TFTC 443

**Marty:** [00:00:00] He hit it. We're live. We're back for our monetary base quarterly update, which in recent updates we've glossed over the, the monetary base and just dove into a bunch of charts and tangential discussions, which I'm sure will happen today.

**Matty:** Um, I'm sure of it my friend. I'm sure of it. Yeah.

**Marty:** What's on your mind right now?

**Matty:** Uh, not too much, you know, uh, got a honeybadger this week. Uh, you were there last year. You're not gonna be there this year, I presume.

**Marty:** No, I have to get back to Austin. Have a wedding. Sure. That we

**Matty:** cannot make it. I'm actually not gonna make it, uh, this year either, unfortunately. But if any listeners are in Europe and last minute, want to go to a very high signal conference, definitely do check it out.

It's a great one. So, coming up this weekend, I

**Marty:** think it's the most hike signal conference in the world. [00:01:00] And rga ISS a beautiful city.

**Matty:** High praise. High praise. Yeah. Yeah, it's a great one. So cool. Um, yeah, got that coming up and uh, you know, I was just sending you some fun little texts last night about, uh, the Nira, you know, one of the early C B D C pilots and, uh, not just pilots, but active uh, programs championing the C B D C.

And, um, do you have the press release? I actually didn't pull it up. Do you have the press release close? I just gave paragraph of it. Yeah,

**Marty:** we'll pull it up, but long story short, it's

**Matty:** pretty, yeah, it's pretty funny. Long story short, uh, yeah, he and I are future uncertain after, I don't have to say it's the former Central Bank Chief Emmett Filly.

Ster, and basically, uh, they said, C B D C looks very uncertain. Uh, the former central banker is now [00:02:00] in the custody of the State Security Services, also likely to be questioned on the funds used to deploy and push the adoption of the eny r from inception. So, uh, quite funny. I mean, if it wasn't so tragic, you know, about playing with people's lives and people's money, but, uh, those, we, we've talked about this before.

I mean, I'm sure you have heard the story, Marty. I'm not, I'm not an expert on Nigeria, but earlier this year, they really pushed it, uh, they even tried to make other, uh, bitcoin crypto withdrawals illegal. Um, and it just failed miserably. There were protests. Uh, they massively cratered the physical stock of money, actually.

And so that's what I wanted to show you. Um, yeah, so the story, the

**Marty:** story was they were trying to phase out cash, right? Or. They didn't position it like they were phasing out cash. They position it like they were recycling notes or creating new [00:03:00] notes that would then go into circulation. So, and Nigerians had to turn in the notes that they had, the physical notes they had before a certain date and then they turned all their money in and they didn't have the new money on the back end

**Matty:** cratered the money supply.

And actually I can show you the physical supply here. So, uh, if you wanna go back to that Logan, where we were on my screen, um, pretty wild. Uh, so this is like a 60 year chart and Ira started in the seventies actually. Uh, but they must have done a little bit of a revised money supply. I'm not sure what they had before in the sixties, but I have that, uh, that sort of matched up to it.

But regardless, this is the money supply and before this year they were at about 3.2 trillion Nira. Uh, this is actually one of the biggest currencies in Africa. Let's take off the growth rates there. You see it, so it's start of, uh, in December, about 3 trillion. It was going down a little bit and it [00:04:00] just cratered it to, by February it was 980 billion nira, and then didn't work out so well already back up to 2.6 trillion nira.

I don't actually have the supply. I was looking for it. If anybody sees it, please do send me a link. Uh, I, I haven't actually seen a transparent supply of the C B D C itself, but this was the physical stock and it's very eerily similar to India, which I will refresh the, uh, the listeners on and the viewers if you're watching this, uh, in a second, which that what they did in 2016.

But basically, yeah, try to roll this out. Not very transparent, causing a lot of problems in India. There were even deaths. I'm not sure if there were deaths here. I'm sure there were lines, I'm sure there were issues, but there were definitely protests in the street. Which I read about. And, uh, yeah, look, the famous C B D C, uh, promise it's not delivering and they're already backup.

And I'll put a [00:05:00] trailing 12 month percentile change here. So at the worst of it, they were down 70% year on year, all right. In early, early this year, February, 2023. And now, uh, they're only down 20%. Uh, but as you can see, it's rising back up. And the compound growth rate, just in case you're curious over the lifetime of the IRA is 17%, 17% year on year growth.

So this is what I've been saying for years and what I'll continue to say, and you know, we got the C B D C tracker coming out, but everybody wants to talk about C B D C. No one is acknowledging the. Blunt reality of billions of people's needs for cb, pc, central Bank, physical currency, very basic thing. Uh, of course, even before central banks, you had private banks that would issue notes.

Um, but we haven't had that, you know, worldwide for a hundred years. Nonetheless, billions of people need [00:06:00] physical cash. And I think it's a pretty illustrative example of just how difficult this is to actually roll out these C B D C programs.

**Marty:** Do you think that need for the physical, for cash is a phenomena that's isolated to emerging markets?

**Matty:** No, I know that it's not. I mean, based on the supply, we, I, I'll, I'll pull up another one there shortly, but to explain it, you know, um, there's only two countries in the world that I've seen that have really. Uh, even though you think, and I know like I'm sure you know, if you're gonna go out to dinner tonight or whatever, like you're gonna pay with credit card or maybe lightning somewhere, but you're probably gonna pay with a credit card.

You're not gonna use physical cash most likely. Uh, I understand. In the west, in Europe and America, we typically can't see the cash. We don't think [00:07:00] that the cash is around, but it still is. Uh, it's just a function of, I'd say probably lower income velocity transactions, you know, lower income, uh, uh, jobs and payments and, and purchases.

But it is, there's only two countries that have literally, that I've seen, have tried to physically, besides what we just saw here with Nigeria, which again, they've, they've failed, uh, really tried to stagnate the physical currency stock. And those countries are Norway and Sweden and even there, it's kind of like they were trying to pull it down and it's just kind of.

It's like almost different. It's almost floating back up right now. It's kind of flat, uh, but it's a worldwide thing that they, that cash is still being printed. I have a number for that that I've blended as well. Weighted average, it's about 10.5% per year. 10 point half percent per year is the rate of growth of physical cash.

And by the way, the rate of growth of like people on the planet is 1.5% per year. So that's a, [00:08:00] a ratio of seven. Uh, the supply, the supply of phys, like it's the most basic form of money, right? We don't need to pontificate about bank reserves or deposits or cbdc. Like still, the most basic form of money is physical cash and the supply comes out seven times faster than the demand.

I mean, how, how could a Yale or Harvard economist talk around that and try to make it seem like it was a good thing for the economy? I just. I just dunno, it's obvious you're gonna have price inflation with such, you know, with such mechanics of the money supply. Yeah.

**Marty:** Yeah. Debasing the physical stock of cash pretty rapidly.

10 point, was it 10.5%? Yep.

**Matty:** Annually, 10 point a half. About 10 point half, 10 point a half percent per year. That's the number. Yeah. And

**Marty:** the reason I asked that question is because, uh, it popped up last week. I saw Peter [00:09:00] St. Che was covering it, but it seems like the San Francisco Fed has a few job postings for people to work on cbdc within the Federal Reserve system.

And which begs the question like, if these pilot programs, most notably in Nigeria are failing pretty miserably, like why would the Fed even go down this route if they have this evidence in front of them that, that there's really not demand for it. People want the physical cash. Are they seeing something?

Are they trying to make fetch a thing? Um, just wondering. And then it very much sort of counteracts a lot of the public statements that Jerome Powell has made in regards to cbdc, which gets to another point, which is like, uh, the different Fed banks, whether it be San Francisco, Dallas, Minneapolis, they seem to have pretty, um, pretty objective [00:10:00] takes, uh, individually.

Where I, I think the Dallas Fed came out this week and said, we have to stop raising rates. It's really gonna affect the, the capital formation of, of industries that, that we need to deliver goods to market. Um, so I wonder, is the San Francisco fed just this. Uh, a Federal Reserve bank with a particular leaning that's trying to make this thing happen.

Even though the Chairman of the Federal Reserve, Jerome Powell, has publicly stated that he doesn't see the need for C B D C where it actually

**Matty:** function. Right. I don't have a direct answer to that, but I mean, they're obviously gonna have to look at these use cases. I mean, Nigeria is pretty much after South Africa.

It's the richest country in Africa, and if you can't get them to do it, uh, you know, what are your chances of getting a less developed country in Africa or South America or wherever, even getting on these C BDCs and then you're like, okay, well we'll do it here. And I have said, uh, I mean, [00:11:00] this is my contention, although I've talked to people in these countries and they don't think it's gonna happen either.

I, like I just said, if there were two countries that would do it, I think it's Norway and Sweden, that they, they have, they're small enough. You know, they're environment, they're, they're wanna be environmentally friendly enough, they're. They're, they have the wherewithal, they're rich enough, they have the wherewithal to push it out and, and, and cover the cost of doing so, you know, kind of socialists in some endeavors, right?

So I, I, it seems to make sense to me that they're the ones that could do it, like, like actually make it work. But, um, I have talked to people in those countries as well, and they don't, they don't see that happening necessarily. I mean, they think that, you know, like an argument is like, well, you know, maybe your bank will lock you out.

Maybe if you're a lower income, you just need to have access to some instrument where you can pay and A C B D C being based [00:12:00] money. It's something that should theoretically, like only the Fed or only the central bank Right. Could turn it off. Uh, and they will, by the way, once they run, they will turn off transactions that they don't agree with.

But, you know, the idea is that, You know, you could even get around the political problems of bank accounts, which is funny because you could solve that problem by just loosening regulation in an instant, but they're not gonna do that as we know. So it's funny that that would even be an excuse for it. But even if that was an excuse, people that I've talked to in Norway and Sweden are saying, that's not a good excuse, because, you know, by law banks have to keep accounts open for individuals, and they don't have apparently those problems like they've been having in the UK right now.

