

**Episode Title:** A crypto reckoning

**Episode Description:** We explore crypto in light of its recent performance and assess where it's at as an asset class. We also dig into the key factors impacting its mid- to long-term outlook and what that could mean for investors.

---

**Transcript:**

Alex Lieberman ([00:04](#)):

What's up everyone? I'm Alex Lieberman, Co-Founder and Executive Chairman of Morning Brew. This is season three of Fresh Invest, your favorite investing podcast sponsored by Fidelity Investments and powered by Morning Brew. This season we're getting you the answers that can help you build financial confidence during economic uncertainty. Last week, we explored how investors like you can incorporate thematic investing into your portfolio. We covered some popular thematic categories and the different investing strategies that can make an impact on your bottom line, and in some cases, the world around you.

([00:37](#)):

Today we're covering a topic that many of you have been waiting for all season; crypto. It's no secret that crypto has had a really unpredictable year, but have these changes been completely unexpected or has its shakiness as an asset class been a natural course correction? We'll get into crypto's performance over the past few months and examine how its increasing popularity with investors may result in more regulations that will affect both institutions and individual investors.

([01:05](#)):

Jack Neureuter, a Research Analyst at Fidelity Digital Assets joins us today to assess the current state of crypto and what it means for your portfolio. Let's get into it.

([01:18](#)):

Jack, welcome to the show. Good to have you here.

Jack Neureuter ([01:20](#)):

Thanks, Alex. Glad to be here.

Alex Lieberman ([01:22](#)):

So let's start off with a little bit about you. Who are you and what do you do at Fidelity?

Jack Neureuter ([01:26](#)):

I sort of followed the traditional path into finance, studied finance and economics at UMass Amherst in the Honors college. I worked at CAIAA, the Chartered Alternative Investment Analyst Association in college and started my career at Fidelity in prime brokerage, so working with hedge funds that typically are looking to gain the ability to short a security. And to short a security sounds simple, but it's really quite complex. You have to actually borrow it from somebody else that owns it.

([01:53](#)):

And so I was doing some of that originally, but really was interested in getting into research. I've always been interested in investment research and specifically got really interested in digital assets because one of the first things you learn in college, or in academic finance, is that markets are zero sum. Somebody's alpha is somebody else's negative alpha or under performance relative to a market cap weighted benchmark, right? That's why we see indexing becoming so popularized. And to me, a space that has less analysts, has the land of misfit toys, which crypto sort of has become in some ways to traditional finance, looks like opportunity to me and that's what got me really interested in the space.

[\(02:34\)](#):

Today, I'm a Research Analyst for Fidelity Digital Assets. We are a wholly owned subsidiary of Fidelity Investments and work with institutions to be able to custody and trade bitcoin and digital assets. I research and speak to, typically, traditional investors about crypto and hopefully bridge some of the knowledge gaps between TradFi and crypto.

Alex Lieberman [\(02:57\)](#):

Love it. Just to rewind for a second. First episode of this season, I spoke briefly with Fidelity's Jurrien Timmer. It was my second time chatting with him and we spoke about the current crypto landscape and he explained how crypto's value grew as more people started using it, which is a concept that we know as Metcalfe's law. Crypto's been pretty wild this year despite greater adoption. Can you summarize what's been going on and what factors have contributed to this volatility?

Jack Neureuter [\(03:26\)](#):

Yeah, what you're really alluding to, and this is sort of a concept that we talk about quite a bit, is things that digital assets are actually driving in terms of their performance and things that they just can't control. And we use the term intrinsic versus extrinsic. So what's actually happening intrinsically to networks like Bitcoin, networks like Ethereum, and then the infrastructure that's being built around them. And to us, we see this positive up and to the right trajectory over time. The long-term picture and thesis around bitcoin as a monetary asset, around Ethereum as this digital platform that offers a more transparent way to do things, such as financial applications or owning content, things like NFTs, we see the use case in the intrinsic metrics, like you mentioned, something like a Metcalfe's law, the actual adoption curve associated with crypto continue to grow, but yet the price is down and it leads people to think, is that necessarily true? Is everything so great in the land of crypto?

