

# KEEN ON RETIREMENT



## A Bitcoin Primer from Keen on Retirement Co-Host Steve Sanduski

Welcome to Keen on Retirement  
With Bill Keen and Steve Sanduski

**Steve Sanduski:** Hello everybody. And welcome back to keen on retirement. I'm your cohost, Steve Sanduski and with me as always Bill Keen and Matt Wilson. Hey guys, how's it going?

**Bill Keen:** Going good here in Kansas City, Steve I try to get a good night's sleep last night after kind of a busy week here in the Keen family.

**Steve Sanduski:** What's going on?

**Bill Keen:** I've had two of my kids graduate from a meaningful efforts that they've made my son Devin, who actually was on the podcast several years ago because he was in Hawaii when the false alarm occurred and folks were thinking that there were nuclear bombs coming toward Hawaii.

Do you remember that?

**Steve Sanduski:** For sure.

**Bill Keen:** And Devin did a great job on the podcast explaining his mindset and what he was thinking when he was hiding in the sewer system with other people in Hawaii thinking that nuclear missiles were on the way. He graduated Steve from the University of Missouri Science and Tech in Rolla as a mechanical engineer with a 4.0 grade

**Steve Sanduski:** Oh, my 4.0, wow.

**Bill Keen:** Yeah. Wow. Yeah. And the school there in Raleigh is known for being, you know, not the easiest school to get through. I mean, I think probably all engineering schools would, would be that way. So I was very proud of him for his efforts. And he'll be starting at Garmin here in Kansas City as a flight test engineer.

So he's married his. Passion for engineering and aviation and one role, which was a real blessing for him and very exciting. So, he'll actually get to be up in airplanes as well as they test the various equipment that they're engineering. So just a dream job for him and my oldest daughter, Taylor I've talked about also on the podcast.

I haven't got her on yet, but we're going to keep trying she graduated from medical school last Saturday. So she has now got the long white coat. As they say. So that was just a wonderful thing that we got to experience. She's been so dedicated in that journey. Devin graduated on a Friday night at 6:00 PM the very next morning and another city Taylor graduated at 9AM.

We were able to go to both of those ceremonies in-person which was wonderful. And then it doesn't end there, Steve.

**Steve Sanduski:** Okay. But wait, there's more.

**Bill Keen:** Yeah, I remember I said I needed to get a good night's rest last night after all this well, Dr. Taylor purchased her first home the Thursday after graduation, and then she got married.

Two days later. Wow. So just this last weekend, she got married to a gentleman she's been dating for over four years. I've introduced him to our group of folks that attend our holiday parties over the years here in person, which I've had some fun with, but he also is an engineer that went to Missouri Science and Tech there in Rolla.

So young, man's got a great head on his shoulders and just super grateful to see what they have in store in their life. So it's been a great a week or so

**Steve Sanduski:** Well, it's a proud Papa there. I'm sure. With a new doctor, an engineer and getting married a new son-in-law. So, wow. What a big week for you?

**Bill Keen:** Yeah. And remember I had a new son-in-law in July of last year as well. father can, can never be happier when daughter gets married and he get to walk them down the aisle and, the gentlemen that they marry are just wonderful young men I mean, I don't know what more I can ask for.

So very, very proud and very grateful.

**Steve Sanduski:** Very exciting. Well, congratulations.

**Bill Keen:** Thank you.

**Steve Sanduski:** All right. So yeah, today I think we're, we're going to have a topic today that not really gone into any detail in previous episodes. I think in the past, we've alluded to it a little bit, but we've never devoted a show to it. So this one I think, is going to be pretty fun.

**Bill Keen:** We're going to enjoy. It's deep. We talked about this. It's been several years, maybe even three years. I'd have to go back in the episodes and look, but we went over just the very basics of cryptocurrency of Bitcoin. The technology kind of behind those things called blockchain. You might recall

when it was very high level and in the last few years, since, since we've talked about that, I think we've had a lot of developments and evolution to these things a lot more just history and experience with what's happened and how things have played out.

So I'm excited for this episode and Matt, and I know that. You actually do have some expertise in this area early on in our podcast, we used to give you a hard time that you were one of the early adopters of Bitcoin and you were accumulating some massive amount of wealth in Bitcoin and you would joke and laugh and we kind of made it as joke that that's what you were doing.

And then, well, we find out here over the last year or two, that you actually have been paying really close attention so much that you have a podcast called the Digital Money Advisor where you, talk and research these things and share it with your listeners. So we know that you've had a lot of, perspective that you've listened to and study.

And then you've also formulated yourself and we want to pick your brain today, Steve. So we're going to turn the tables today and we're going to interview you. What do you think about that? You ready?

**Steve Sanduski:** I'm excited. Yeah. You know, I, really appreciate that the crypto space, the Bitcoin area and, like you too, I'm a very curious person. And so when these interesting things like this, come along, this one in particular, I happened to spend quite a bit of time researching. And as you mentioned, I do have the podcast about it.

So yeah. So happy to, to chat and share some of the knowledge that I've accumulated here over the years.

**Bill Keen:** Yeah. And you know, Matt and I we want to be cautious and we want to be thoughtful. We want to be prudent. But we want to just understand it, continue to expand our knowledge base as well and bring that to our listeners. So think we'll have a great episode today.

