All right, everybody. Welcome to the All in Podcast. And with me again this week, the Sultan of Science, the Prince of Panic Attacks, the Queen of Kinois, David Friedberg, the dictator, Tramoth Polly Hoppitya, wearing a beautiful Mr. Beast sweater, and David Sacks, the Rain Man himself.

Thanks for coming to my Laura Piana dinner on Tuesday, Jake Caldwell.

That was wonderful. Thanks. At least one bestie showed up for you. Wonderful, wonderful dinner.

I sat as far away from the Laura Piana people as possible in the arranged seating. Thank you for that. I guess maybe you were like, I'm going to contain the damage.

And Bernard Arnaud said, put the all caps got at the end. And I said, okay. Yeah, he still heard me. I was like, Tramoth, what's the amuse-bouge?

Jake Caldwell's joke. At dinner, every time he said something, he yelled like he was in all caps.

So funny.

He's like, Tramoth, I want another butterscotch pudding.

The butterscotch pudding is delightful, Sean.

Oh my gosh.

She was like, I'm four feet away from you, me, Jake Caldwell. You can take the caps slot.

Sean was so embarrassed.

Chef Sean crushed it.

Chef Sean crushed it.

Sean crushed it once again.

Were you sounding alarms when the restaurant almost ran out of something? Alert, alert, alert.

Restaurant is running low on coffee.

We're a dangerously low on caviar on this wide asparagus.

All right, everybody, welcome to the pod where we try to inform you. We try to make some jokes here.

I just want to make what is a little bit of an opening statement here. It's not an apology and it's not a victory lap in any way. But there's been a lot of attention, I think, on the last episode of the pod and perhaps some tweeting from two of the four besties this past weekend.

I saw, and I'll let you speak for yourself here, Saks, and we're going to get into the timeline of what's occurred and then what are potential outcomes here and solutions to the banking issues that we've witnessed in. What is a week since the bank run on Silicon Valley Bank and the shutdown on Friday?

What I saw, and again, speaking only for myself here, was absolutely terrifying up close and personally watching people pulling money out of banks and watching people have to set up loans to hit their payroll. This was like one of those surreal moments in a movie where like a meteor is coming towards Earth and you see it in the telescope and nobody else sees it or only a small number of people in the observatory see it.

I think part of the reason people listen to this podcast is because we are insiders and speaking again just for myself, I'm always trying to be exceptionally candid and transparent

with the audience.

Additionally, I make jokes. So sometimes you might laugh during this podcast or you might laugh when you're reading my tweets and that's part of what I do. Now, I also realize that we have an audience now that is larger than I think any of us expected for this podcast. I certainly am magnitude larger than I expected. And frankly, I didn't know if this podcast was going to make it past 50 or 100 episodes and my Twitter following count doubled since we started this podcast.

Well, that's because you tried to ruin the pot.

I think it was because of the caps locks. But anyway, putting all that aside, what I would like to say as well is like, we are living in a situation that is unprecedented. I think the alarm bell I sounded, you know, was because I saw a fire. We'll get into the timeline here. But I sounded that alarm bell after Silicon Valley Bank was put into receivership and when I saw additional bank runs occurring, I wouldn't change it. I think these were the right the right thing to do was to inform folks. Now, I did use all caps, perhaps a little too much. That was a little bit of a bit if people didn't understand that. Maybe I need to adjust my communication style now that this thing is so popular. But I stand by my mode of operating in the world, which is I always want to be candid with people. I always want to tell the truth. And yeah, sometimes I make jokes about life and, you know, dealing with these stressful situations. That's it. It's not an apology. It's more of an explainer. And yeah, maybe I need to adjust the caps lock or how I deliver stuff. But I stand by the message of what I said. And I think it's important for us to maybe look at the series of events and misinformation that has spread because there are people literally blaming venture capitalists for the bank run. That is now systematic and the balance sheets of multiple banks around the world. And I think it's actually be great for you to maybe just comment on the week that was and the timeline of events.