[\(04:27\)](#):

And what I would say is it's really more around the extrinsic variables. So in traditional finance, this is one of the worst years historically for traditional assets like stocks and bonds, you looking at 60/40. Over the past 100 years or so, this is one of the historically worst years. And if you think about crypto or digital assets, they are necessarily a nascent asset class. Bitcoin, the first block was mined in 2009 for Ethereum, the second largest digital asset network, it was 2015. And so you're talking 13 years at most in terms of the lifespan of this ecosystem. And so it's still very nascent and thus, it gets traded as this highly risk-on asset, it has a very high beta. When equity markets go down, bitcoin tends to go down by as much as the market and then some.

[\(05:17\)](#):

And this isn't that surprising because we look at the macro backdrop. The macro landscape has really shifted, and that gets to the point of intrinsic is different than extrinsic. We can still have positive things happening in these networks and ecosystems which we are observing right now. So the long-term picture, I think very much so, remains intact, but really the short term, what it has more to do with is

this fear of inflation, changing policies by central banks such as the Federal Reserve, and that's causing a tightening in financial conditions that we haven't seen in a long time. And we've seen it in things like real interest rates rising. If you raise the cost of capital, well then that's going to hurt investment assets, risky assets, but it's going to hurt assets that are viewed as extremely risky assets, such as digital assets, the most on a relative basis. So it's not necessarily surprising that in the short term, we've seen huge headwinds.

Alex Lieberman ([06:11](#)):

I think you've done a great job summarizing basically what's happened in the lens that an investor should look through to better understand what's happened. Now I want to talk about what this means for someone who's thinking about dipping their toes into crypto. You talked about adoption, and over the last year, we've seen a 15% increase in Morning Brew's audience holding crypto.

Jack Neureuter ([06:32](#)):

Yeah, so I don't think anything has fundamentally changed about the actual investment thesis. For those considering it or just getting started, it's market volatility like this that's happened four or five times throughout crypto's brief history. We've seen it in 2013, 2014 in Bitcoin, we've seen it in 2017, everybody knows the buildup and blow off top that Bitcoin had when it grew from \$3,000 to \$20,000 back to \$3,000. And so we've seen 70%, 80% draw downs in crypto to be normal.

([07:06](#)):

And so to me, does that say you shouldn't invest in the asset class just because it's volatile? And I would say that is probably the wrong way to approach it. I think the right way to approach the question is, it is a volatile asset, are there positive attributes, is there positive EV to this investment? And I think there certainly can be a case to be made that digital assets become larger, and therefore it becomes a potentially interesting reward relative to that actual risk, and you can get compensated for the risk that you know are there.

([07:38](#)):

We're in the midst of a 60%, 70% drawdown. We know those risks exist and we shouldn't avoid them and pretend like they don't exist. And so to correct for that, the key word I think is position sizing really, right? If it's a 1%, 2%, 3% position of an otherwise traditional portfolio, well then you can only lose the 1%, 2%, 3% of that portfolio even if digital assets were to become completely worthless and outlawed.

([08:04](#)):

And so I think position sizing is really important, knowing your risk tolerance, knowing the time horizon of that capital that you're investing. And then I think the second part to it is research, which goes hand in hand with the position size that you can take. If it's a relatively larger percentage of your portfolio, you need to really understand it. And because digital assets are so different, they have different use cases and valuation techniques don't necessarily translate perfectly from traditional finance over to the crypto space. You really need to be careful and do your homework before FOMOing into this asset class. It's not the right place to just jump in because you've heard about something, it's really important to do your research and then position size appropriately.

Alex Lieberman ([08:45](#)):

Totally. I'm assuming it's going to be a relatively similar answer, but I'm going to ask it because I don't want to leave the other half of the crowd out. For existing investors, given the current climate, given they've probably experienced, or possibly experienced losses to their positions, what should existing

crypto investors be keeping in mind when deciding whether to sell their coins or to continue to have diamond hands?