I might also mention Steve has another podcast as well. Barron's reached out to Steve O last year, and he has a podcast that he hosts for. Barron's now called Barron's Advisors and that's. It's basically angled toward investment advisors. Would you say Steve?

**Steve Sanduski:** Yeah. So the Barron's audience Barron's magazine is really designed for retail investors. The magazine has been, then they have a division called Barron's advisor that is directed toward financial professionals. And so they have a podcast that they asked me to host. And so basically we alternate.

So one week I have a show the next week someone from Barron's does, and then we, kind of tag team opposite weeks there. And the thing that I do that is a little bit different is rather than me interviewing other financial professionals to the financial advisor audience, I'm actually out trying to find people for the most part outside of the financial industry, where it might be psychologists, it might be authors.

It might be athletes. People that have some specific skill that could be applied to what financial professionals do. So it's really, think, interesting and, and open to even non-financial advisors, because I do have some very interesting guests

**Bill Keen:** Speaking of guests in Bitcoin I saw that you interviewed someone named Dan Held on the Barron's podcast regarding Bitcoin's value as an asset class.

**Steve Sanduski:** Exactly. Yeah. So Dan's one of the long time Bitcoin advocates and very, very knowledgeable about the space. So yeah, so he and I had a great conversation in, got a lot of great thoughts from him it relates to Bitcoin as well.

**Bill Keen:** Well, I'm going to confess something here. You know, I'm going to feel safe to do that on our show. I'm kind of jealous, Matt we're not the only ones that get Steve on

**Matt Wilson:** Our podcast. He was popular in the podcast world.

**Steve Sanduski:** Well, I gotta say, you know, I've got my own, you know, my podcast, but I've been doing this for, what is it? Five years now. We've been doing this

**Bill Keen:** Yes I have. and a half.

could be close. We went on six now. Yeah. I think we have closed 140 episodes out and, and it's such a, it's such a wonderful thing that we do because folks can go back and I would encourage your listeners to go back. We don't change any of the podcasts. We leave everything out there online.

So you can see them either through the apps or, literally online they're through Keen Wealth Advisors through the podcast uh, links. And if you want to see what we were saying at any given time about a market correction or something that was happening in the economy, you can go back to that month and year and click on it and listen to what we were saying.

And it's almost like a diary of our thoughts and what we were seeing at those times. So I really love this format. So, and I do appreciate you, Steve, your long-term commitment to us here.

**Steve Sanduski:** Yeah, well, this has been a real pleasure to do this and enjoy getting together and having these conversations.

**Bill Keen:** Well, Matt, I would like for you to just be as hard as you can on Steve, because you're a smart guy.

**Steve Sanduski:** As Pat, Benetar said, hit me with your best shot.

**Bill Keen:** Yes.

**Matt Wilson:** We'll try and stump

Steve today.

**Steve Sanduski:** That's right.

Stump, the Bitcoin whale. How's that?

**Matt Wilson:** we have been getting more questions about cryptocurrency and the role it plays in portfolios and our views on it. And I mean, partly that is fueled by performance. We do have the benefit of hindsight right now, performance has been very good. If you look back to when Bitcoin came out and 2009, I mean, at one point, I guess it was trading at 8 cents and at the peak \$65,000.

So it definitely gets people's attention, but it also has got the attention of the government as well. For the first time I noticed this, I was filing my taxes and I use one of the software programs and specifically were asking, did you buy or sell any cryptocurrency in 2020? They want to get some tax revenue out of it.

You know, they're looking at that 8 cents to 65,000 there they're viewing, Hey, somebody made some money on this and they may not be paying their taxes. Cause it's possible, you know, considering that the reporting requirements, I think for cryptocurrency are still kind of influx. I think they're starting to get a little bit more clarity from the government, how that's going to work.

But, you know, that's just leading to a lot of questions from, you know, from clients on this. So we figured this would be a great timing you know, to have a show on it. maybe this is too general of a question, Steve, but my first thought is, and this is a common question we get is what is cryptocurrency and what is it use for?

**Steve Sanduski:** Okay.

**Matt Wilson:** And that might be too that's maybe a loaded question. I don't know.

**Steve Sanduski:** I'll be honest with you. It's not as simple to answer as you might think. So let me just give you some thoughts here and then we can, we can dialogue on that a bit if you'd like, so let's start with Bitcoin because that's really where it all begins. And Bitcoin is the original cryptocurrency. So Bitcoin technically came out in the form of a white paper in October of 2008. Basically the white paper said here's what Bitcoin is. And then a few months later, first week of January, 2009, the computer code. That basically was the computer manifestation of what was in the white paper was actually released.

So technically we can say Bitcoin was came into being in January of 2009, but what's interesting. I think a lot of people forget is there were decades prior to that where the components of what Bitcoin is were actually being developed. And it wasn't until Satoshi Nakamoto, which is the suit anonymous person or people that actually created Bitcoin.

It wasn't until Satoshi Nakamoto was able to take all of these previous pieces of technology and ideas that had been developed over decades to put them all together in a certain structure and add one or two more bells and whistles and release this thing called Bitcoin. That. Started at zero and became what it is today, which, you know, it fluctuates, but it's in the tens of thousands of dollars per coin.

So, so that's a little bit of the Genesis of the history. so happy to go into some more details, to get a little more specific on what Bitcoin is in, in terms of what promise also. So basically what Bitcoin is, is it's essentially a new form of digital money and it's a form of money that no one can take from you without your permission.