Yeah. So as usual, you're not apologizing. No, absolutely not apologizing, but we'll recognize that this platform is bigger and that maybe on the margins I could adjust my communication strategy. But Chris, there's a lot of people who don't know that I make jokes. And maybe people don't understand what I'm joking and when I'm serious, right? And so Jason, what would you change? Was there anything you'd change? Come on. I think I might not have used a Mad Max image and GIF about the end of the world because people are too stupid to understand that's a joke and a fictional movie.

I see. So you find yelling effective?

It depends. Well, J. Cal, I agree that I don't think you have anything to apologize for in terms of the substance of what you're trying to get across. I personally could have done without the all caps.

It was a bit.

Yeah. What you're basically saying is nobody should listen to you because you're not that important. And I wholeheartedly agree with that.

No, I'm saying, I understand I might make a joke. Consider me more in the Bill Maher category.

Yeah.

All right. Let's go back and look at the timeline because there are now serious accusations

and I would call it really scapegoating. And it wasn't just you. It was me and Bill Ackman. In fact, the Wall Street Journal editorial board, which I respect a lot, mischaracterized what me and Ackman were trying to do in terms of drawing attention to a regional banking crisis in progress around on the banks. They called it spreading panic. I don't know how you tweet or publicly discuss a run on the bank that's currently happening needs to be addressed with an immediate federal intervention. I don't know how you can discuss it without then having someone else mischaracterize it as trying to spread a panic. But J. Cal, the Wall Street Journal editorial board didn't mention you. So you're off the hook.

Okay. Good. Fair enough.

They didn't know who you were.

Thank you.

Thank you.

Thank you.

No, but seriously. So I went back and looked at the timeline of all of this. And so, first of all, we have to understand that this banking crisis now has swept in five banks, five bank failures. First, there was Silvergate, but everyone dismissed that because it was some weird crypto bank. Then it was SVB, but everyone dismissed it because they said it was based on panicky VCs rather than the systemic problem in the banking system. Then it was Signature Bank, which got seized on Sunday, which I think utterly refuted the idea that this was just a Silicon Valley problem. Then you had the Fed step in and backstop First Republic, which would have been the next dominant of fall if it wasn't backstopped. And then five, you had Credit Suisse, basically, again, avoid an outright failure because it got backstopped by the Swiss government. So we now have five banks in roughly a week. And these are not small banks. Credit Suisse is a G-SIB, a globally systemically important bank. And the other ones are top 20, top 30 type banks. We're talking about hundreds of billions of dollars in deposits. So clearly, there's a larger phenomenon going on here. And frankly, it's being caused not by anything VCs did because VCs are just depositors. We're just one class of depositors. And depositors are not to blame for what's going on here. What's going on is that these banks have huge, unrealized losses on their balance sheet. And the losses have come from the sun's spike in interest rates. That's what's going on. The sun's spike in interest rates is because we've had the most rapid Fed tightening cycle in our lifetimes. In the last year, the Fed funds rates gone from roughly zero to almost 5%. That has broken a lot of things. And the banks which have broken first are the ones that had preexisting problems. And they had horrible risk management. But that's who gets broken first in a stress test, right? It's the most poorly run banks, the ones with preexisting issues. But just because they went first doesn't mean that others don't have similar kinds of issues. Now, I'm not saying this in any way to be panicking with those banks to be fine, but there are larger issues in the banking system that are worth talking about. And to the point about whether VCs could have spread this, Jay Cal, you're absolutely right about the timeline. I went back and checked. I personally never tweeted anything about SVB until Friday afternoon when SVB was already in receivership and the run on the bank had already started with signature and first republic. And we could see it with our own eyes. And then this pod didn't drop. The one where we talked about this problem didn't drop until Saturday morning

when the banks were already closed. And by Sunday night, the Fed had acted and basically implemented our recommendations, which was to basically intervene. So I don't know how you can blame... The search for scapegoats, I think, is getting out of control, and it's just not factually accurate.