Jack Neureuter ([09:12](#)):

Yeah. I think the big question goes back to what we started with. It's the intrinsic fundamentals and the value prop associated with that, if you are a long-term investor, then that is what should really matter to you over the long term. If there is still a value prop or a thesis intact for a political, transparent, neutral, peaceful, opt-in monetary systems and technology and decentralized digital ownership, has any of that changed? And I would argue, I don't think so.

([09:45](#)):

In fact, over the last two years, I think that that thesis has actually grown clearer and stronger. We see pressure on centralized technology and social media companies for being too large and powerful. We see every word seemingly out of central monetary authorities like the Federal Reserve moving markets. We see centralization in places and we have this decentralized, transparent alternative that's been created. And so again, for the long-term investor, I still think that the thesis is very well intact if that is ultimately what you believe.

([10:20](#)):

And then I think the second question, and this is more the shorter term question, is what about the macro environment? Get back to that intrinsic piece. If that's what's suppressing the asset price today, because things like interest rates are rising and risk sentiment is lowering, when is that going to turn is really the question in the short term. And to me, that all relates to the macro environment.

Alex Lieberman ([10:42](#)):

Totally. We talked a lot about the average retail investor. I want to talk about the institutional investor for a minute. If we made the assumption that there could be greater institutional adoption, whether it's businesses investing in crypto, whether it's brokerages allowing you to invest through your brokerage account, whether it's companies accepting bitcoin or other crypto as tender, how should an individual investor be thinking about that, assuming that trend continues?

Jack Neureuter ([11:15](#)):

Yeah. So I don't necessarily think of institutional adoption in the way of everyday businesses accepting crypto as a means of payment. It certainly doesn't hurt. In many ways, this has been tried by companies like Circle with their Stablecoin years ago, there was this push to potentially disintermediate large payment providers. But I think that what we've seen is there's been less adoption, particularly if I think of somewhere, I live in the United States, we have robust payment systems and I can't think of too many issues as the end retail user of those applications. I know businesses, there's high gate keeping fees and other issues, but that has been a space where it makes sense for crypto to go eventually, but it hasn't been this clean use case.

([12:04](#)):

And for me, I think of institutional adoption as really, what are the largest institutions and where are they pushing their capital and how does that change market structure? And so for me, it's pension funds, endowments, sovereign wealth funds, those are some of the largest entities in the world. It's not a single person making those decisions, but if those actual boards that make investment decisions come around to the digital asset space, which they are increasingly looking for education on the space, we see one offs of pension funds and endowments moving into the space through venture capital investments.

But for me, it's that investment coming into the space is really key because A, you get investment into things like venture capital, which can then fund entrepreneurs to build applications that create the next wave of use cases and better user interfaces, similar to the internet. You needed investments in order for those use cases to actually be built. The first application of the internet or email was people sending pictures of cats to each other via email.

[\(13:08\)](#):

And we look at that and we're like, "Oh, it's silly." And back in the 90s there were so many videos of people saying, "Well, there are no use cases that exist for this. There's not enough people using it." And yet we zoom out 30 years later, and we would say that is a terribly misguided statement. But yet, we have sort of the same thing going on here in the crypto space with people flipping NFTs. These are just digital art. And I'm not saying that to belittle NFTs in any way, but it's just, we're so nascent and we need those use cases and the user interfaces to get built out. And so, institutions investing in those entrepreneurs is really key and that is happening, but it'll hopefully continue to happen on a larger scale, which again, finds its way down to end users at the end of the day with better applications.

[\(13:56\)](#):

And then I think the second part is direct investment into tokens from these institutions. And what does that do? That makes the space larger, if you have more capital flowing into the space, and increased interest that drives capital into the space has a meaningful impact on A, market structure, but B, the regulatory environment. And that is a key one here, particularly in the United States.

Alex Lieberman [\(14:18\)](#):

So tell me about the regulatory environment. Where do you see that going and how should any of our listeners who are either already invested in crypto, or considering it, be thinking about the impact that regulation will have?