It can't be inflated away. It can't be confiscated because there's no centralized authority that is issuing this or giving you permission to use it. So, one way that it differs from say our money today, or differs from say Visa or MasterCard is that those are all centralized systems. So with our money system today, we've got the U S government that prints the U S dollars and they control the money supply and you have to use U.S. Dollars to pay your taxes.

So the government controls the money, whereas with Bitcoin. Nobody controls it. It's decentralized. There's literally thousands of computers. They call them nodes around the world that are all running the same set of Bitcoin software. They're tracking the transactions that people are making with Bitcoin.

They're verifying that the transactions are correct, and that there's no double spending of the same Bitcoin. And then they're publishing that. And then each time, every 10 minutes, all these transactions get aggregated, they get verified and then it gets published in the form of this blockchain. And every 10 minutes, all these blocks get upended to the previous blocks.

So there's one continuous chain of transactions that goes back to January of 2009, and that helps to keep system secure. So, that kind of quickly is what Bitcoin is.

**Matt Wilson:** it also sounds like it's not regulated either. is that fair to say?

**Steve Sanduski:** Well, there is some regulation, certainly, and there will definitely be more coming, but the U S government has already made some decisions in terms of how it views Bitcoin. So they've already made a decision years ago that Bitcoin is treated as property from a tax standpoint. So if you buy or sell it, or if you sell it and you sell it for a higher price than what you paid for it, you have to pay tax on the difference between what you paid for it and what you sold it for.

And that could be a long-term capital gain. It could be a short term capital gain. So the government has said, that's what that piece is. And then they're also definitely going to be more regulations in terms of anti money laundering. And the government has made it clear that they're going to start cracking down even further to make sure that people are reporting their Bitcoin transactions and that they're reporting their profits and that they're paying their appropriate taxes.

**Matt Wilson:** Okay. Kind of to my point earlier, the government is definitely looking for tax revenue, and this is one space that that there's definitely some, some revenue to be had. you know, and I think too, the government is still trying to determine some of the aspects of it. I know that's the first step, like you said, how to tax it.

So they'd treat treated as property or similar to how a stock trades. If you have a individual stock in a brokerage account and you sell it for a gain, yes. It's capital gains based on how long you held it, Bitcoin

or cryptocurrencies treated the same way. But I've also read that the Securities Exchange Commission, which kind of regulates the stock market and investment advisors, they categorize cryptocurrency as a security, like a stock or bond.

Whereas the CFTC like the futures regulators view it as a commodity.

**Steve Sanduski:** Right. Yeah. And so different branches of the government are viewing it in different ways and, you know, they, they all have different purposes. And while it is quote, you know, in, in our case, the U S government, you know, they're, they're different departments and they've got different objectives and goals.

And so they may be looking at it in different ways. But I think ultimately, yeah, the key thing for a lot of investors is how is this thing going to be taxed? And I think that's been made pretty clear. So I think there's definitely clarity on the tax side. And, you know, we never want people to avoid paying taxes that they legally owe.

And on the other side, we never want them to pay taxes that they don't owe either. So, we just have to be very clear that you pay everything that is owed and by law you pay what, what the taxes are that are required.

**Matt Wilson:** That's right. Currently the exchanges where you might be trading your cryptocurrency on are not giving you any documents, you have to self-report what your transactions were. Is that

**Steve Sanduski:** Yeah, I think for the most part, that's how most of them are operating right now. And so it is on the honor system. That you are tracking that there are different companies now that have sprung up, there's different little pieces of software that have sprung up that enable you to like download your transactions from some of these different crypto exchanges, where it will make it much easier for you to track your buys and sells and determine what your cost basis is and what any gain may be.

And so you it'll make it little easier to report, but yeah, and I would suspect though that over time that you'll see more of these exchanges will be reporting that information to the government. I think it's probably gonna be more by forced versus by voluntary on the, on the part of the, the exchanges, because part of the ethos of cryptocurrency is that it is.

Decentralized that it is permissionless. And there's definitely some libertarian strain, a lot of libertarian strain in the whole idea behind these cryptocurrencies. And so, that's really the thinking. And so I suspect that a lot of these exchanges they will definitely do what they're required to do, but they may not do a whole lot more until they're asked

**Matt Wilson:** Yeah. Considering kind of how this was materialized and put together in, in 2008, you know, in the midst of the great recession, like you said, the pieces of it had been in place for decades, but this white paper now, I don't know how long they had been working on it.

No one really knows, which is one of the things that is a, just a mystery of who created this thing and whoever they are and individual person or a group of people not wanting to reveal themselves.

**Steve Sanduski:** Yeah. You know, and that's actually a really important part of the Bitcoin history that's one of the things that distinguishes Bitcoin from all of these other cryptocurrencies that are out there. Because as I mentioned, Satoshi Nakamoto is synonymous, which means we don't know who the person is or the persons behind that.

And why that matters is if we look at the data and one of the nice things about Bitcoin and the blockchain is that it's very transparent. We can open up a little piece of software and we can look at the Bitcoin blockchain. We can look at the history and we can see every transaction that's ever been made.

We can see every Bitcoin address out there and we can see, what's in there. What's not in there. And when the last time it was transacted. So with Satoshi Nakamoto, we have an idea that Satoshi controls roughly maybe eight, a hundred thousand to a million Bitcoin,

which is worth tens of billions dollars.