Although I've had problems with Swedish banks here in the Baltics. But, uh, regardless, I, I think that this is a good example of the problems that are really coming and. I was reading that article, it kind of, I don't, I don't know the, the, the [00:13:00] political leanings of that publication, but it seemed like a little bit status and they were saying, well, you know, it's not the end.

It's probably just gonna be going back to the drawing board, understanding the value proposition, why people will need it, so on and so forth. But I mean, for, for the fact, for them to even publish an article like that, which said it, you know, its future may be limited or move to the back burner was something that they said.

I think that's just extremely illuminating about what the real use case value proposition, cost rollout of these things is. And I think one more to close on this one. Uh, let me just roll the other tab. Logan, this is India. Now, uh, I've shown this maybe on your show before I've done videos on this, just this had nothing to do with the CCB d c, but I think this is illuminating.

They had the 500. Uh, let's take off the rates. The 501,000 Mahad Ma Gandhi notes that they wanted to get out of [00:14:00] circulation. Um, they said it's in the name of, you know, digital, uh, improvements and having more digital payments and everything. And so they tried this at the end of 2016. You see here about 17.7 trillion rupees of physical cash, 17.8, and then it was cratered.

Same thing in a matter of months, uh, almost in half, 9.3 trillion by December, 2016, 9.3 trillion rupees, and literally by the next, let's look at the percentages now. Already by December, 2017, they'd increased the money supply 80, 80% year on year to get back to where they started a year prior. And now you are like, uh, yeah, three times, no double, you're double roughly where they were in 2016.

In 2023, you have 33.6. Trillion rupees of physical cash and the all time growth rate of the rupe for the data that I have, which is quite limited, actually only 20 [00:15:00] years, 12.9% compounded. So a little bit better than the nira. But yeah, I mean, I think it's just, you know, even that, of course this was not a C B D C case, but it's illuminating to, to see exactly what they, almost the exact same case, very swift rollout, declaring illegal, uh, turn your bills in.

And in India, people actually died of exhaustion and big waiting

**Marty:** in line at the ATMs, right? Yep,

**Matty:** yep. Uh, it was, it was a big, it was a big deal. Um, so what's the point of all this? Like, what is, how, how much longer can they go on with these games? Well, in both directions,

**Marty:** right? Like, I think they're, so that's, I wanna make two points here.

One that builds on what we've been discussing and bringing in another sort of, Twist to the story, but yeah, like what are these countries finding out? Like is it you, you just can't rip physical [00:16:00] supply of money off the market abruptly? Like are they gonna go back to the drawing board and try and do it in more methodical fashion moving forward?

Um, but looking at the growth rate of those charts, it seems like the way these economies are running, they need more physical cash to be circulating to, to prop up their economies. And then the other thing too, I'm not sure if you saw this, but the b i s came out with a blueprint for the C B D C earlier the summer.

Um, and I read it and when you dive into the details of how they, sorry, we got some weeded whacking in the background of how they Yeah, that's a

**Matty:** nice effect to hear it, of how they,

**Marty:** um, plan to implement it. Like they're technically not competent. They're, they're talking like if we think Ethereum's complex and completely centralized and gonna collapse, Under its own weight in the future, like the, the b i s blueprint is, is laughable in terms of the implementation of how they think they're gonna do

**Matty:** this.

Yeah. [00:17:00] Yep. And, uh, you know, that physical cash constant need to grow, which as I said globally, I got a number for you that's 10 point, 10.5%. Uh, I recall even part of the narrative in 2019 when we had the, the repo spike and they were finally, theoretically more normalizing their balance sheet. They hadn't, the fed had not increased the balance sheet since 2014 and it was even decreasing by, you know, late 2019.

Of course, this was before all the madness with 2020, but I remember part of the discussion in 2019 wa after the repo spike was, Well, you know, might need to increase a little bit more. And plus we're running on the, you know, we're, we're running into this lower bound barrier of physical cash, which needs to grow.

I remember people saying that on Bloomberg, you know, of course. Was it a policy point or whatever, but you know, they're aware of it. I mean, obviously they're aware of it. They never talk about it. I think it's just the funniest thing [00:18:00] that the central bank, the institution in control of the money. You know, yes, they publish these physical stocks, I get them from their websites, but, uh, it's such a small component of the discussion.

And, you know, it was nine, 9 trillion bucks of them around $9 trillion. It's $9 trillion equivalent market, which is massive, right? When I say 9000000000002.2 or something is actual dollars, 2.3 maybe. It's actual, you know, Benjamin's hun undies and, and all those things, like most of 'em are in Europe or outside of the us but, uh, you know, the rest 7 trillion is euros, yen, yuan, uh, RA's rupees, uh, floating around.

So it's, it's a massive market. They ignore it. They don't talk about it. All of a sudden, we're gonna turn this $9 trillion, you know, ancient market. It's a, you know, it's a thousand year old technology, physical cash. We're, [00:19:00] we're just gonna turn this over the next few years into a, this thing called a C B D C, which we take inspiration from Bitcoin, but we're gonna do better than Bitcoin.

It's, it's, it's laughable to its core. So do you think it's

**Marty:** literally impossible for them to implement it due to the mechanics of this

**Matty:** physical stock? Well, I, I wouldn't say that. And like I said, I, I, I personally think you're gonna see it from Norway and Sweden. Uh, I think that, that they have the wherewithal, but.

These sorts of stories encourage me and, uh, you know, we'll track it. We're doing the C B D C tracker with the Human Rights Foundation. We'll be launching that by the end of this year. But

they've tried dumber things, which we can talk about for the rest of this show. They've certainly tried Dumber things. This guy's

**Marty:** literally right next to me, so let's jump into some of the dumb things.

**Matty:** All right. [00:20:00] Uh, all right, I'll, I'll just quickly go through a couple of these. Um, Logan, if you want to go to the next one here. Yeah. So we got the top five currencies highlighted. Uh, you know, if you've been following us with these quarterly updates for, for a few years now, this is gonna look familiar, but, uh, we can build 'em back out, right?

So the rest of the world, it's about 18% of it. It's here. That means 45 different currencies, including the two we just discussed. The Indian Rupe, which is the one of the next biggest after the Swiss Franc, uh, one of the next biggest in the world, and the Nira all in this bucket here. Okay? Which, uh, totals about $4.8 trillion equivalent.

Uh, then you got the pound sterling, which is less than 5%, 1.23 trillion Japanese yen. And when I, the next four are the big four Japanese yen, Chinese Yuan, European Euro, [00:21:00] US dollar. Now, uh, this is the monetary base, okay? So this includes that 9 trillion of physical currency I mentioned, and it also includes about.

At the moment, uh, $18 trillion worth or so of bank reserves, which is basically the, the most core fundamental asset that a bank can hold in a banking system. It's, it's their account with the Federal Reserve. So those two things together, the bank reserves and the physical cash make up the monetary base, and the total is 27.2 trillion, a little bit under $27.2 trillion equivalent.

And again, when I say that number, uh, you know, I have to describe this with some unit of comparison, right? So that's the dollar. But you really need to think that these are different currencies that are making up this, this group, this is the core, the system, this is why we compare it to Bitcoin. 'cause Bitcoin is the core of its own system.

It's not a Coinbase account, it's not a Kraken account. Uh, those institutions can hold Bitcoin, but they are not, they are not the, the actual, you know, U T X O. So that's why, you know, [00:22:00] we also call this outside money. Okay, so Central Bank money is outside of the, it, you know, it definitely is connected to, and, uh, highly corrupt in some ways with the current financial system.

And they make the rules for the financial system. But at the end of the day, they're the, the monopoly that sits outside of the financial system. So it's called outside money, so that's why Bitcoin is also outside money. Gold and silver as well are analogous to this in history. They're also outside money, so this is the number that would really compare to Bitcoin.

Uh, we can talk valuations in a second, but, uh, $27.2 trillion. Notice that is down from the Covid peak now, you know, not as it was going steep down, uh, by the end of 2022. Then they raised it a little bit this year. You see it went down to like 20, uh, yeah, it was 26 and a half trillion by the end of last year, about a year ago.

Uh, and then they raised it back up to 28. Now it's down again to 27.2 trillion, but [00:23:00] it was 30 trillion, 30 and a half trillion, uh, at the end of 2021. That was the whole covid stimulus. And remember when I started doing these monetary base exhibits and working on this research, it was 20 trillion. Okay? So lot's happened In the last three, four years, we've gone from a $20 trillion global monetary base up to a $30 trillion one, and now we're down 3 trillion to 27.2 trillion.

And this actual reduction in the monetary base, and as I've told you, it's, it's only the bank reserves that are reducing, right? 'cause physical cash is generally growing. In every country. So it's this, this, this actual reduction in the bank reserve volume or value, uh, in bank deposits. That is actually the thing that causes these interest rates, spikes.

So this is the transmission mechanism as they call it. They don't just, they have targets of course, but they can't just like put into a computer. We want interest rates to be this. They have to do something. And how they do [00:24:00] that thing is that they remove money from the system. Uh, credit becomes more scarce, interest rates rise.

That's basically how it works. So this, this is, this is what, this is the core of the global system that you're looking at here and, uh, yeah, I think it's a good, it's a good primer for anybody that's interested to learn a little bit more about money because, uh, you know, they don't teach you the stuff in I M f, uh, briefs or b i s publications.

They just, no one, no one seems to want to compile this stuff on a global basis. Is the guy still weeded, whacking? No, he is

**Marty:** gone. The rain's coming now, but we'll be good.

**Matty:** Um, more soothing.

**Marty:** Yeah, and I mean it seems like building on the C B D C conversation, the physical cash, I mean it seems like all these central banks are essentially, their backs are pressed against the wall and they have no other option but to print more over the long term, medium to long term [00:25:00] like that reduction from the 2020 peak.

I mean, it's still up 35% from when you started doing these reports, when it was at 20 trillion. I guess it's been reduced a little bit. And is that recent bump because of the BF B T F P um facility?