And it's convenient to make tech, which is hated right now, Chamath and Friedberg, the scapegoat, venture capitals, obviously the part of tech that people might hate the most or the easiest target. But let's talk about the Fed raised those rates because of inflation. And inflation happened because of out of control spending due to COVID and then the second administration. So you had a republican administration that spent a lot of money and then a democratic

administration, Chamath, that spent a lot of money. So maybe we could even go backwards from Fed, fund rate going, you know, what looks like parabolic when you look at the chart. Maybe you could speak to what got us to the Fed making those decisions, Chamath or Friedberg. Maybe I can just do a little cleanup on what SAC said. I think the issues at Credit Suisse are different than the issues at First Republic. And the issues at First Republic are different than those other three banks. The other three banks, David, that you mentioned, signature Silicon Valley Bank and Silvergate all had very traditional liquidity crises, right? We talked about this last week, which is duration mismatching where you have depositors who want their money today, but you have assets that mature in 10 years. And as a result, you have huge unrealized losses if you all of a sudden cash them out today versus waiting 10 years. I think what's happening at First Republic is really just about making sure that that loan book and the depositors can get parked into a combination set of banks that can take care of the balance sheet so that there are no more liquidity issues. At Credit Suisse, they have an enormous amount of liquidity. What that was, was I think a lot of speculation around whether they would default on their bonds or whether they would theoretically need more liquidity. But the balance sheet itself was not only liquid, but also very solvent. So I think that was just more of a panicky reaction to comments from a 9.9% shareholder who just said that they can't put in any more equity. But even then, I went back, this is the chairman of the Saudi National Bank, he was asked on Bloomberg, would you give Credit Suisse more money? And he had a very reasonable answer, but it was snapshotted in a very awkward way. The first sentence was, under no circumstances, would he do that? Okay. Now, if you stop there, you could be panicked. But the rest of it made a lot of sense, which is he said, look, in Saudi Arabia, if we go above 10%, we have to go through regulatory approvals domestically, and there are regulatory approvals abroad. That's a big hill to climb. And all of a sudden, it no longer becomes a financial investment, it becomes a somewhat political investment. And so we're very happy at 9.9%. That was the totality of his statement. But if you just cherry pick the first 45 seconds and ran with it, which people on the internet did, this is sort of what caused that second level wave panic at a GSIB. And then the Swiss National Bank stepped in, and I think that that panic has largely gone. Okay, so what is the real issue? The issue again, is I think we have had a bit of supervisory failure here, right? Because we all know this in any industry. If you let capitalism go totally unchecked, shareholders will demand immediate profits today. It happens in every industry, except in ones where you can basically gamble on

future profits. And that's what tech does. But every other shareholder in every other asset class demands money today, and that's the same for banks. The problem is the banks are a highly regulated business. They are supposed to be supervised by the regulators. And this is a very clear example where why is there not a real time spreadsheet? I mean, this is not complicated stuff where assets and liabilities and duration mismatching can be known on a real time basis where the San Francisco Fed, Mary Daley, should have a report that's escalated to her when SVP got over their ski tips, which they did in Q4 of 2022. So I think the real question that has to be examined is where were these folks for the last four months when they could have done something, not just about this, but rules in general for all banks that are not the GSIPS. And I think that's a very important question that politicians need to get to the root of.

Friedberg, we discussed this article from Seeking Alpha, which came out on, let me get the exact date here, December 19th. Title of this Seeking Alpha story is SVB Financial Colon Blow Up Risk. And the summary in three bullet points says, bullet point one, potential losses in loan portfolios could severely impair book equity. Number two, unrealized losses in hold to maturity portfolio already equal to book equity. Number three, funding environment for startups were pressure deposit base, adding even more pressure to the balance sheet. In other words, startups spending money to cover their burn rate. Friedberg, and obviously we had the Dodd-Frank rules lessened or loosened under the previous administration. And that specifically was driven by Silicon Valley Bank that had a big part in that. So looking back on this, and people do want to place blame, let's talk about the effects that occurred because this was hiding in plain sight literally in December in an article that looks like it was written by somebody who went into a time machine and said, how do I warn people in December about this? Maybe you could talk about the Fed's interest rates, the spending and what led up to this look issue with the banks.

You guys remember when we started this podcast three years ago, we were like, they're going to shut down the economy. There's going to be crazy second and third order effects of doing that. No one knows what they're going to be. Here they are. And I think that's like the root of what is a rippling effect. You can't shut down the global economy and stop trade and stop people and have the government step in to write a giant check and not expect that you're going to have to cash that check at some point.