Okay.

Yeah, but what's interesting is not single. One of those coins has been moved since they were first received back in 2009, 2010. And so Satoshi Nakamoto is sitting on tens of billions of dollars worth of Bitcoin. Has never cashed in on, it has never come public to say who they are and they disappeared.

So we've not heard, we've not had any communication from Satoshi Nakamoto since like 2010. And they basically said, you know, I've moved on to other things. And so the reason why that's important is because one of the main ideas behind Bitcoin is the fact that it is not controlled by any state actor.

It's not controlled by any individual or any group of people that could change the policy of it or that are materially benefiting. From it. And so they have some kind of bias in the system there. So that is a super important piece of Bitcoin that this Satoshi Nakamoto has essentially disappeared. Now it's possible the person has died. It's possible that they basically burned their keys that would give them access to the, Bitcoin that is under their key. We just don't know. But the fact that after all these years, after tens of billions of dollars, that that person has not shown up nor have they moved. Their coins is a very important part of one reason why it has value relative to some of these other cryptocurrencies, which are all started by people.

And oftentimes the people who started them kept a portion of the supply for themselves as a way to pay themselves. So there's definitely a big difference there. Okay.

**Bill Keen:** You mentioned, that blockchain and one of your statements just now. And can you talk just a little bit about the blockchain and what that means and how that fits in with Bitcoin?

**Steve Sanduski:** Sure. So let me also add in this idea of mining and how does a Bitcoin itself come into being? So another key aspect of the Bitcoin system is that there will only ever be 21 million Bitcoin mine. And the reason why that's important is because that essentially says there's a fixed supply. And when you have a fixed supply, that generates scarcity.

And when you have scarcity that has a tendency to increase the price over time, and it's very predictable. So what happens the way the system was designed. And again, this is one of the genius things behind it is that. Initially when the system was launched in January of 2009, every 10 minutes, the system essentially mined or created 50 Bitcoin five zero Bitcoin.

Now then the question is, well, who gets the 50 Bitcoin? So what happens is anybody that wanted to make a transaction using Bitcoin, you wanted to buy or sell or transfer it from one person to another person, basically that would go through the Bitcoin protocol and it would be put out there. And every 10 minutes, all the transactions that took place in those 10 minutes would basically be aggregated.

And then the miners, which again are simply people who have these computers and we also call them nodes. They're connected to the network. Basically a cryptographic problem is. Thrown out to the, the miners and they have to solve this problem. And it takes a lot of computing power to calculate the answer to this cryptographic problem.

The first computer, the first miner that gets the correct answer gets awarded the Bitcoin for that 10 minute period. And then that verifies that those transactions during that 10 minutes are accurate and appropriate. you know, that's kind of like the first blockchain and then the next 10 minutes.

Same thing, another cryptographic problem. First miner that gets the answer gets the 50 Bitcoin. And then that second block essentially gets appended to the first block. So now we've got two blocks and then we do a third and a fourth. And so we have, don't even know what the number is today, but we've been doing blocks every 10 minutes since 2009.

So there's many, many blocks that have been appended. So every time there's another block added almost impossible, not, totally, but practically to be able to go back and change a historical transaction that would mess up the ledger. I guess another key piece of the system is that every four years, the amount of new Bitcoin that is awarded gets cut in half.

So after four years, it went from 50 to 25. And then four years later went from 25 to 12 and a half. And then just last year it went from 12 and a half to six and a quarter. And as of right now, we have well, over 89% of the 21 million Bitcoin have already been issued. So there's only 11% left.

you know, that's essentially how it works. Bitcoin. It's a, it's a digital ledger that keeps track of all the historical transactions.

And again, with the little piece of software, you can look right into the software and you can see every single one of those transactions and blocks over the year. So it's very transparent.

**Matt Wilson:** but it's all anonymous. You don't know who owns what.

**Steve Sanduski:** Right. so, you know, another piece of the system is, again, it works with cryptography. And so there's this idea of what's called a private key and a public key. So think of it this way. Let's say you go to the post office and there's a hundred PO boxes against the wall. Each one of those PO boxes has a number like one 67 or two 33, or, you know, five, four, six, nine.

you know, let's say it's, it's PO box one, six, seven. Well, everybody can see it's PO box one, six, seven, but not everybody knows. know, who has access to PO box one 67? Okay. So the public key is one six, seven. The private key is I have the key to open up PO box one, six, seven, so anyone can see the public one, but it's only the person who has the private key to unlock that.

Has access to that Bitcoin. So if I want to send money from one person to another using Bitcoin, all I do is I get that person's public key. And the public key is, I think it's like, you know, maybe 32 to 36 alphanumeric characters. And so they send me, Hey, here's my public key.

And I say, great, I'm going to send you, you know, one 10th of a Bitcoin to your public key. And then that gets added. The network will recognize that from this address, one 10th of a Bitcoin was sent to this other address, the one 10th of the Bitcoin. And now whoever has access to the private key that was just sent that one 10th of a Bitcoin can do what they want without one 10th of a Bitcoin.

you know, we know the public keys, but we don't know who has the private key that's attached to that public key.

**Matt Wilson:** Now you mentioned there's only 21 million Bitcoin. I've read statistics that have said 95% of all Bitcoin is controlled by 2.4% of the accounts and that 20% of the supply is lost or in stranded wallets. Is that correct?