**Matty:** Uh, not really, no. Uh, the overall balance sheet has fallen, uh, for the Federal Reserve from the 9 trillion peak for.

Like a year, more than a year ago. Um, it's, the facility is more of a guarantee. It's not enacted yet, you know, we'll see if more crises happen. Um, but it's, it's not necessarily from that. Uh, but the, yeah, that's all I'll say with that. It's, it's, it's just not, I, I, I haven't globally, I haven't actually, uh, uh, pinpointed which one is more, might be Europe.

I actually see Europe looks a little bit high compared to the rest. That's [00:26:00] kind of keeping it a little bit, it looks a little bit more stable there if you just look at the Euro there. But I'm not sure, uh, of the, of the bump that happened in the, in the very last year. But the US themselves, even with the early banking sort of crises that we had at the start of this year, has not, not exploded the balance sheet yet.

Uh, if they do, then we know that, you know, it's more money printing and Bitcoin's gonna. Continue to go up, but even this is another thing. I can put the next chart actually up, uh, Logan. Um, even if they do continue, you know, Powell just gave another speech. You know, they have their Jackson hole thing and trying to put a happy spin on this.

More pain that's gonna be happening to so many banks and financial institutions, balance sheets overall, they're still, they're still gonna keep printing at the end of the day. I mean, at some point they're gonna go back. So this is an interesting one. This is a trailing 12 month change. This is the same chart.

I [00:27:00] just, you know, one green shaded area. You see the massive bump here. Okay. So there've been three massive bumps in money printing before covid, uh, on a trailing 12 month basis. Okay? So covid on a trailing 12 month basis, by February, 2021, went up 38.5%. Okay? The, the, the global monetary base, this happened three times before, twice.

During the G F C years, 2009 and 2011, which, you know, more or less people can understand and once actually during Y two K, uh, we've probably talked about that. Marty, that's kind of a famous thing. People were literally freaking out taking cash out, Y two k, bug, everything. Uh, and that was a 32.9% peak. So those were really the only peaks, uh, major, major peaks.

And you see there in 2019, they really tried to get it down, like the only time other than just recently when it, when it went negative, when they've tried to, as they say, [00:28:00] normalize or decrease all of this stimulus, all this money printing they'd done in the past happened at the end of 2019. And it happened this year, basically all of this year.

So January, February, March, you'd see on the tool tip there, annualized run rate. Negative, negative, and it's just now. As of May, let's zoom in. I can catch it a negative again between May and June, but it's very close. It's very close to zero. It's very close to flat at the moment, year on year. But you can see obviously the, the big decline, uh, you know, that was last year seems to be over, but you never know.

Maybe they can, they can try to do it again and really, you know, prick inflation and all that stuff. But, uh, price inflation. But again, this is, these are things that I'm not even actually interested about in the, in the short run, uh, as I'm sure you're not either. It's, it's more just [00:29:00] a story about what they typically do and for what they typically do.

A assists line compound growth rate, that's the number. In red that they're always hovering around. Just like I showed you with the physical cash, there are different numbers. And for the worldwide monetary base that number's 13%, which means 1% a month, right? 'cause you compound 1% a month, it's not just 12%, it's over twice closer to 13% shows you the, you know, the power of compounding.

And that's, uh, that's what's happening to your money, uh, at the core of the system. At the end of the day, 13%, that's what it's been like since the fall of Brenton Woods, since the end of the, uh, since the Nixon shock, the last 50 plus years. So that's, that's the number I think to think about. And what's the doubling

**Marty:** rate for a 13% compound gross

**Matty:** rate sub six years.[00:30:00]

That's insane. Uh,

**Marty:** Well, I've been thinking about you in recent weeks too, like going back to our last conversation where you dove into the balance sheets of, um, Fannie Mae and Freddie Mac. Mm-hmm. I had John Titus on from Best Evidence, who's done some really good research, and he essentially is honed in on the F H L B loan exposure that the banks have.

Um, and he's pinpointing that as an indicator of stress. Like if you are a bank with, uh, a crazy assets to F H L B loan exposure, like you likely to go down, um, as, as time moves forward, I think Charles Schwab has something like 130% exposure. Um, their F H L B exposure is 130% of the, the, uh, equity they have in their company, the assets they hold on their balance sheet.

Um, [00:31:00] And that's like the federal home, uh, lending bureau, I believe. And this is the, and I'm not, I wasn't too familiar with them until

**Matty:** I,

**Marty:** uh, spoke with John. Just building on our conversation from last time where we dove into Fannie Mae and Freddie Mac, like, I wonder if that's connected to that as well.

**Matty:** Did you ask him about how insane those that balances are just overhanging on the economy?

No, I didn't,

**Marty:** um, I didn't connect the two dots while we were having the conversation. It wasn't until after where I began to think about it.

**Matty:** Yeah, no, but I mean, there's just, yeah. Serious issues that are still hanging over these companies and big banks balance sheets and. You know, COVID didn't help it.

Okay? Covid made everything worse. Uh, the response, the knee jerk response is typically what they do, right? They say, people are in Bain, we need to print money and help them and give them stimulus and [00:32:00] all the rest. And it's just, it's like the same story the governments do, basically from time and memorial.

So, I, I can't, I can't really, uh, yeah, I'm not a trader. I, I, I imagine there are way more interesting ways to trade, uh, some of these charts and some of these, some of this news if you really have your hand on the pulse and wanna be in front of the screen, you know, 24 7 or whatever. But, um, at the end of the day, I think it's just, it's great for Bitcoin.

If we look at this chart again, you can put it up Logan. Um, it's not the, the change in the trailing 12 month rate is not correlated to Bitcoin's increase in price, right? So remember, look at the dotted line, uh, In 2017? Well, let's start with 2013, right? So that was kind of like one of the first big booms.

Went over a thousand bucks for the first time, right? In the end of 2013, the monetary base was truck trucking out, right? About the typical average, the, the all time compound, right? 13, 14% [00:33:00] per year. Let's look at the 2017 cycle. Same thing. 13, 14% per year. And then they tried to to slow everything down because of course all the other markets were hot then as well.

Uh, and then covid. A lot of markets boomed, a lot of meme stocks. So did Bitcoin. That was an extreme bump, right? We're up to 40% year on year increase of the monetary base. But even, you know, even here when it was, I'm looking at 2019, I'm highlighting the 2019, which is a relatively flat year on year increase of the monetary base.

Really, when they're trying to normalize when they had the repo spike and all that stuff, and the season of the repo market. And in the end of, uh, uh, 2019, even during that period, you know, there were little mini booms in the Bitcoin price. Like it's not, it's just not like it's, it's necessarily correlated in my opinion.

Yeah, you can say that, you know, 20 18, 20 19, 20 [00:34:00] 18 of course definitely is a down year and that, and that trailing 12 month rate was going down, and then in 20. 22, I guess we can say it was a down year and yes, this, this rate was going down as well, but how much that's gonna relate to Bitcoin in the future?

You know, I'm not, I, I, I just can't, I can't say with that, but I, I could definitely, we can look at the, some Bitcoin, uh, trendlines, which I have as well. Those are the fun ones. Uh, you know, we just know that we're generally increasing there on a power curve, uh, trajectory that's much better, uh, you know, at preserving your purchasing power.

So, so again, don't wanna sound like just a extreme buy at any price sort of huddler, but I don't, I don't necessarily see any of these big swings as being like super good or [00:35:00] super bad for, for bitcoin. Yeah, I mean,

**Marty:** in external to where Bitcoin fits into this conversation and just looking at this chart, it looks like we're gonna need some sort of mean reversion at some point.

Mm-hmm. Like where, where it's sitting and trending up upward a little bit. But yeah. And then you think about like the posturing from the government here in the United States really beginning to grease the wheels for more lockdowns, um, or a climate crisis that could bring about a new form of lockdowns.

It seems like they're beginning to look for an excuse that turn the money printers back on, uh, at some point this fall or later this

**Matty:** winter. Yeah. And if they, do you see the mean reversion that happened with covid? I mean, if it's as bad as that one, uh, you're just gonna blow right through the mean and go and go the other way.

So from that side, yeah. Uh, I guess that's definitely, definitely good for Bitcoin. [00:36:00] But, um, As we know, there are a lot of other spillover factors that happen from controlling the money supply these planning boards that think they can control, you know, all the prices and everybody's, uh, actions in the entire economy, you know, planning board of just a, a dozen people or so.

It's, it's just insane. It's, uh, it's an insane way to do things. Yeah.

**Marty:** And, and then it's really unnerving to an extent, because I'm sure you've seen it, but like in recent weeks, last month or two, the amount of videos that have been popping up on social media, people experiencing extreme amounts of stress due to the inflation they're seeing in their everyday lives, whether it be here in the United States or more particularly pronounced up in Canada.

Hmm. Like, it just paints a really scary picture if all I. Of these insane moves that the Fed has made over the last couple years to get rates up [00:37:00] to tame inflation. Um, it brought it down to 3.2%. But if you look at core inflation, it's still above 4.7 pretty consistently, I believe. And then as we all know, those metrics are completely bunk on their face.

Um, yep. Inflation's much higher that's being reported. And we get to a situation

**Matty:** where something happens in the

**Marty:** banking sector or who knows what happens. It probably happen in the banking sector and they're forced to turn the money printers back on. Like again, it's a bit unnerving 'cause it, it does not seem to me at least that they've, uh, properly tamed inflation.

It may show up in the C P I that they made a lot of progress, but if you anecdotally looking around, it doesn't seem like any material progress has

**Matty:** been made. Right. And again, that's where I always fall back to this like look at the all time trend line, right? I mean, that mean reversion may happen, it may not happen for [00:38:00] another six months or so, but you know, if the G F C was any indication after the fat years of the early two thousands or, uh, obviously covid, you know, you can just see that mean reversion is never just, especially in recent years, it's, it's rarely kind of hugging that mean it just flies right through it.

And that's why you just gotta think about, I mean, what is it gonna do when the, when the base money of the world increases at a rate of 13% per year, or I just looked it up by the way. Uh, it's 5.7 year doubling time. So a little bit more than every five years and six months, uh, the money supply has doubled.