That's effectively what I think we've been kicking down the road here. The way we initially tried to resolve the problem was to drop rates to zero and then spend our way back to a growing supported economy and then overshot, ended up with too much stimulation, too much stimulus, too lower rates for too long, responded too quickly, whiplashed back. At the end of the day, there was a giant gaping hole blown into the global economy when we shut down the world from COVID. There's no blame. It's just what happened. And when that happened, there was a massive cost that had to be born at some point and it's going to get born at some point. And the rippling in a pond, you don't know where the ripple is going to hit, what part of the pond, what leaves it's going to hit. That's what's going on still. And it's such a dynamical system. It's so hard to say with linear certainty, this is what should be done and what could have been done and what they should have done at the time. No one had that predictive capacity back then. They did what they needed to do. People thought that they

should have dropped rates. They said we should have written all these big stimulus checks. Some people said you shouldn't. Some people said you did. Certainly, some people are being proven right and some people are being proven wrong. But at the end of the day, the economic loss that was realized at that period of time, we're still trying to get out of it and we're still recovering from it. And I think that's a big part of what's being eaten up right now. And you're going to see it in the wipeout of certain equity. You're going to see it in the wipeout of these banks, of the assets that they hold and these portfolios. And the effects of that are obviously still being felt.

Saks, do you agree that mistakes, there isn't somebody to blame because it is clear that the Fed said inflation is transitory. That was wrong. And then they went faster than in history to raise the rates. Those seem like two glaring mistakes. And then the Dodd-Frank loosening under Trump and with Silicon Valley Bank pushing them, that seemed like a really big mistake.

I wasn't saying the Fed's not to blame for not raising rates fast enough. Because you guys remember, I was the first person to talk about what Stan Druckenmiller had said, that they're not raising rates fast enough that we've got massive inflation. We should have been raising rates. I was the first person on this show to be barking that. So don't forget, I was there pretty early. What I was pointing out was we shut down the economy during COVID.

That is the main cause.

That is the cannonball that got blown through the ship. And everything else is plumbing and patching and work to try and keep the ship afloat. And we're still dealing with that. And at the same time, as you guys know, we've been loading the ship up with debt, the global ship, the global economy with debt, 360% global debt to global GDP ratio right now.

And as that ship has gotten heavier and heavier, to have a giant hole blown in the side while you're trying to do all this patchwork with all this debt weighing on it, it's a critical challenge.

The ship is sinking.

And the one that we're feeling acutely here, they're feeling it in Europe now. And we're certainly going to see the global ramifications as we try and fix this economic catastrophe that was caused by COVID at the same time that we've been spending our way into a happier future that it turns out we have to pay the bills for at some point.

Saks, your response.

The question of who you blame for this banking crisis has really become a political rorschach test. And I've seen that there are six different parties that people want to blame in this situation. And there's some merit to all of them, but the degrees are very different. That's number one.

Let's do it.

Let's go through them.

Okay, number one, the bank management of all these different banks. Clearly, very poor risk management didn't do a good job. They are to blame. However, and Chamath is right about these banks, they differ in the details, but the point is that they're all operating

under conditions of extreme stress. Where did that come from? Number two, the Fed's rapid rate tightening cycle. Clearly, I think that the combination of poor risk management with the spiking interest rates, that basically has precipitated this larger problem.

Number three is, I think, the Biden administration spending, which, in fairness, started with COVID before Biden, but Biden really intensified it. And then I think it really compounded the problem in the summer of 2021 by claiming that inflation was transitory when it wasn't. That allowed them to keep spending and keep printing money and kept QE going for another six months. That created the bubble of 2021. Everything got super frothy. And then that made the rate cycle even more vicious, because you started six months later. They could have started six months earlier, and it could have been more gradual. And I think that really was a disaster for the economy.

Number four, the Dreg in 2018. I think Elizabeth Warren and Ro Khanna have made what I would call a compelling case that the Dreg in 2018 have contributed to this problem. I think, in hindsight, creating a two-tier system of banks where one tier are the systemically important banks, who are completely guaranteed and backed off by the federal government, and then a sort of lower tier or second tier of regional banks was a poison chalice for the regional banking system, because in the short term, it meant they were more lightly regulated, which may be appropriate for smaller banks that aren't these mega banks. However, it has also now, I think, created a situation where people are less confident about them. The money flows are going from the regional banks to the systemically important banks, the SIPs. Like I said, it might be a double-edged sword. I think we're going to have to look at those regulations and figure out what's the right regulatory regime to create confidence in the regional banking system. We want a thriving regional banking system. The question is, what's the right regulations that get us there?