**Steve Sanduski:** Well, it depends. So let's, let's take the first part of that. So that would suggest that there's a very small number of addresses or people that own a very large percentage of the total supply of Bitcoin. Now that can be misleading because we have these exchanges. And so in exchange like a Coinbase or a Kraken or a Gemini, they have their own.

Bitcoin addresses. And so as an exchange, they may aggregate a hundred or a thousand or 10,000 people who own Bitcoin through the exchange. They may aggregate all of that Bitcoin and put it in one address. And so that's going to make it appear that one address might maybe one address has 10,000 Bitcoin in it, but that 10,000 Bitcoin might be allocated to 30,000 different people.

And so it looks like it's highly concentrated, but some of those addresses are actually aggregated from an exchange. So it's hard to tell just what the actual distribution is of that particular thing. So, so yeah, so again, it's hard to tell, but, but clearly there are some people who own, you know, a large amount of Bitcoin, like Satoshi so Satoshi might own. three, four, 5% of the total Bitcoin. And then the other part where you said like 20% might be lost. So for example, the Bitcoin that Satoshi has, or has access to, or we think has access to has not moved. And so one might suggest that, well, maybe that's kind of taken out of the supply also back in the early days of Bitcoin, when it had very little value, people did not necessarily take good care of their private key.

And so people would lose their private key. They might get rid of their computer that

stored their private key. might have ended up in a garbage dump and then three years later, it, when Bitcoin was all of a sudden worth a lot of money, like, oh my gosh, I got to get my key back. And so, yeah, definitely in the early days, People lost keys, they lost access.

And really, there's no way to get that back because Bitcoin is a bearer asset, which means whoever has the private key has access to do what they want with the Bitcoin.

**Matt Wilson:** So if you pass away, which is possibly something that happened to Satoshi, if that's an individual and they did not share their key with anybody it's over,

**Steve Sanduski:** Correct?

**Matt Wilson:** it?

**Steve Sanduski:** Yes.

**Matt Wilson:** I don't know. I have not heard any views on this from any estate planning attorneys, but is this something that can, the key can be passed?

I mean, you can give it to anybody you want, I guess, following the estate planning and estate tax laws, but it's just, whoever has the key, they don't necessarily verify who that is.

**Steve Sanduski:** Correct. Yeah. So again, it's a bare instrument, which means whoever has access to that private key controls, what they can do with the Bitcoin. And so there have been a number of companies that have sprung up in recent years that have come up with a variety of different ways to store and secure your private key ranging from simple to super sophisticated.

So depending on how much Bitcoin or other crypto assets that you might have access to would determine how sophisticated you want to be in protecting your private key. So there are definitely third-party services out there that help you do that. Now that's also one reason why a lot of people like to use an exchange.

Because when you work with an exchange, the exchange controls the key and they basically tell you, this is how much Bitcoin you have. but you don't have to worry about storing your private key. The exchange does that for you, chances are they have more security than you do.

**Matt Wilson:** Okay. Yes, because I have heard, I've kind of kept an eye on this. I remember back, I think it was 2013. There was an exchange that actually, I believe would under Mount Gox. That was, I think actually a fraudulent thing, but there's been hacking involved in this it's not uncommon not being it's doesn't happen every day, but you hear about that.

So it's definitely scary to some people.

**Steve Sanduski:** Yeah. And I think there's a couple of things to keep in mind here when we think about hacking. So number one is yacht Mt. Gox back in like 2013 was back in the early days. And there was not a lot of sophistication in terms of the exchanges back then in terms of their security. And so when

people say, oh, Bitcoin got hacked, what they're saying is whoever was storing the Bitcoin, their private key got stolen.

Okay. So there's a big difference between someone got my private key and hence they got access to Bitcoin versus the Bitcoin protocol or the Bitcoin software itself being hacked, which has really not happened. And so despite people trying to hack the protocol or the Bitcoin network, that's not really happened, but yes, an exchange has been hacked and so people have lost their private key through like a phishing campaign or, you know, people just getting in a backdoor somehow to get access to your private key so that that's happened. And that's why, again, in recent years, a lot of companies have sprung up to do a much better job of helping you your private keys.

**Matt Wilson:** You know, I think the biggest thing for me and I find this interesting, and I, I don't know why the sec doesn't provide a commentary on this, but there has been, I believe about eight. Organizations that have filed for ETFs exchange, traded funds, meaning that would allow people even maybe uh, easier access to invest in Bitcoin or other cryptocurrencies, because now you can buy it on the exchange like you and your stocks and bonds and everything else own it inside your normal Schwab portfolio or wherever you hold your, your assets, they have not approved any of those.

**Steve Sanduski:** That's correct. Yeah. And so a number of companies have, have filed to launch a Bitcoin ETF, but up to this point, the SEC has not approved it. And I think for the most part, I think they're, they're still taking a bit of a wait and see attitude. They feel like it's still a super volatile asset. It's speculative.

I don't think there's any question about that. And I think the government wants to feel better that there is more security around it. And so I think they're taking a little bit of a wait and see attitude now. What's interesting is. Things are different north of the border. So up in Canada, they already have two or three Bitcoin ETFs that have been approved.