The base money supply. I mean, that is going to affect the rest of the economy. And you have to prepare for it. You have to prepare for it. Yeah. [00:39:00] Yeah. Get some bitcoin freaks. Yeah. You wanna look at the Bitcoin chart? Yeah.

**Marty:** Let's look at the Bitcoin chart. 'cause I was looking, actually looking at the rainbow chart earlier today.

Yeah.

**Matty:** So this is very similar to the rainbow chart. They probably, whoever is, I don't know, there's many people that create rainbow charts, but it's some sort of a trend line like this. It's called a power trend line. It's four basic trend lines. Just to remind the listener, viewer, uh, we could do a linear trend line, which is like a flat trend line straight through.

Uh, we could do an exponential trend line, which would be also straight on log scale. This is on log scale, so it would also be a straight line on log scale. Uh, there's also a logarithmic. Which is, but it's steeper than this. And there's power, power curve is kind of a blend of, of those, it's a, it's, it's a more shallow on a log scale type of a curve.

Uh, but it's, uh, it does decay a little bit. The radio growth is faster at the beginning on log scale, and it does decay, kind of like a logarithmic, but a [00:40:00] little bit more shallow. Uh, so, you know, the beauty of these very simple charts, unlike other, you know, more hyped charts which don't take into account demand and other things, uh, this is a very simple one variable, uh, model.

It's, uh, time is the independent variable prices. The, uh, prices, the dependent variable, and you just calculate your coefficients. You can run this trend line. And then from there, once you have the trend line, you can do these bands as I have them, these red and blue bands. And so we can zoom in here and you can really start to see more interesting things.

So these bands, as you see there, have the two Sigma Band and the One Sigma Band. Basically everything between the blue bands is a one Sigma move. What does that mean? That means that anything between those blue bands is basically a two thirds of the time event. It's one Sigma event. It means it happens uh, two thirds of the time.

And anything between the red bands is [00:41:00] a, uh, two Sigma event or a 95 percentile event. It means 95% of the time the data's gonna be between those bands. But if we ever get outside of those bands or close to the edge of those bands, that's where it's an interesting phenomenon. That's where it's an interesting move.

So you see air in 2017, we got to up to 20 k. He is very close to a two Sigma move, not quite based on this trend line. Uh, it was a two Sigma move. And you see, after the F T X debacle, the final nail in the coffin of all the nonsense of 2022, uh, we, we, we bumped a longer two sigma move to the downside. Okay.

So when we, when we went, uh, pretty much right after F T X filed for bankruptcy, we fell down to 15, 16,000 there for a few months. End of, uh, 2022, started 2023 as a two Sigma move to the downside. So we've, we've pulled back up from there. We're around a one Sigma move now. Okay. Uh, you know, getting [00:42:00] outside of one Sigma move, I should say.

Uh, and we actually just did with this fallback from 30,000. I know we had a little bit of a bump today up to 27 or so. I'm not looking at the price right now, but this is, this is only from a couple days ago. It doesn't matter. It's not gonna affect the all time trend, but, but that's where we are. And then the fun thing with this is you can actually use this to predict out, and this.

95% R Square model that I have by December 31st. 2030 takes you to about $600,000 per Bitcoin. So it's a nice thing to think about. And again, uh, you know, this, these are statistical models. I'm not doing anything crazy. It's very basic stuff at the end of the day. Uh, maybe compiling it in an interesting way, but this is like, this is no fancy math here.

It's nothing to do with the bitcoin emission schedule or anything. It's simply based on the price. And, uh, yeah, if you have any betts or something we can look at, we can look at how the bands [00:43:00] shape out.

These guys are really going at it right now. Okay, let me, uh, let me switch over to the next one. I, I, yeah, you, you froze a little bit too. I thought I completely lost you, but I got you. Okay. This one as well, this is a good, uh, this is a good chart to look at because it can show us how good or strong of a black trend line this chart was.

Right? Black trend line's in the middle, roughly in the middle, right? That's the actual trend line. As I said, if prices continues to fall below this line, this trend line will fall. If it rises up, the trend line will rise. So it, it, the, the trend line moves every day. It's not like it's a fixed thing. I'm trying to predict the future or anything.

It does move, but we can still ask ourselves how strong is this black line? For that? We can look at this chart. I showed you this before, Marty. We have different years of trend [00:44:00] lines where I just stop them based on that year's data and then move forward. So let's take off some years here and just look at 2010.

This is like the best trend line ever. It'd be great to get back on this one, but you know, as you see the early years, the early, uh, the early the first year basically, where there's real pricing action to Bitcoin, very thin pricing action. I started from Bitcoin Pizza Day, so it's not even the full year, but you're just, you know, you have this slash dot article, you have, uh, a lot of things that are exciting and bitcoin's, you know, going over a dollar, going over to a few bucks.

Uh, maybe not a few bucks by the end of 2010. Yeah, still, still in the 20, 30 cents range. But anyway, quick, quick, uh, escalation from nothing. If you just look at this year's data, do the same calculation and only do a trend line from there, you get this trend line, which is monster. So if you take it to today, the trend line, you're not reading this wrong, predicts the.

The Bitcoin's price would be $1.3 billion for Bitcoin, [00:45:00] $1.3 billion. It's a great trend line to be on, but unfor, unfortunately, Bitcoin lost the trend, which is okay. It, you know, we revise our trend lines with this stuff, and by 2030, actually it's like $128 billion. It'd be a great trend line. We're off that.

All right. Obviously the, the, the way that the price and the market has worked, it's pulled it down. So we're off this trend line 20 11, 12, 13. I don't have those, but know that they're somewhere between this blue line and the black line. But here's the interesting thing. From 2016, I have all of the different trendlines as we've gone through, so I'm just gonna draw them all right now as see if you can spot them.

20 16, 20 17, 20 18, 20 19, 20 20, 20 21, 20 22. You probably can't even see them because they're all stacked up. Let's take all the 2010 line. They're all stacked up on the black trend line, which is a good sign. This is even better. I've done this analysis on my YouTube channel of like, gold. This is even better than gold would [00:46:00] look from 2011, you know, the 2011 and being very, very favorable with gold.

Like from 2011 back to, um, back to not even like through the eighties, but only like through the nineties were like the bottom. When gold was at $200 an ounce, then with a $1,200 an ounce that, you know, the 2012 trend line would've taken gold to $30,000 an ounce, something like that. But all the other trend lines from then on have gold, like down to $5,000 an ounce, $6,000 an ounce.

So gold has even more extreme swings, uh, than Bitcoin. Bitcoin is very, uh, and, and, and they're, they're spread out by the way. The point is that they're spread out. But this is pretty interesting from Bitcoin's 2016 trend line, which is the lowest. In fact, we we're not lower than that. Zoom in a little bit, even more, if you can see it.

2016, it's in red. You know, as of August 28th, the, the all time [00:47:00] trend should be $56,000 per Bitcoin. 20 sixteens trend line is $55,700 per Bitcoin, $800 per Bitcoin. That's a little bit lower than the current trend, but all the other ones are a little bit higher and close. So again, it's just a, it's a nice example of the model, which shows that it's pretty consistent.

The trend line's pretty good for the last, you know, seven years. And, uh, yeah, we're, we're below it. We're pulling it down. We might make an all-time low. We just, we, 2020 was also a low trend line. You see it's $57,000 9, 940. We just, I had to change the color because we, we just went below that, that one. So that's, uh, not, that's, that's a blue one now because it's above our current trend line.

So there's only one year, which is below. But even with one year, it's quite interesting. It shows that this Bitcoin trend line goes up, goes down. It doesn't just go down all the time. And, uh, yeah, we might, we might make a new low on that trend line with [00:48:00] this cycle. Uh, nobody knows. But, um, if we, if we don't, that'll be even cooler because then we will, we'll have not put in that bottom of 2016 on the trend, you know, on the trend line.

And, and as long as that Bitcoin price keeps trending up and starts to get above that trend line, it will pull the trend line back up. The all time trend lines. So it's a lot of discussions about trend lines there. Uh, especially if you're listening to this dear listener, not watching. But the point is that this, uh, this nice power regression trend line, which is, which I have a lot of videos on this, on YouTube, you know, it's, it's, it's a pretty solid, it's a pretty solid I think, representation of where Bitcoin's price has been over the last seven years.

It's funny 'cause you

**Marty:** mentioned gold sort of went off its historical trend line in 2011, 2012. That was right when like G L D dropped, right? That's when G L D launched was around

**Matty:** then gold. It was, and it get, was getting up to $2,000 an [00:49:00] ounce. Uh, at the time that was like an all time high for gold, but then, you know, went into a 10 year bear, uh, from there.

So, so they're kind of, the point is they're kind of all over the place if you do the same analysis with gold, whereas with bitcoin, Yeah, they're all are all over the place in the early 2010s. But we are just, I mean, that's, that's a monetary system just getting started, like give it a couple years. Uh, you know, am I saying that, that all years after this are gonna be, you know, stamped right around this trend line?

No, but it's pretty interesting that they have been since 2016. Yeah, no, that's the

**Marty:** point I'm trying to bring up is like, with all the news around the ETFs that may or may not be coming to market, does that sort of throw an interesting externality in the mix that could, that could push up this all time power trend?

**Matty:** Yeah, I think a lot of people are hoping that it does, and I saw there was some good news for G B T C as [00:50:00] well, but I'm not too deep in that saga. It seems like a complete mess, but regardless of BlackRock, it's approved. That's, that's obviously a huge deal for institutional money coming in. Yeah.

**Marty:** And that's the big question right now.

Is it similar to like the C m E Futures launching in 2017 where it's sell the, sell the news by the rumor?

**Matty:** Hmm. Yeah. You, you still got the, uh, the, the Lawn mowing services near you, right? Yeah, they should be done soon. It should be done soon. Okay. No, I'm just saying we can move on. Uh, it's just a couple Bitcoin charts.