Jack Neureuter [\(14:29\)](#):

I, and others on my team, have been using this phrase called the regulatory flywheel for adoption, where we actually think there could be a really positive reflexive cycle between regulators, financial institutions, and end users or adopters. And that's both institutions and retail investors. And for us, it's really lots of large institutions have been hesitant to touch the space because there's not regulatory framework. And also, large financial institutions have been hesitant to build products and services because either they're explicitly not allowed to or they're implicitly not allowed to, and so we need that regulatory clarity.

[\(15:09\)](#):

And I think you're starting to see it, especially amongst politicians are increasingly talking about the space. There's more than 40 million voting Americans that have some form of ownership of crypto, and that is a real voting block. And so I think what you'll see is increased clarity on the regulatory side could potentially drive increased investment across institutions and individuals into the space because financial services firms can build better products and services to make it easier to onboard the masses.

[\(15:38\)](#):

And really, that is sort of a flywheel in many senses where you get more regulation, you get more products and services that can be built, then you can have more investment in the space and the space becomes larger, and then you need more regulation and the cycle goes on and on. And so again, it will be different for different projects, but regulation on net is probably beneficial to the space.

Alex Lieberman ([16:01](#)):

Yeah, I think it's a really good point you make because I think the less researched investor kind of hears headlines about how regulation could be a bad thing, it's scary to people, but in a lot of ways it could be a net positive from the standpoint that it's hard for companies or institutions to build or interface in the space if they don't know the rules to follow. Once you know the rules, you know how you can behave. So I think it's a really important point that you make around what regulation will do to crypto.

([16:32](#)):

A few more questions for you. The first is, for investors who plan to hold their investments and they're trying to think about what is crypto's outlook look like long term, what should they be keeping in mind?

Jack Neureuter ([16:48](#)):

I think there's a few things, and I don't want to sound like a broken record, but I think expecting volatility in this space is a must, right? I mean what's the worst case if you're expecting volatility? Maybe there's less volatility than expected, but again, to me it's, understand that what's happened historically is this is a nascent growing asset class. It has a long-term Metcalfe's law-like adoption curve, but it's not this perfect up and to the right movement for the asset by any means, right?

([17:19](#)):

But that's rational. If this asset class went straight up and to the right, then there's something wrong. Risk should be correlated with return if we have rational financial markets. And so, expecting volatility, and then of course as a result of expecting volatility, position sizing it appropriately in portfolios, and then again, doing your own research and not holding super strong beliefs that can never change. This is a dynamic space that is constantly changing, and I think being stuck in one certain way of thinking, I know I myself entered the space with one lens on the digital asset ecosystem and it has evolved and transformed in many ways, just from keeping an open mind and listening to people with different voices all across the space and in doing my own research.

([18:07](#)):

And then I think beyond that is, to the point of the space being so large, is really try to hone in on and understand what you understand and acknowledge what you don't know. I spend my entire 40+ hours a week full time working studying the space, and then I also, it's sort of my hobby as well, maybe need some other hobbies, but I spend more than that in this space, and I couldn't possibly tell you about more than a handful of projects in the space because everything is so intricate and changing. And in order to stay on top of things, you really need to hone in your focus on certain ecosystems or spaces that you think that maybe you have an edge or a better understanding in because you can't simply understand this whole space, it's too massive. And I think acknowledging that is a step in the right direction for people looking at this space.

Alex Lieberman ([18:59](#)):

Totally. I think finding ways to niche it down, but also in true Buffett style, understanding basically what you know you don't know and what you don't know you don't know is very important for trying to basically not be blindsided by a space that's just ever evolving.

([19:13](#)):

Of course, we had to leave the most controversial crypto topic for last, which is the environment. And there's been just all of this discussion and debate, especially on Twitter over the last year, about what is

the environmental impact of crypto, people have focused the discussion on bitcoin at times. How should people be thinking about this?

Jack Neureuter ([19:37](#)):

I pretty much expect to get this question every single time I talk about this space. And really, for me it gets to the ESG considerations, right? I think there's a reason why the investment management space put together ESG and it wasn't just a consideration of environment, it's really environmental impact, the social impact of your investments, and then the governance aspects of your investment.