And I think there's already billions of dollars among those that have already been invested here in 2021. So, so Canada's ahead of us in that area and it's anybody's guess at this point as to when or if the U S will actually approve a US-based Bitcoin ETF

**Matt Wilson:** I believe that's would be a big step for cryptocurrency to have, you know, access to that because I believe that then starts probably the ball rolling with providing, you know, analysis and. Different maybe diversification tools because I, and I've read there's 7,800 different types of cryptocurrencies out there.

And I mean, some of them are complete scams or they're just made up on a whim. I've seen videos, people, they can create them in five minutes and it's like, well, what are they, what do they even do? What, what is this? And you know, maybe the, the STC approving an ETF at some point, if they ever do, you know, provides a way to, to okay, here are real cryptocurrency, because now we've done the analysis.

We actually have some thought behind this and, and some data points. Okay. And then all the other stuff don't even, it's not even, it's never going to be in an ETF because it's not, it's not even real.

**Bill Keen:** I think also about, I wanted to just ask this question. You talked about estate planning earlier, Matt, and if you think about SEC regulation and government regulation in general.

If you can give somebody your key. Yes. And this is all anonymous. Isn't that one big sidestep to any estate tax that estate might be subject to, if all this is random and you can give maybe someone down your, next generation, your, key, but that would be something.

That would be a huge red flag for the government. I would think on this and we talk about 21 million coins as the maximum number of coins, and that potentially 20% have been lost in potentially the coins that the founder of this or the creator of this might be stuck somewhere. If he's passed, never would have dreamed our economy would be the size it is today, let's say 50 years ago.

And that has required us to have a money supply that has been able to expand. So thinking about where we are today and push it out 20 or 30 years from now, is it rational at all to think that you have a limited supply of this, quote currency, I guess, or we're not calling it a currency quite yet, maybe because of some of these reasons that it would be able to work throughout an economy that's grown and compound in ways.

We probably can't even imagine at this point, What would be the answer to that, Steve.

**Steve Sanduski:** well, I think you've opened up a hornet's nest on that one. Yeah, there, there's definitely different schools of thought on that. And we could definitely do a whole separate episode on this idea of hard money versus the fiat system that we have today. So me just throw this out and tell me how far you might want to go with it.

But I mean, my personal view is that I don't envision Bitcoin replacing the U S dollar as the world's reserve currency. You know, anytime soon, I suspect we're going to end up with a parallel system, at least for the foreseeable future, where we still have the U S dollar. We have Bitcoin. We might have some of these other digital assets as well, but I think there'll be used for different purposes.

So Bitcoin is really been evolving. Into what people would call digital gold or gold 2.0, and that's a use case of Bitcoin that basically was there since, since day one, a Bitcoin, but basically it says people think of gold as a store value. They think of it as an inflation hedge, but it doesn't pay a dividend.

It doesn't have any cash flows. It just kind of sits there. And it goes up over time a little bit, you know, typically kind of keeping up with inflation. It's been around for 5,000 years and people look at the properties of gold and then they look at the properties of Bitcoin and they say, Bitcoin basically does everything that gold does, but does it better because it's digital, whether it's the visibility, whether it's portability whether it's, you know, the ability to verify it those sorts of things.

Bitcoin does it better because it's in a digital form, not a material form. And so even if Bitcoin just became kind of a replacement for gold, the total market value of gold is roughly maybe let's call it \$10 trillion. If Bitcoin, it had a value equal to Gold's value than Bitcoin would be selling for about \$500,000.

So that's just kind of one way that people and come up with, well, how do I actually value this? So, so yeah, again, I don't think Bitcoin is going to replace the dollar, but it could definitely have a certain function, a certain use case in the monetary system, whether it is as a replacement for gold as a store of value, maybe as a world reserve currency it's also a great way to transfer.

Material values across time and space at a very low price. So if I want to send somebody \$10,000 or \$10 million, I can just open up my phone in, in a few taps, I've just transferred \$10 million from my wallet to somebody else's wallet and it immediately shows up in their wallet. and it happens for a very, very low fee.

So that is definitely a use case. But you know, time will tell whether or not it you know, starts making a big dent in the U S dollar

**Bill Keen:** We're going long today, but you've come up with a lot of information and I know our listeners are interested in this topic. I think we would be remiss not to at least ask you the question about the energy requirements that we hear talked about. So often in the news media, I saw Bank of America securities recently put out a note that says the global Bitcoin network now emits something like 60 million tons of carbon dioxide annually, roughly equivalent to the country of Greece.

It says that every 1 billion of inflow into Bitcoin. It's like putting 1.2 million gas powered cars on the road. Now I know that's one angle on this, but what is your, experience and take and, belief on this energy requirement to just power, all these super computers, it's kind of mind boggling, honestly, to the lay person.

Who's trying to learn about

**Matt Wilson:** this.

**Steve Sanduski:** Yeah, I mean, it's an important issue and an important question and certainly something that has come to the fore here in recent times as, Bitcoin has gotten bigger and bigger. But as we think about the energy spend, as you mentioned, the energy that Bitcoin generates or, or consumes actually is because of the electricity that the computers need to solve these cryptographic problems and then get awarded the Bitcoin and mine the Bitcoin.

So the energy spend really does three things. One is it helps fairly distribute the new Bitcoin according to Bitcoin's monetary policy. The second thing is it allows anyone to participate in the Bitcoin network and basically participate on an even footing. And then third, it helps create a strong security around the transaction settlements, because as I've talked about earlier with this blockchain, that's.