They're interesting. Uh, uh, check my YouTube channel for more on those. Uh, which one do I wanna talk about

here? I can show you this one really quick. This is the Scan Dix. So let's even take out Denmark. These are in their own currencies. Like they're all kind of similar. Actually it's in Croner, they're all called Croner. But here you see Sweden and Blue, [00:51:00] no way. And red Sweden really from 2 0 0 8. The G F C really tried to get rid of cash and did, uh, they were at, you know, over a hundred thousand, 110, not a hundred thousand, it'd be a hundred, 110 billion Kronner, Swedish kronner and physical cash.

By 2017, that was down in half, basically 56 billion and Norway more flat, let's say. They didn't, you know, really have to cut it much, but they, they were at say 50, uh, billion kroner around the G F C, and now they're at 40 billion. But you can see in both cases, particularly with Sweden, like it's kind of reversing, floating back up, as we said.

And that's, that's again interesting. And Denmark never, they're pegged to the Euro, so they never really did it anyway. This is kind of just doing what the Euro does as well. So Denmark is still, is still growing, but Thek, Dex, you know, Norway, Sweden in particular, they're the ones that are [00:52:00] really, really trying with this.

Know, it's like at least get your physical cash. If you say you wanna go into C B D C, see if you can actually get the physical cash out of circulation. And so far we've seen no country that's been able to do

**Marty:** that. Yeah. Well when it comes to Sweden, I'd be interested to see if the chart is telling a story about your immigration policy over the last five years.

Like, are a bunch of immigrants coming in, don't have bank accounts and the demand for cash has simply gone up because you have a new labor force entering the market that doesn't have bank accounts needs to get paid.

**Matty:** Yep. Very good point. As the Syrian crisis in particular was, you know, 2014 to 2016 there, uh, and you can see from 2016 that, uh, bottomed out their, uh, attempt to get rid of cash and now it's slightly up from there.

So, very good point. And all of these things, issues that are just not gonna go away for. [00:53:00] Countries that are trying to, trying to, uh,

control. Yeah. So, yeah. Uh, yeah, sorry, go ahead.

**Marty:** No, I was, I mean, pull up like the national debt chart that you had up there. 'cause I think that's important to touch on as well. Yeah. I mean, obviously we had the debt ceiling impasse earlier this year. The debt ceiling essentially got eliminated until 2025.

Probably won't be re-approached till 2026 because we'll have a new president coming in. Then we'll let the pick his committees and it'll be take time for

**Matty:** it. Could be never reinstituted, man. For all we know. I mean, yeah, it could be in a whole new world by then. Uh, yeah. But go ahead. You have,

**Marty:** you have that, I believe it was June or July, uh, we added.

Another trillion dollars worth of debt. Then you had the treasury come out and say, Hey, we're actually gonna issue $1.85 [00:54:00] trillion worth of bonds between now in the end of the year. So, rough math, there is about $4 trillion being added to the debt. Mm-hmm. Uh, in the second half of this year.

**Matty:** Yep. Uh, just a quick note.

I I can put these in log, dear listener viewer. Some, some people have requested that, but it's actually better I think to just, you know, this is a 250 year chart. So yes, log helps, but with the tool tip and with zooming, I think it's better just look at it in linear. So that's what I'm gonna stick with. But if we've zoom into, you know, the last 30 years here, uh, and I talked about this actually recently on Peter Peter McCormick's show, because I, you know, He, he was having a discussion about, okay, we, we gonna get more liberal, classical, liberal minded politicians in maybe it seems like something may break.

And, and he may be right on that. I mean, who knows? I, I'm still not, I'm still pretty disillusioned with [00:55:00] politics, particularly US politics, but as I know you are as well. Uh, but regardless of if they do think about this. So here we got it. You know, in 1990, if you're listening, we had $3.6 trillion, 3,600 billion, $3.6 trillion in national debt.

Now we have 30, uh, 31.5. It's even higher than that I think in June, whatever, 31 and a half trillion now. Okay, so up 10 x in 30 years, I assume is a little bit wrong. Sorry, something like this. But think about the Clinton years, okay. A big deal for Bill Clinton. I. Was balancing the budget, something he still talks about to this day.

Such a big deal. Right. And he did that for a couple years, three years maybe. It was mostly a second term, uh, going into the new millennia that was here. If you think about like how much this is, talked about, how much this is, like, put on a [00:56:00] pedestal as the best thing. The divided Congress, Newt Gingrich, all these people were working together and, uh, yeah.

You know, sex scandals and he was a bad dude and, you know, maybe killed some people, bad things were happening. Uh, but, but they still had some good, you know, they had some good things with some these divided Congress and it was really, it was just a real, you know, really good, good thing for the country that is just like a little.

Cresting, like de descending plateau there just a little bit, like almost. Okay. We're, we're, we're, we're leveling off this increase in debt to about $5.6 trillion at the end of the millennia. And then, you know, up 27 trillion over the next literally what, three, four administrations, baby Bush, Obama, Trump, and Biden.

I mean, it's, uh, all of them have increased the debt significantly, 30 to 40% during their, uh, during their reign. [00:57:00] And I, I just, I don't see what you do to that. Otherwise, uh, unless there's major outside external factors, um, I, you know, I, I don't, I just don't see how this stoppable, I don't see how libertarian candidate, you know, he mentioned how Dave Smith coming in and might wanna do something and, uh, or he is on Joe Rogan.

And look, I, I even as, as well-intentioned and well-spoken and principled as a lot of these people are that want to get into politics, I just don't. And I, I don't see it. I don't see, I don't wanna sound too, you know, throwing my hands up in there. It's never gonna be done. But if you just look at this over the long term, you know, all countries look like this, by the way, you know, Argentina looks worse.

Some countries look much worse. Some countries might look a little bit better, uh, but all countries look like this. And something usually breaks. Something usually breaks and they reset. [00:58:00]

**Marty:** Yeah. Like, I mean, let's steelman it. What like, extraordinary measures would somebody need to take to fix this? Just like a pure default?

I.

**Matty:** Well, I would, I I would say if you wanna steal, man, it, I would say default is not the option that they would take, right? Because we've been soft defaulting for decades, right? We've been rolling over, uh, devaluing the currency, devaluing the dollar, and that's, that's the soft default. The hard default, I would say is, yeah, not the steelman argument.

The steelman argument. That is what they say in debates. It's what they, that's what they talk about. You know, I, I saw an interesting tweet from EB actually, as much as he's just proven to be a complete adult on Bitcoin, um, he was quoting some people in the Trump campaign, uh, saying like, this time, so like, Trump is gonna really clean the swamps.

We're really gonna do it. And, and you know, all this bullet point list of things. Um, I can't remember the guy's name. He does this like cpac, you probably know who he [00:59:00] is, but I'm not in US politics too much anymore over here in Europe. But point is EB called it. He was like, look, I mean, Only a full, only a sucker goes in twice for the same candidate expecting a different result.

Uh, you know, how many times has this been done in any industry, politics, business? Uh, I know that there are people that are really big fans of Trump and are very principled and and whatnot, but you, you just cannot. It's, it's a definition of insanity. If you're like, Trump did not do that much during his first term, you can't blame it on, oh, he was learning the system.

He's kind of outside of politics, uh, to expect if Trump wins to expect that he's gonna come in and like, really clean house, drain the swamp, do everything you want him to do,

just look at this debt chart and tell me that he's gonna flatline that [01:00:00] and make it go down. Even I, I say no way. His wall. His wall alone is gonna explode the thing if he ever gets that done. Which he won't. I mean,

**Marty:** he is proven. I mean this is just like the visible debt. We're not even talking about the 220 trillion in unfunded liabilities.

**Matty:** Social security, Medicare and Medicaid are off balance sheet. It's another nice thing the United States like to do, which most countries don't do.

And

**Marty:** we, people have to remember in the context of Trump, like he oversaw the largest expansion, the monetary base

**Matty:** ever like, and yeah.

**Marty:** Think he wouldn't use those tools again when push came to shove is, like you said, insane.

**Matty:** We didn't even mention that, did we? Yeah. I don't know. I dunno what you're thinking.

I'm, I, I dunno what you're thinking about this election season. I mean, it seems scary to me, uh, but I, [01:01:00] I Why do you say scary? Just 'cause. Two old guys again going at it and, you know, their hands on the codes and all the rest. Uh, I mean, as we know, it's a pretty, you know, their hands are tied regardless. The system itself is completely institutionalized.

Uh,

I mean, I, I see some podcasts. I see people really trying to interview these people, hold their feet to the fire. Uh, I saw Trump on Tucker, like maybe trying to say like, okay, will you, what will you do about the agencies? You really gonna clean house, you're gonna do this? And of course it's like nons answers that he's given.

But, you know, that's the steel man argument is just their, their non-answer flowery comments that they're gonna try to do and say during the debate. But when push comes to shove, when you're actually sitting there, I mean, it's just an institutionalized, uh, thing. And that control has not given up easily.[01:02:00]

Uh, it's certainly not giving up from the inside.

**Marty:** No. Yeah, I think it's an absolute shit show. I mean, just looking at the last chart you showed, like we're approaching the vertical point of the chart where it just goes straight up. It's gonna happen at some point in the next couple years, and obviously, yeah, that's why we focus on Bitcoin, try to get people to the life rafts while all that happens and hopefully can provide some sense of a soft landing, a soft dish landing, a relatively soft landing, a safety net if you'll, yeah, but it's gonna be chaotic.

I mean, again, there's unfunded liabilities alone, like that's never getting paid

**Matty:** back. No, this is an interesting one. If we layer in the central bank holdings, so this is basically, it's essentially the monetary base. It's a little bit of a different number. I'm taking here the assets side. This is actual assets, uh, United States government bonds, securities on, on the Federal Reserves books, so, [01:03:00] Just a reminder again, the way that they get money out into the system, they could buy anything, but they typically buy government bonds, right?