([20:04](#)):

And to me, if you look at ESG as a package around an asset like bitcoin, I actually think it's really a ESG-positive asset potentially. To get to the energy discussion, I think first you have to discuss proof of work and proof of stake. Not to get into the details, we could spend all day, multiple podcasts talking about this. You could have an entire podcast series on proof of work versus proof of stake, but really, to boil it down into its simple components, proof of stake is very similar to a stakeholder mechanism.

([20:37](#)):

Not to say that Ethereum moving to proof of stake means it's a security. That's not what I'm saying. But what I am saying is the structure is the percentage of wealth you hold on that network is correlated to, effectively, your governance or voting power. Whereas in proof of work, which is really the energy component that gets talked about around crypto and specifically with Bitcoin, now that Bitcoin is really the last man standing in terms of large networks that consume a lot of energy using proof of work.

([21:05](#)):

Proof of work separates wealth from power of that network. That's really the beauty of what a proof of network is trying to get at, is this novel innovation of, you could own a million of the 21 million bitcoin, but it doesn't give you any voting rights over the network because really, governance or block security is created through hashing, which is energy consumption. It ties it to real world energy. And again, not to get into the nuances, but the important piece is, it separates wealth and power over the network in a way that doesn't exist prior to Bitcoin's existence.

([21:43](#)):

And so if we tie the S and G into the fact that Bitcoin uses energy, I think there's some really profound understanding which is, okay, it uses energy, but does it provide positive utility? And again, it's still a nascent network, but we've seen examples of this in terms of the social implications of Bitcoin. Places like Nigeria, people protesting police brutality, had their access to bank accounts shut off. They were able to access, effectively, a bank in your wallet via Bitcoin. Same thing in Belarus for women's rights marches, places like El Salvador, we saw the president himself saying that 70% of the population is unbanked or underbanked, and with Bitcoin and the lightning network, all you need is access to the internet with a cell phone and you can download a mobile wallet and you can plug right in yourself.

([22:35](#)):

And then to the governance point, or the G of ESG, the governance implications are stark in terms of Bitcoin. Bitcoin doesn't care or know your gender, your ethnicity, your religion, your political affiliation, and it doesn't care about your wealth. And that's the key in terms of proof of work is wealth and power are not correlated.

([22:57](#)):

And then lastly, just to put the period on the end of the sentence, in terms of ESG is, we are finding increasingly interesting ways to use the energy consumption of Bitcoin in a positive or productive



manner. We're seeing increased levels of transparency around the energy consumption for the Bitcoin network. And it is, I've seen reports of upwards of 60% of Bitcoin's energy being used as sustainable, but there's really novel ways to potentially use Bitcoin because miners themselves are just agnostic buyers of energy. You can put them anywhere.

[\(23:34\)](#):

Whereas civilization lives, historically, as a result of seaports. You see major cities are on the sea, but they're not necessarily near renewable energy like waterfalls, right? That's because this was before times of electricity, but now we have this sort of agnostic buyer of energy that doesn't care where it's located. And so you can go to stranded remote places and mine bitcoin and make use of otherwise wasted or stranded energy.

[\(24:03\)](#):

In particular, there are potentially profound applications of that for renewable energy where, if you think of a solar panel, it creates electricity only when the sun is out logically, but that doesn't necessarily mean that's when people are using energy. So you have this sort of mismatch between when it's creating energy and when people need energy, and battery technology isn't great enough yet, and selling back to the grid is complicated and nuanced and the grid isn't necessarily set up to handle that. Whereas, you could put bitcoin miners on site, and we're seeing this today, where they can make those renewables more profitable, less reliant on subsidies, and then sort of on net be a beneficial additive to the environment or renewables conversation, rather than a minus, but because all of that is so nuanced, it's easy to write a media headline that says that bitcoin uses as much energy as XYZ country and then end it that way.