Basically been upended since January of 2009, we have to secure that network so that no one can attack it. So the only way someone could go back and change a historical transaction in the Bitcoin blockchain is if they controlled more than 50% of the computer power that is verifying the Bitcoin transactions.

So when you have thousands of computers distributed around the world, owned by different people to have someone that can control more than 50% of that power of the electrical spend, that's required to control more than 50% of the Bitcoin mining network. That's a huge amount of money. And so that's one of the things that gives Bitcoin its security.

Is because of how much money it would cost in the form of electricity and computers to actually corrupt a network. so that kind of shows you, well, why does Bitcoin have to spend so much money? You know, security is a huge, huge part of it. But then in terms of okay, is this wasteful, is this just contributing to climate change?

I would say most of the people involved in, cryptocurrencies, you know, they're concerned about the environment too, so not trying to be anti environmentalist at all. So what Bitcoin does is anybody that's running or mining Bitcoin, they have a huge incentive to find the cheapest sources of energy possible.

And so what's interesting about Bitcoin is. Unlike, typical energy consumers is with Bitcoin. They can take these computers to where the energy is. And so there's lots of sources of energy out there, whether it's hydroelectric energy, whether it's you know, solar energy, whether it's geothermal energy whether it's natural gas, that's being flared and just being wasted.

So you can take the Bitcoin mining to where the energy is at the source that may not today be used in an efficient way. So one thing it does is it's helping use energy more efficiently by using stuff that's not being efficient today. A second thing is that it's accelerating the development of clean energy.

And so by creating. More demand for this type of energy. It's increasing the speed at which efficiencies are gained and economies of scale are gained in moving to some of these cleaner sources of energy. And so ultimately longterm, many people think, and I think as well that it's actually going to speed our move toward cleaner energy over time.

So in the short-term uses energy for sure. But it is securing the network and you compare that to the alternatives, like think about the U S monetary system, how much energy is used to secure that. And again, that's a whole, different conversation in terms of the military that is behind.

You know, supporting the U S dollar and our interests around the world. So, there's a lot of energy that's, that's used in all of that stuff as well. So, does that make sense or,

**Bill Keen:** It does because I know there's two sides to the story. And you mentioned the side that I didn't when I asked you the question, but I had seen the case being made for exactly what you said.

**Steve Sanduski:** Yeah, we'll see where it ends up, but like I said, they, the Bitcoin miners, they absolutely have an incentive to find the, the least expensive source of energy possible. And I think they're speeding the development of more effective and efficient and cleaner sources of energy.

**Bill Keen:** You know I know the public looks to some of the major financial institutions to come out and make statements, I think. And, and as they try to educate themselves, and I saw one of a JP Morgan Chase's senior strategists came out and said, You know, kind of a rail against Bitcoin making it clear.

It was not an effective store of value and not a medium of exchange. And it is based on pure speculation and then not a whole lot longer after that, back in April of this year, JP Morgan Chase announced that the bank will debut an actively managed Bitcoin fund this summer for their private wealth clients.

So the message can be pretty confusing to your, consumer. Who's trying to understand what the position is of even these large institutions.

**Steve Sanduski:** Yeah. So you go back to, you know, JP Morgan, the head of JP Morgan a few years ago, basically was very dismissive of Bitcoin. And now JP Morgan is very involved in Bitcoin as well. So yeah, things change over time

**Matt Wilson:** It definitely can be a difficult space for, I think Investors to really try and get a sense of what are they supposed to do here. And I guess that's why we talk about it really being a, a speculative asset class at this point. And we'll see as time goes on, you know, what happens to it and how do the regulators treat it? I believe it'll be important to watch what they do.

**Steve Sanduski:** I basically spend most of my time paying attention to Bitcoin because I think that's the one that's really the unique one. that's the first one. And I think it has certain properties that definitely make it stand out from all the others.

So that's really where I put, put most of my emphasis.

**Bill Keen:** Okay. So before we wrap. Can you just talk briefly about this dogecoin?

I think I pronounced it right.

Maybe. And in your opinion on that, and then we'll, wrap this episode up at this point.

**Steve Sanduski:** Yeah.

Well, yeah, the doge coin phenomenon is really fascinating, I think from a cultural standpoint and from a psychological standpoint. so briefly if you think about the people that are really promoting it. the coin itself was created back in like 2013 as a joke and the people who created it.

had no desire to create the next Bitcoin. It was just a joke. It was a meme. And over time, you know, most of them, you know, basically abandoned it. And so it just kind of hung out there. Well, it wasn't until rather recently that people started to pick up on it. Elon Musk been one of the most prominent people who just started promoting it and they're tweeting about it and they're creating these memes and they're creating them, these stories and these narratives, and they're all just having fun with it.

But then eventually the price of dogecoin started to go up and then more people started jumping on it and they said, well, let's pump this thing. Let's go to the moon. Let's go to Mars and so on and so forth.

And it kept going up. But all the while there's really no value behind it. Unlike Bitcoin, which has some real technical ideas behind it as a sound structure behind it.

Dogecoin is not like that at all. Now what's interesting is a lot of younger people have picked up on it. And this kind of gets back to this idea of subjective value. So even though dogecoin does not have the types of parameters in the history that Bitcoin does. If enough people think it has value and enough people are willing to transact and exchange value using that, then it has value.