It's obviously, who's the husband? Who's the wife? The central bank, the, uh, the government. It's their, their in their, it's a corely, uh, it's core related institutions and yeah, the central banks in charge of monetary policy, they get money out into the economy. But how they do that is they buy assets. They could buy anything.

They could buy real estate. They could buy stocks like Japanese government and Swiss government, uh, central banks. But, um, nonetheless, mostly it's, it's, uh, it's treasury securities, so it's a little bit higher than the monetary base. It's a couple trillion higher 'cause it's reverse repo facility on liability side.

We don't need to talk about that now. But nonetheless, here's the number. You compare this with the national debt and do a percentage term here and, uh, we can see that the peak was during Trump's term, I guess it was. But when did Trump leave? December, 2020. Is that right? [01:04:00] Uh, so I guess it was the start of Biden's, but it was going up to it at the end of Trump's term.

The peak was 28%. Again, on book government liabilities of the United States, which are well under the, uh, unfunded liability number that Marty keeps mentioning. 28%. Uh, and that's, that's a all time high. If we just zoom out, uh, in the seventies, stagflation it went up. Vietnam was ending, went up to 17%. The Central Bank owned, but the Fed only been around for less a hundred years, never owned this much debt.

And that is coming down Okay. Since Jackson Hole of a couple years ago. That is coming down. They're trying to normalize again. Same thing they were trying to do in 2019. Um, but again, we, we, we saw in the monetary base, the, the year on year, it looks like it's kind of dipping, like you just said. Doesn't look like that yet here, uh, But how low they're gonna [01:05:00] get this, like if they're gonna get this below this level in 2019 or 15%, I'd be very surprised.

I'd be very surprised if, you know, it's, this is a matter of months, I think as we're talking about, right? Six months, 12 months. I mean, you're really gonna pull this, this 23%, uh, ownership of government paper down to 20 or 15%. I think it's just too much pain. It's too much pain to, to do otherwise. So this is the whale in the marketplace is the Federal Reserve, what they, they purchase of United States government bonds.

**Marty:** Yeah. And I mean, just taking a caveman's view of this chart, like looking at any point in time where it's the, the black line has dovetailed into the green shade, the lake green shade, it seems to have had to reverse. Um, I don't think there's any mathematics behind it. That

**Matty:** is a, that's a good K view of it.

Yeah. But yeah, it's, it's, I think it's just the visual on the right axis. But [01:06:00] that's a, that's a good s t f, uh, view of it. No, I mean, you're right, you're absolutely right. I mean, look at that, like it's, it's trending up. And, uh,

that's a, that's pretty funny actually. I didn't think about it that way. You could be, right. Yeah. It's a matter, it's a matter of months, man. It's a matter of months. And we already know that it's, that that is going up, this ceiling is suspended. Like that was a surprise. Like that was the secret. It's this song and dance.

Like we act like we don't know that it's going up every single session of congress, you know, and this has happened like 30 times. It's uh,

**Marty:** yeah. And this Republican congress is trying to say, they came away with a bunch of wins. It's like, no, you didn't, you suspended. The ceiling for, for two years, likely three or more.

Yeah. Um,

**Matty:** yeah, so this is a big one. This is a big one, I think. And, um, [01:07:00] I don't, I don't see, I don't see an easy way out of this one at all. No, I don't see libertarian, democrat, republican, any candidate that can change the trajectory of what this is. I mean, this represents like the, the guts of the bad promises that governments have made.

'cause remember the debt increases when they spend more than they take in, in taxes in one calendar a year. So this little happy time with Bill Clinton, his second term's, just a little bit of a crescendo into happiness. And then, and it just took off again. I mean, it's just, it's unstoppable. Yeah. And after

**Marty:** the great financial crisis, it looks like the line's like flat, like it's very much being manipulated pretty aggressively.

Yeah. Wherein if you go back to the longer view of the chart, it does look like there's at least some sense of markets trying to determine, um, or the government, [01:08:00] letting the market try to determine things.

**Matty:** Yeah, it's true. It does, it does fluctuate much more, doesn't it? Yeah. Maybe even going down some years, you know, some decades, it's very true, especially from the Vietnam peak.

Uh, it fluctuates a lot more. You can see it in the black shaded line, whereas here it's just completely more straight. There's no, uh, you know, seasonality or changes there. And this little dip here, by the way, where if you're listening, which is probably hard for you at this point if you're listen to all these charts, but, uh, you know, we were at eight, 9% Central Bank holdings of, uh, government paper before the G F C and dipped down to like five.

This is where Ben Bernanke was trying to figure out what to do. So basically swapped out government bonds. Uh, for commercial paper, and this was just all the facilities. There's massive, they figured out how to get that off the books after a year, but just massive corporate bailouts and everything took over the Fed's balance sheet and they had much less government [01:09:00] paper during the G F C.

**Marty:** Yeah, I mean, and then you add in with the current interest rate policy. I mean, just the interest expense and the debt that's expected to balloon to like $1.7 trillion a year once treasuries roll over over the next 12 months. And then we look over to Japan. They've seemed to have completely lost control of their yield curve, which they've successfully controlled for for many decades.

Um, which begs the question like, obviously Japan is the prototype for quantitative quantitative easing as a policy. Uh, and it seems to be nearing its end game. And, uh, I guess the question is like, do you view Japan and their inability to control their yield curve in recent months as a canary in the coal mine that this stuff is getting [01:10:00] outta control.

They can't keep the cat in the hat anymore.

**Matty:** Well, one thing I always told you was we gotta be humble. We gotta be careful here with, uh, with where we think we're going with, you know, Bitcoin in this picture. And though Bitcoin's 500 billion Right, which is a lot higher than it was, you know. Five years ago, and when the monetary base was 20 trillion, now it's 27 trillion globally.

And, uh, Bitcoin is 500 billion Bitcoin's, you know, the eighth largest, uh, currency, if you call it that way, if you, if you, if you frame it this way, which it is, uh, outside money, you know, you have the, the four, including Japan, which you just mentioned, the big four. Then you have the pound sterling. You have, this was Frank, the Indian Rupe, and then you have Bitcoin.

And Bitcoin actually around 27,000. When you get up to 30,000, you're already bigger than India again. So we're at number eight, number 10, if you include gold and silver. But [01:11:00] it's an amazing achievement for what Bitcoin has done nonetheless. I always caution, you know, imagine you were a gold bug, like right here in 1980.

It's like chaos. Uh, Vietnam War was ending a lot of chaos. Stagflation gold. If you, if I'd layered in the gold price here, it'd be going up to 850 bucks an ounce. For two seconds on world markets, but everyone would be loving it. You would think that sound money was returning. You would think that we were, you know, that you would won.

I I say this all the time and uh, I know I've said on your show before, but that's, that's the, that's the only risk. And I, and I think the Bitcoin mitigates the risk like Bitcoin, it's, it's, it's clear based on those power trend lines that we saw. It's clear that the trend is up. It may go tens of thousands of dollars under the trend line for, for years, but it's clear that the trend is holding for now.

Uh, I, I shouldn't even say [01:12:00] for now. It's, it's clear, it's, it's a clear trend that Bitcoin has and we know the value proposition and all the rest. Whereas gold has a lot of antiquity baked into it, literally and figuratively. That just hasn't held its trendlines well at all. So there's a lot of good things that are happening for Bitcoin there, but we still have the lessons of the past and in the modern era.

In the modern era, you know, the United States government debt when gold was 850 bucks an ounce was, you know, $830 billion. You would think as a gold bug that that would be a signal that, okay, the markets don't trust us government paper, they don't trust the dollar. Uh, it's time to return to sound money after 10 years of being out the gold standard.

And you see what happened, you see what they did. So I just have to say that to your canary in the coal mine comment, because I totally empathize with it. I [01:13:00] sympathize with it. But you know, Japan in particular, they have been impressive at kicking the can down the road and markets like normalcy. Even during the re you know, we had a ridiculous few years here, right from 2020 to now, and everyone wanted to get back to normal.

They wanted to get back to, you know, a little bit of lower interest rates, a little bit of, uh, Uh, predictability in the markets, and they're not getting that right now. So that's, that's, that's, that's interesting. But I, you know, if, can they, can they extend this for another cycle of 10, 20 years? Right? If, if, if everybody just, if everything goes to shit, if, and they have to take interest rates from where they are now, which are pretty, you know, I don't have an interest rate chart for you next time.

Pretty high, right? Five, six, 7% of people are suffering on their car payments, mortgage payments or whatever might be adjustable credit card payments, pretty high rates all around the world. Can they take those back to zero? Yes, [01:14:00] they can. They can take those back to zero. Will it destroy the currency again, I think if you were a gold bug, you would've been loving life in 1980 and you would've thought we would return to it, but, but we didn't.

So I think Bitcoin protects you. I think Bitcoin is the steps that you need to take, but I just, I, I. I don't have an answer for what comes, what comes next, do you? No,

**Marty:** I'm not gonna pretend like I do. Um, in the midst of all this that's going on, whether it be the banking crisis earlier this year, back to covid stimulus, the expansion, the monetary base, I will say it does seem like it's getting to the point of insanity, like to such an extent where it's like, all right, it seems like something has to break.

But I do also have to recognize that I'm in somewhat of a bubble and I'm a bit autistic about following this stuff and really immersed in [01:15:00] it. While most of the world probably is not. Um, and like you said, they've proven time and time again that they can kick the can down the road and then analoging to gold.

I mean, there's a lot of, I think, pretty strong theories that governments in banks. Uh, essentially work together to artificially manipulate and hold down the price of gold. Um, so that it didn't send a signal to markets that they were losing control. Like, to think that they wouldn't try to do that with Bitcoin as well is probably a bit naive if, I mean, it's, it's proven.

We, we got the London Gold fixing scandal. I think another JP Morgan trader was just arrested for, for fixing gold prices. Um, so I think, oh yeah, think it's a theory. Yeah, I think it's been confirmed, um, to be a reality to some extent. It's probably still going on to [01:16:00] this day. And to think that these governments that have so much control and so much power right now and really wanna hold onto that, will not employ those same tactics against Bitcoin.