The final two we can talk about later, I'm hearing Wokeness getting blamed, which, listen, I think that Wokeness was a distraction. There were a lot of crazy programs happening at these banks, but listen, if Wokeness was the key factor, the whole Fortune 500 would be out of business, because they all do this stuff. They all do this stuff. I think we're going back to the well a little too often on that critique. I don't want to burn that critique out, because I think that Wokeness is bad, but it's not the key reason why this stuff happened. For Wokeness, we could also maybe frame it as ESG more broadly as the distraction, because Wokeness is charged, ESG is real.

Yeah. What I would say for sure is that if these banks have spent as much time on risk management as they did on ESG or on Woke, then this crisis wouldn't have happened. Definitely a distraction, but not the thing that specifically caused it. Then just the final thing is VCs. I just can't fathom at this point, given the multiple bank failures, given that we see the larger problem of unrealized losses on bank balance sheets, that somehow any class of depositors would be blamed for this. That just makes no sense to me.

Chamath, I think the critique is specific to Silicon Valley Bank, because I think this article was in the Wall Street Journal, but what it shows is a really complicated, intertwined relationship between VCs and Silicon Valley Bank, where VCs were given very cheap interest rate loans, they were given GP call lines of credit, they were given LP lines of credit, and then those same VCs would be directing their companies to put their deposits inside

of SVV, who would then take those deposits and buy risk.

Well, the reality is all of this stuff will come to light, because I think it will get exposed as we go through congressional hearings on all of this. I think pointing the finger at VCs in this specific case is somewhat warranted, because there was a little bit of people working in lockstep together, and there was a lack of functional responsibility around how to be a true fiduciary. If you come to a board and your founder is 22 years old, and you give that person \$15 or \$20 million, I think it makes a fair amount of sense that you are supposed to be the more sophisticated financial person in that room.

If you have incentives that aren't properly disclosed to that CEO, and now a set of decisions are made, I think that there should be some accountability for that, or at least some exploration of why that happened.

I just want to make sure the audience understands this, because it is a bit in the weeds and it's a bit inside baseball. What you're saying Chamath is, if I could summarize it, there are people who are the adults in the room, venture capitalists. They have deposits at Silicon Valley Bank. They also might have loans that are fantastic with Silicon Valley Bank. I had a mortgage for this office from Silicon Valley Bank, and I talked about how, on the last episode, how great it is. They come, they open wine with you, it's white glove service that you wouldn't get at another bank. Then they might have loans against what's called the GP carry, or the GP share, or they might have mortgages. There's a conflict there. If you're a venture capitalist and you're directing a 22-year-old CEO to Silicon Valley Bank, maybe you're doing that is, I guess what you're saying could be explored.

No, the bigger conflict of interest.

No, the bigger conflict of interest.

And in some cases, Silicon Valley Bank is a limited partner in all of these funds. My point is that all of these things-

Yes, that's the bigger conflict of interest.

Okay, hold on. We have to explain that.

So imagine a situation. You go and start a fund. Silicon Valley Bank comes to you and says, let me be a limited partner and invest with you. Let me give you some amount of money. I don't know where that money comes from from Silicon Valley Bank, but they, well, let's be realistic, more like \$25 million, \$50 million, \$100 million. Okay, this is a lot of money. So a million kind of is whitewashing this problem. So you give them a reasonable amount of money. They're like, wow, I have tremendous loyalty for you. Thank you. Well, do you need anything else? Do you need personal loans? Do you need lines of credit for your business? Sure. Why not? I take those too. And invariably on the back end, now your loyalty obviously builds up. Again, none of this is wrong, but this is what's happening. And then you tell your companies to keep your deposits there. Maybe the cash management program is not as strong as it would have been if you were more circumspect and you didn't have those incentives to direct people to one institution only. In any other part of the market, so in the public markets, as an example, there is such a bar for disclosure. Okay. And I cannot stress this to you enough. Related party transactions, all of this stuff. We have to tell everything, not just for us, but even if our like sister or brother or mother may have a transaction with an entity that we're doing a deal with. And it just isn't the case in private markets.

