-put? I don't know the answer to that. My guess would be that you can't, and you think you can?

Brian Kelly: No. Today you can't. Look at CryptoKitties. It slowed down the entire Ethereum network and that was the killer app, right?

Demetri Kofinas: Exactly.

Brian Kelly: So I think, I look at that and [00:54:00] say, "No. We clearly need to work on scalability." We clearly need to get the through-put out there. There are some people out there that are working on it, I think will solve that problem. But if you came up with the next Facebook today you'd crash almost every single one of these blockchains.

Demetri Kofinas: Well, I think, for sure, where I fall on this and the reason why I've been covering ... Well, once reason I've been covering is the same reason I'm sure you know there's massive interest. Like, that's why everyone's covering it, right? I mean, I just see the numbers on my audience when I talk about this. [00:54:30] It's an interesting space for me to get into because I have a background in tech and I also have a background in finance.

But, I think, ultimately, separate from that, is actually the fact that I do think that there's something really powerful here, which is this disintermediation of the data layer, right? I mean, doing for data, for data storage communication, and processing, as I've said before, what the internet suite of protocols did for communication. That is what we need.

We've covered stuff on this show before with people like Jeffrey Rosen on constitutional law, and how do you [00:55:00] move into this future with these technologies that are intermediating experience? How do you get to a place where you can have safe experiences when they're happening on someone else's database, that they control? That's really scary stuff. So I think, you know, I certainly hope that a company will solve this problem. I am looking for that. It's something that we've covered on the show from different perspectives. But, yeah, I definitely think it's something to focus on. I don't know the answer, but, yeah, I think it's really interesting.

Do you think that central bankers are going to be out of a job? [00:55:30] Because that's what we're kind of getting at here.

Brian Kelly: Yeah. Is this live now?

Demetri Kofinas: It's not live but it's going to go out. It's going to go out

Brian Kelly: Yeah. So people are going to listen.

Demetri Kofinas: It's going to go out. There's lots of tape.

Brian Kelly: No, no.

Demetri Kofinas: This is like David Letterman.

Brian Kelly: Right, right. So, probably not in my lifetime. I don't think so. I do think that there's going to be a global digital currency.

Demetri Kofinas: 666, mark of the beast?

Brian Kelly: Yeah. I don't think-

Demetri Kofinas: RFID chip.

Brian Kelly: There's too much ... Exactly. There's too much. I think it would take [00:56:00] too much of a political upheaval to have this put a central banker out of business.

Demetri Kofinas: I also think that people are really underestimating the power of governments. I think that this community really, really underestimates that. The really bullish, the hodlers, or whatever you want to call them.

Brian Kelly: Right. There's no question that this technology can disrupt central banks. So, to that I will say, "Yeah, absolutely this can disrupt central banks." But you got to go through a lot. Listen, you got to-

Demetri Kofinas: Well, governments don't want to give up seignorage rights. They don't want [00:56:30] to give up the right to-

Brian Kelly: They don't want to give up any of that.

Demetri Kofinas: They don't want to give up the right to print their own money, why would they do that?

Brian Kelly: Exactly. How do they tax it.

Demetri Kofinas: They have all the guns.

Brian Kelly: Exactly, they have all of those things.

Demetri Kofinas: They have all the guns.

Brian Kelly: Exactly. Exactly. I mean, listen, if you're buying Bitcoin and thinking that the global political system is going to disintegrate at any time soon, I also think you should probably be buying some guns and probably some canned goods, too, because we've got other issues. The point is that I do think this technology can survive without disrupting central banks. There's plenty of use cases for this.

Demetri Kofinas: Brian, it was great having you on the show, man. Thanks for coming on.

Brian Kelly: My pleasure. Thanks for having me.

Demetri Kofinas: [00:57:00] Thank you.

Brian Kelly: Enjoyed the discussion.

Demetri Kofinas: That was my episode with Brian Kelly. I want to thank Brian for being on my program. Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at HiddenForces.io. Join the conversation through Facebook, Twitter, and Instagram @hiddenforcespod, or send me an email. Thanks for listening. [00:57:30] We'll see you next week.