'cause the Bitcoin price runs, um, that sends a signal to the market like, hey, More people are trusting this money that's completely separate from the state, maybe you should adopt it till people start dropping their dollar bags for SATs. Um, the government does not want that to happen. Um, so I could certainly see that playing out.

But then other side of that coin, pun intended, is that, uh, I don't know, I think Bitcoin is such a unique animal in terms of the fact that it's digital, it's globally distributed. It's very easy to acquire and to opt into, like does that create a condition where it's much harder to suppress that price, particularly if people are actually benefiting from the natural properties of the [01:17:00] network that allow them to actually take control of it.

Um, I think if enough people do that, it makes the government's job of controlling prices a bit harder. Um, Then they just throw more weight behind it. I don't know. I could see it going one or two ways. I could see Jack Dorsey's hyperinflation tweet being extremely prescient. We'll look back at that five years from now and be like, yeah, he was right.

We could be in the middle of it right now. Um, and if we are, people are going to need alternatives. Bitcoin obviously we believe is the best. Um, it'll benefit massively from that. But I guess the, the question the unknown known is like, how much more power, gun power powder gunpowder does the government have to sort of manufacture a facade of stability?

**Matty:** And what if they actually start to reserve Bitcoin or buy Bitcoin? [01:18:00] Yeah,

**Marty:** I mean, we do know. I mean, no, mine came out. Last week announced that they're investing $1.1 billion in, uh, Ertz, which is a Bitcoin mining company. Obviously we had the Kingdom of Bhutan come out unwillingly earlier this year due the fact that they got swept up in the bankruptcy proceedings of Celsius and Block Fi.

They basically had to come out and say, yeah, we've been mining Bitcoin since 2020 and yeah, we're gonna double down. Uh, obviously it's been public that Gas Prom and Bit River have a, have a deal together. And so Gas Prom is a state owned oil and gas company in Russia. So Russia's got some skin in the game to some extent.

Obviously historically, Venezuela, El Salvador are in the game. Seems like Argentina may have aina, maybe may have a president that's, um, very open to Bitcoin. Could see proliferation of [01:19:00] adoption down there. And I actually saw, I, I think it might have been river dropped, um, a research paper highlighting that.

Argentina's actually got more Bitcoin adoption and usage in El Salvador does at this point, without any legal tender laws or anything like that. So, Hmm.

**Matty:** Does seem like interesting. I'll check that out. Yeah, I can, I can absolutely see that as being the case. It's a huge country.

**Marty:** Yeah. And it does seem like, so yeah, it's hard to tell.

I guess it's just prepare for both outcomes, I mean, selfishly, um, for the stability of the world and to avoid a Mad Max scenario while also being able to stack more SATs at lower prices. Like hopefully they can kick it down the road, uh, a bit more. Um, but then the accelerationist to me is like the negative externalities of these can kicking policies build up and compound so much that maybe in the long run it's probably better to just rip [01:20:00] the bandaid off sooner rather than later and begin rebuilding.

**Matty:** Yeah, I think, uh, in the short run too, it would probably be good for, I mean, it has been good and will continue to be good for price when you have more of these announcements or leaks or whatever with governments, government entities or government energy companies, mining, uh, and stacking. Uh, but even if like the federal reserves so that we're gonna, you know, or they secret, they did it and then we have like, you know, a certain amount of Bitcoin we wanna add to the stability of the do dollar or something.

That's where I think it starts to get a little bit dicey because then you're in the same circle that you were with gold. We know that the bitcoin market is much more, uh, at least we believe that the Bitcoin market is much more resilient globally due to its digital nature rather than physical nature, than gold has been because you're absolutely right.

And I agree like the a Greenspan quote, you know, he said during the nineties, central Bank, he said it, you know, gatta quotes it all the time, like, central banks stand by ready to sell [01:21:00] gold, should the price rise Like it was absolutely. Price suppression scheme, they probably don't even have a lot of the gold that they say they do.

They probably leased it out. So it's a whole thing. Uh, and that was, but interestingly, over the long term, you know, whether it's due to Bitcoin itself, o o outshining, gold, literally, you know, pun intended as well, I, uh, I'm not sure, but gold, you know, gold's just still stuck there. 2000 still got all these gold bugs where like, I just think it's the worst type of a boomer who's so excited that these bricks countries are, are, are, you know, announcing more gold stuff.

And I, I just think that's the worst type of boomer. I mean, you know how I feel about Russia, but I mean, these are hu you know, human rights abusing China, like these countries are not model countries that you wanna have your, you know, stake the stability of your, of your currency around. And just to think that that's gonna be a beautiful thing for your asset.

I just think it's it's way off, it's way off base. And I, I would feel the same way about it's. [01:22:00] Bitcoin not in the same way that you are mentioning it, because still it's, you know, that they're just doing what they need to do. Nothing is, I mean, other than El Salvador, there's nothing like major legal tender, but those might come and, you know, we'll have Bitcoin people championing those as those things as well.

But I, I go back to the speech I gave in Prague. You know, I talked about, um, how easy it was for the Nazis to just come in and take gold and, you know, it's just one, one other way. If you're talking about a nation's treasure was literally the first thing that the Nazis did. It's how they funded their war machine throughout the whole war because the reichs mark was worthless in Western markets and they traded, you know, illegally with Switzerland and everything, or, or not illegally, but uh, just in a very, uh, shadow, shadow market way.

But that was gold. It was gold that kept their war machine going, and it was the first thing they did when they went into Czechoslovakia. It was the first thing that they did, uh, when they went into, uh, [01:23:00] Austria. And it was the first thing that they tried to do when they went into Poland. And I, I told a story about the Polish gold, which I might've said a little bit on this show before, but it's an amazing story of how the polls got the gold.

Literally, it's, they got the gold out of the country as, uh, in, in September of 1939 as they were being firebombed. Bitcoin is different, of course, you know, the distributed nature of keys and how you would do this and hold this and all that stuff. But I still think it's kinda like MicroStrategy, right?

Like it's, it's great that they're buying all this stuff, but you know, You don't wanna pin the hopes of Bitcoin on MicroStrategy. And at the end of the day, they're just one central actor that can easily be seized. It would be the same way if, if Bitcoin was under the purview of the Federal Reserve. Uh, so it's, it's a, it's a catch 22 as well.

I, I haven't quite thought through the end game of that, but I, I don't think it's a great thing if we rely on these governments that have just ruined, [01:24:00] trashed all their other currencies, you know, manipulated the value of gold. Literally. You can say that. You can't say all markets are manipulated, but you can say that about with the gold market for sure.

And, uh, in fact, I think you and I would agree, like most markets are not manipulated. They're mostly free and always trying to get around stupid laws. But, uh, if, if they try to do this stuff with Bitcoin, yeah, I think it's like short term maybe good, but over the mid, long term, uh, we just gotta keep working more to keep it.

Distributed and not having the same fate of as gold because gold has had a terrible fate over the last hundred years. And if you're a boomer gold bug tweeting about BrickX countries accumulating gold, which they don't even have that much, but if you're, if that's what your pin in the hope on for your, you know, 4 0 1 k or your investment portfolio, uh, shame on you.

**Marty:** Yeah, you're fucked too. Well, let's talk about the bricks. So the, you had the bricks plus meeting in South Africa last week. This is leading up to COP 28, I [01:25:00] believe. I forget what number they're on for that UN climate event, but it seems like, from what I can tell, these are like back to back events that the Brix Countrys bricks plus whatever we're calling them these days are, are going to attempt to use to essentially announce like a pivot, uh, on their strategy and how they interact in the international markets.

Um, and obviously there's been many theories I've written about them in the past and I think. Um, at one point, um, I had more confidence in their ability to actually do something than I do right now as I've thought through it. Like, like you mentioned, you know, the hodgepodge of different types of countries, democratic republics, uh, autocratic regimes, um, uh, sort of monarchies, if you will, to a certain extent that are coming together.

And I think just purely [01:26:00] from a logistics standpoint, like, uh, just think that these countries would be able to coordinate and get along in the long run. I, I just think it's shortsighted. I don't see, I see it being a massive coordination problem, number one, like, who holds the gold? How does it settle? What else is in that basket of goods that they're, I.

Trying to launch, and again, who custody is those assets? Who audits 'em? Like I, I just find it hard to believe that they're gonna be able to create consolidated, um, and cooperative regime that, that works in the long run. I just think there's too many competing and it'll just turn into a dick measuring contest that erodes the confidence in anything they launch at the end of the day.

Hmm.

**Matty:** Yeah, I mean, and you know, China's probably gonna be demanding to dictate most of that dick measuring [01:27:00] at the beginning and always. And if they start to filter off or people start to not trust them, which is already happening, you know, what happens then? Uh, I, I, I think you know, the whole idea of bricks bucks or this bricks gold, I.

Uh, basket or whatever they might do. Uh, I, I don't think there's anything yet that's like coming out of this. And like you said, uh, I think it's rife with potential problems, but I'm not, I'm not saying that I'm championing, you know, the, the old ways of the west either. As, as I know that you're not, like, it's just we know that there's something better.

We know that Bitcoin is like light years better, um, stateless neutral, and I think that's just where probably, I mean, I know that's where we're focusing our attention. So that's, that's usually what I just tell people. But yeah, I, I, I, I have no love for the boomer gold bugs that, that think this [01:28:00] is a good thing.

And like there, there, there is a lot of 'em, if you look, you, you'll see 'em on Twitter just talking about this is, this is like gonna be great. So much accumulation of gold and all this stuff. And none of the lessons would be learned from World War II and. You know, precisely 70%, uh, of the gold left Europe and, and the world trying to get to the United States during World War ii.

So it was actually, you know, people talk about many different reasons that the gold standard ended really, you know, it ended because of autocratic dictators, like wanting to just walk in and take your gold because it's in a vault. Um, you know, autocratic communist regimes, are they gonna be much better in the short term?