Alex Lieberman [\(24:58\)](#):

One, I love how passionate you are about this. Two, if you were doubting Jack before about being able to do a whole podcast series on the difference between proof of work and proof of stake, my guess is you're not doubting him now. And the third is, at the end of the day, I think his answer very clearly shows this, it's a pretty intricate and complex question and discussion. So if you think you've found your point of view on the environmental implications of crypto in five to 10 minutes, you probably haven't dug deep enough to understand the nuances of this discussion. But Jack, this was awesome, really appreciate you joining the conversation and look forward to having you on Fresh Invest in the future.

Jack Neureuter [\(25:36\)](#):

Yeah, thanks for having me, Alex.

Alex Lieberman [\(25:41\)](#):

Thanks everyone for listening to Fresh Invest today. I hope you're feeling more confident about how to assess crypto's ebbs and flows and what to consider if you're deciding to invest in crypto for the first time, have recently invested, or are an early crypto adopter. Market fluctuations can feel challenging to navigate, especially with newer alternative asset classes like crypto. The potential for regulation will certainly be a catalyst for more movement in the markets and crypto adoption may accelerate as [inaudible 00:26:09] are offered for individual investors.

[\(26:11\)](#):

There's hopes that these changes will bring some clarity into a space that often seems confusing and a bit like the Wild West, and could really set the stage for crypto to become a key player in investment portfolios. So, be sure to keep tabs on what's happening in the space and, as we've all learned over the



last year, be prepared for anything. Join us next week as we go even deeper down the crypto rabbit hole and explore how you can actually invest in crypto, what the regulatory market is looking like, and what all this means for your taxes. See you then.

Alexandra Bass ([26:42](#)):

Hey everyone. This is Alexandra Bass from Morning Brew, and as the Producer from Fresh Invest, I'm here to let you know this podcast was created on behalf of Fidelity Investments by the Morning Brew Creative Studio and does not reflect the opinions or point of view of the Morning Brew Editorial Team. Sources are provided for informational and reference purposes only. They are not an endorsement of Fidelity Investments or Fidelity Investments products. And on their side, Fidelity is the paid sponsor of this podcast, which includes providing Fidelity personnel for interviews and publications with Morning Brew Studios on content development. Fidelity and Morning Brew independent entities. Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or solicitation to buy or sell any securities.

([27:20](#)):

The views and opinions expressed by the speaker are his or her own as of the date of the recording and do not necessarily represent the views of Fidelity Investments or its affiliates. Any such views are subject to change at any time based on market or other conditions. And Fidelity disclaims any responsibility to update such views. These views should not be relied on as investment advice and, because investment decisions are based on numerous factors, may not be relied on as an indication of trading intent on behalf of any Fidelity product. Neither Fidelity nor the Fidelity speaker can be held responsible for any direct or incidental loss incurred by applying any of the information offered. Please consult your tax or financial advisor for additional information concerning your specific situation.

([27:56](#)):

This podcast is intended for US persons only and is not a solicitation for any Fidelity products or service. This podcast is provided for your personal, non-commercial use and may contain copyrighted works of FMR LLC, which are protected by law. You may not reproduce this podcast in whole or in part in any form without the permission of FMR LLC. Fidelity, the Fidelity Investments, and Pyramid Design logo are registered service marks of FMR LLC, copyright 2022 FMR LLC, all rights reserved.

([28:21](#)):

Past performance is no guarantee of future results. Investing involves risk, including risk of loss. Digital assets are speculative and highly volatile, can become liquid at any time, and are for investors with a high risk tolerance. Investors in digital assets could lose the entire value of their investment. Fidelity Digital Assets SM is a subsidiary of Fidelity Investments, dedicated to building products and services that help institutions adopt digital assets. Custody and trading of digital assets are provided by Fidelity Digital Assets Services LLC, a New York State Chartered Limited Liability Trust Company. NMLS ID 1773897. Fidelity Digital Assets is a service mark of FMR LLC. Fidelity Brokerage Services LLC, Member NYSE, SIPC, 900 Salem Street, Smithfield, Rhode Island 02917.

1048243.1.0