It's kinda mind blowing when you think about it. But if you think Bitcoin is speculative, I would multiply that by a hundred. You know, and that you might be looking at dogecoin. So it's clearly super speculative. It's like trading a baseball card or, you know, something else that it's just there because other people are willing to pay something for it, but, there's, truly, very little to nothing supporting it.

**Bill Keen:** Yeah. Just like the tulip mania that we, talk about that happened hundreds of years ago.

**Steve Sanduski:** Well, you know, even with the tulip mania, you still had a tulip, you know, it was a beautiful thing to look at. And whereas with dogecoin, you've got a picture of a dog on it. And again, it's, it's just, it's a meme and memes are, you know, have value to people. And again, there's another episode, you know, we could talk about, I'm not an expert in this area, but if you think about people that grew up playing video games and how a lot of people basically live in a digital universe, No, they put their headsets on and they play their video games and that's their social life is through that type of universe.

And I think dogecoin, you know, to some extent is kinda kind of taps into that idea of a community. And also, you know, some people suggest that it's a way for younger people to try and quote get ahead. you know, they kind of grew up with the 2008 great financial crisis and then the pandemic and it's like, gosh, how do we get ahead?

Well, let's, pump dogecoin. You know, let's all get rich off of that. So I think there's a lot of different cross-currents that are taking place and it's part of culture. It's part of Twitter. It's part of Reddit, you know, kind of ties in with the Game Stop phenomenon from earlier this year.

So a lot of things going on there, but is there a real value there? Highly, highly unlikely.

**Bill Keen:** Right. my mind for nearly 30 years has been focused on how does someone take the precious assets that they've worked over the course of an entire lifetime that need to carry them for the rest of their lives. And how do they invest that money in a way that's diversified and intentional and thoughtful.

my mind thinks about buying things that I can see companies and earnings. business objectives that are adding back into the stream of life, things that are bettering society with certain business functions that you can touch and feel in my opinion, a little bit better than, than what we're talking about today.

I don't want to be completely closed minded to this, concept, which is why we did this show today. And I know a lot of people have questions about it. But I do know today that me personally, I have nothing in

cryptocurrencies. I have diversified portfolios of stocks and some, bonds in there, and that's where I stand today, but I am open-minded Steve to these things.

And I appreciate your time sharing with us what you've learned on your deep dives with folks that are, are involved heavily in this and the, in their thought process are, well beyond my thought processes at this time.

**Matt Wilson:** There's a, a lot of things that we don't know about.

And I would say cryptocurrency is in the early stages of becoming an asset class. if it does, it may not. I mean, the government can step in at any day and say no more. I don't see them doing that, but it's, it's a possibility. It's definitely got a lot of attention because of the performance that it's had since it debuted in early 2009.

But you know, for me, it's, it is very important to kind of see how the regulators treat this because there can be a lot of money lost in this too, as maybe we've seen in the last couple of weeks, as of the recording of this episode, we've seen a lot of these cryptocurrencies cut in half and know we'll kind of see what happens after that.

**Bill Keen:** I might be old school, but it scares me. When I think about Steve, you mentioned the young people getting frustrated that it takes time to build wealth, that they can find something that they can get rich quickly on. It just scares me because a lot of those times, if not all of those times, some of those, thought processes ended up backfiring on folks.

And then they say, well to heck with investing. I tried it, I got halved. I put uh, you know, 10,000 and it's worth 5,000 today. Yeah, I'm just going to abandon this and not even try to do anything for myself because it's too frustrating. And just forgetting the wisdom that in building wealth, in my opinion and experience is a long-term objective that requires discipline, focus, intention thought, and a plan a and not something that just happens overnight.

Although some people have gotten lucky on GameStop, like you mentioned, or Bitcoin, or you know, these things and they look up and they've built portfolios that are sizeable. But then my question would always come back to what are you going to do with the money? Now you hit it, right? Let's call it luck or let's call it.

I don't know. If you want to even call it skill, I would do that. But now you've got a portfolio. That's a substantial asset that let's say you could live the rest of your life on now. What do you do with it? You now rotate back into say, I'm going to go back into what would be considered a traditional investment portfolio with that serious money.

Keeping just a small percentage in these New type of investments that we're talking about today. I guess it's a thought process we're going to continue to, circle back on and talk about, as things play out.

**Steve Sanduski:** One of the things I appreciate Bill and Matt is that you guys are having this conversation here today. And even though crypto assets are not really part of your portfolios or allocations right now,

and maybe never the fact that you are educating yourself and trying to understand what's going on, I think is the hallmark of a great financial advisor in that you understand that things evolve over time and.

You want to see what's going on. And there's a lot of things that evolve that never go anywhere. And then there are some things that evolve and become the next thing. So I think that's very important that we have a conversation like this in, and we'll continue to monitor it and see what happens over time.

**Bill Keen:** Steve. Thank you for that. And thank you for taking so much time with us today and letting us pick your brain on the topic. And don't be surprised if we come back to you at a later

date to talk more about these

things.

**Steve Sanduski:** Well, I'd be happy to, and for all of you listening, we've got lots of additional episodes here of Keen On Retirement. So just go to Keen Wealth Advisors.com, that's the website. And then you can look under the menu item there for blog and podcast, and you'll see all the previous episodes. So Bill Matt, thank you as always, and look forward to the next episode of Keen on Retirement,

**Bill Keen:** Thanks, Steve. Thanks. Matt thank you.

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