Maybe. But in the midterm, you know, we're, we're, we're looking pretty bad for, for dictators right now in many parts [01:29:00] of the world. So I, I just don't see that as, as a viable thing. And yeah, I know on the other side, like, again, I'm not doing, what about, as I know there's a lot of people that. Anti, uh, you know, everything about America and like what, what they did to Russia, freezing the Russian reserves.

I'm not saying that the dollar system is better, I'm absolutely not saying that. Um, but what we saw was if, if the, if the gold standard, uh, and wasn't a, the classical world standard already fell anyway by World War I, but if what was a remnants of what was happening with gold around the world, and, you know, F D R was manipulating the price of gold and devalued the price of gold, uh, in the thirties.

But as we went into World War ii, if you saw that literally 70% of the gold goes into America, and then you have, by my count, less than 30 years. Yeah, 27 years or something. [01:30:00] Of an American base gold standard. You see basically how gold handles the extremes, right? The worst of the worst is what happened in World War ii.

This, it doesn't get any worse than that. I mean, the, the murdering, the pillaging, I mean, obviously the worst is the, they called it the San Gold. It was the gold that was ripped from, you know, Jews' teeth as they were walked into oblivion. I mean, there was a lot of that. Uh, but the, and I, I gave, I showed these charts in my presentation.

You know, I'm not, I'm not moralizing each pile of gold, but the most swift direct way that the Nazis stole was just walking into central banks that they, around the world and around Europe and taking the gold to fund their war machine. So that's what they're gonna continue to do. If you know that, that, like, if, if push comes to shove or come into any hot wars, like that's what you'll see with more centralized gold standards.

So that's the worst. That's the absolute worst that can happen. The best is apparently what happened when the gold flow had flowed into the us it flowed all into the US and we set up this [01:31:00] Bretton Woods standard. It lasted from, you know, 45 to 71.

**Marty:** France said, Hey, we want our gold. And Nixon said, wait, you're gonna have to wait a few months.

Gonna have to go find it. And then,

**Matty:** yep. It was one of the last things he did. And as president sra, the gold, he, uh, he, he, uh, in the late sixties, he just started to claim and he became like the biggest gold bug ever. And the US couldn't redeem and had to suspend. And so again, it's the same, you would have the same problems with Bitcoin, by the way.

Like if, if you were gonna do this, you'd have the same, it's, there's nothing magical about the standard. You'd still constrain yourself and all those things, but I just think it's funny. The extremes that we've seen, right? I mean, literally the, it does not get any better than, excuse me. It does not get any, uh, well, you could say it could get better than what the United States, the situation that we had in Bretton Woods, but let's say it was like the [01:32:00] best kind of that we had at the time.

And it certainly doesn't get any worse than the Nazis. So, you know what you think this like mixture of autocratic, communist, monarchical, monarchical, however you would say it, uh, monarch regimes coming together for some new gold standard's gonna be better. I mean, there's just, there's no way. It has to be neutral.

It has to be stateless and we're on the, the, the path there. So that's where I think, uh, I just think it's, it's doesn't get out of the gate basically. And, uh, I, I think it's a warning as well for Bitcoin. I think it's a warning. Like you, I dunno what you think about like MicroStrategy or something, but I just, I, I'm still not a, I'm, I'm not a huge fan boy of just seeing all these tweets of buying more Bitcoin.

Okay, great, great for the price and stuff, but there's nothing there that, that's adding to the decentralization of the network. It's, no, the,

**Marty:** [01:33:00] uh, the headquarters being within walking distance of Langley is a bit unnerving. Um, but

**Matty:** my, my, my podcast oh, is Alec talks about that either in Tyson's corner. Tyson Corner, I guess it's called.

Yeah. And it's like all of the agencies and lobbyists are there, like you said, walking distance. But I, yeah, I'm, I'm not, I'm not saying it's a psyop, I'm just saying if again, we, we're not, we're not putting our, shouldn't put your hopes on the world. Truly potential new world money that's decentralized, that that's gonna be like the next catalyst.

Uh,

**Marty:** no. And like, I actually do have thoughts on this too, and we can wrap on this subject, but I do think it's whatever Bitcoin's permission list, MicroStrategy can stack as much as they want. Whether or not they're front for the government, who knows? I don't think it's likely, but I think it's funny. I don't,

**Matty:** I don't either.

I think it's, I'm same boat to be clear. Same boat. I don't think it's likely, but it is funny. [01:34:00] Yeah.

**Marty:** Um, but the hope is that, and I've been writing a lot about this and thinking a lot about this 'cause we've implemented into my business and I can see it. Actually providing a clear path towards what let's just define as favorable adoption.

Adoption that leads to the optimal outcome of Bitcoin being as distributed and in as many hands as possible, um, outside of governments. Hmm. And that is the utility that the layered stack of Bitcoin provides individuals, particularly the Lightning Network. And Lightning Network obviously is not a panacea for scaling.

Like it's, it's limited. It'll only be able to scale us to a certain extent and, and we'll have to add other second layer solutions to interact with it, um, something like Fein. But I do think that there is somewhat of a clearer scaling path in front of us right now via the Lightning [01:35:00] Network. And again, things like Fein and other second layer solutions that will come to market and that hopefully, and then the next.

Three to five years. The user experience of actually spent sending and receiving Bitcoin over these networks is so far beyond the incumbent system. And it enables so many use cases that are literally impossible in the incumbent system, that people are almost forced to adopt it because they want utility that these solutions provide that literally do not exist in the incumbent system.

So to that point, like again, I'm pretty bullish on this, just haven't seen it up close and personal with Podcasting 2.0 with what's going on in Noster. What, um, with something that we're working on at T F T C with lightning monetization, like I do think we're getting closer to the point. Uh, a tipping point, if you will, of, um, people being able to implement [01:36:00] lightning and create better user experiences and unique experiences, most importantly, that do not exist in the incumbent system that people, um, will be forced to adopt because they want the functionality that it provides, um, whether they're consuming content or sending payments around the world.

And I do think we've reached a point, particularly at the Lightning Network, where you have robust, uh, competition. At the implementation layer. We have things like L D K, so you have development kits that are making very easy to, to build, uh, lightning wallets and lightning experiences. Um, and then I think on the business side, you, you have companies beginning to better understand the nature of the Lightning network and what makes sense and what doesn't to implement it into their stacks.

And I think the emergence of ai, whether or not. It's all hype, 90% hype or all signal is yet to be determined. But I do think, uh, what's going on with L 4 0 2, [01:37:00] um, and essentially just using the Lightning Network to do paywall. A p I calls for the energy intensive, uh, AI industry is like sort of a natural fit.

Like I, I do see a potential scenario, um, where AI is signal, it is useful and people do adopt it en mass and then they're literally forced to adopt the Lightning Network and do these, uh, paywall. A p I. Uh, calls, um, because it's the only way they can ensure that they're gonna be capital capitally, capital efficient, um, uh, with their energy cost in in mind.

Um, so again, that's the hope. Uh, I'm, again, optimistic. I do think the things that I've seen developing in the Space point towards that being, um, a, a probability and that probability increasing over time. Um, I do see a [01:38:00] path towards that. And again, favorable adoption that leads to an optimal outcome of significant distribution.

And more importantly, people getting Bitcoin, uh, into their own hands, uh, before quote unquote hyper Bitcoin or the price runs

**Matty:** Yeah. Too far away from them. I love that man. Uh, Sergei Cutler would always say that from, uh, bit refill. You know, it's like we all. Love Bitcoin, obviously spend a lot of time studying it and understanding it.

And, uh, you know, the people that go to conferences, they love Bitcoin. It's an easy sell to, you know, use the next best, uh, lighting wallet or like you said, some a p i, uh, wall even, you know, for your, for your business, uh, using Lightning, which is gonna be fantastic and it's gonna be awesome. But that is an easy sell for, for us.

It's, it's not an easy sell for the average person that just wants to buy something and wants to do something. So it has to be [01:39:00] that easy for the people that don't love Bitcoin, that don't care about it, but they just want, they do want the utility. They need the utility, as you said. And, uh, I, I agree man. I think it's coming.

I think it is coming soon and that's, that's just gotta be the way, right, like it's definitely circling it all back to the start of the conversation. It's definitely not gonna be the way that Nigeria tried to do it or the way that India tried to do it with their good old C B P C. Uh, or C B D C. Yeah.

Implementations.

**Marty:** Agreed. Yeah. So if you're listening to this, we gotta go build it. We gotta build the experiences, build the utility, show it to people, make it easy, gotta make it easier. It has gotten significantly easier. I think that trend will continue. Um, that's the goal. Like armchair pontificating about number go up does have its merits in terms of helping people understand the value prop of Bitcoin.

But then there's also this network side of things that literally needs software engineers to build [01:40:00] out in a layered fashion to bring the full utility of the network to more people. Um, and the more utility you have, uh, the thesis is the more adoption you'll get. Um,

**Matty:** so That's right. I love it, man. Good stuff.

Yeah.

**Marty:** I love you Mr. Junious. Um, This is always

**Matty:** likewise, buddy. I went to, uh, uh, never, never a chore. Never a chore.

**Marty:** I want to apologize for the landscaping that was going on for a lot of this.

**Matty:** Uh, you know me, man, I can, I can roll off on these charts, but, uh, I hope it was just clear enough for the listener and they didn't give up on us too early.

But, uh, if you are listening still, uh, we got the Crypto Voices podcast and then Pork Alos Economics on YouTube and, uh, pork kalos.io as well for a lot of the economic stuff.

**Marty:** Yeah, very high signal content. Um, any parting thoughts you wanna leave the freaks with?

**Matty:** Not really. Uh, stack SATs, uh, [01:41:00] be humble as you guys like to say.

And, uh, I think as you said, go build it. There's a lot of good optimism in your closing words, and I couldn't have said it better myself. So nicely done. All right,

**Marty:** that's all we got today for Peace of Love,

**Matty:** Dicky. Thanks buddy.