And so it's not to say that anything untoward happened. But when people point the finger at VCs, I think they are pointing to this whole set of issues and asking the question, shouldn't there have been more disclosure and transparency around it? And now that this has come to pass, shouldn't we explore it? And I think that's what the Wall Street Journal did. They started pulling on this sweater thread. And my guess is that you're going to find a whole ball of yarn at the end of it.

Sax, what do you think of this?

I think Chamath makes a fair point that if VCs have SVB as an investor and then they're directing startups to use SVB, that is a conflict that should be disclosed. By the way, we never did either one of those things. We never had SVB as a limited partner and we also never directed our startups to bank at SVB. I don't know why we'd ever do that. Moreover, I always try to talk founders out of taking venture debt, whether from SVB or elsewhere. Yeah, we'd be clear about that. And to be clear, I never directed anybody to a specific bank. I always told people to get two or three banks and have redundancy. Totally.

Yeah, totally. And look, founders have multiple VCs typically on their boards. So the idea that anyone VC directs them, which bank to use, that's not realistically what happens at these startups. But look, I think Chamath is right that when there is a bank failure or any kind of failure at this big, then all the practices are going to be under a microscope and there's going to be some scrutiny of this and maybe there should be. But my larger point is we're now operating in an environment in which clearly there's a larger set of stresses on the banking system. We've already had now five bank failures or near failures. Moreover, do any of us believe that this is over? Or do we believe there are more shoes to drop? If we believe that there are more shoes to drop, we may not know exactly what they are, but I think all of us probably believe that we're not the end of this. But just to finish the thought, if we believe there will be more shoes to drop, then clearly the issues cannot just be limited to Silicon Valley. They have to be a larger set of issues. I think that it's important to understand the facility that the Fed created. So what the Fed did this weekend is essentially create a buyer of last resort again. Now, how did they do this? So all of these banks basically have assets that they bought for \$1 and are now worth \$0.95. And that's what's creating this whole issue or \$0.80 or \$0.85. You pick the number, but they're not worth the dollar that they bought. What the Fed basically said is, okay, give me that asset, give me that bond. I will value it at \$1 and I will give you \$1 as a loan and you will pay me interest. And the interest rate, I think, is what's called OIS and they added 10 basis points on top. So I think it's about 4.9%. So what it allows all of these banks, and if you take all of the banks that are not the top four in America, so the top four are JPMorgan, B of A, Citian Wells. So just ignore those for one second. The other end banks, if you look at all of the assets that are underwater because of all the rate hikes that SACs talked about, and you add up all those losses, that is about \$2 trillion. And the Fed didn't denounce that there was a beginning and an end to this program other than saying these would be one-year loans. And so I think the exposure for the American banking system at a minimum is going to be this \$2 trillion

because now the incentive, if you're a banker right now running one of these banks that

has not gone under, is to immediately go to the Fed, put all of those assets to them, get a loan, and now take that and buy different assets, different bonds, different U.S. treasuries that are yielding much more than what your old treasuries were yielding. And I think that's the arbitrage that we've unfortunately created. And the other question now, though, however, is what does that mean for the top four banks? Because if it's \$2 trillion for everybody else but the top four, what's the gap for the top four? That looks like it's somewhere between a trillion and \$2 trillion. So that's another amount of money we're going to have to cover. The Fed will have to backstop. And then, as Friedberg said, these checks always come due. What do we do in a year? Because in a year, the problem is the only way to make the banks in a position to repay this much money in one year is to cut interest rates so massively that these assets massively inflate. And now, all of a sudden, you're in a position to cover this. So it describes what that delta is because it's about, they're down 15%, 10% in book value, these longer-term treasuries. It depends on the security. Again, it depends on what they bought. We don't really know enough details, so I don't want to guess. But if you own these 10-year treasuries, you could be off 10% or 15%. If you own mortgage-backed securities, it could be off a little bit more. If you own short-term securities, they're off a little bit less. But these are with the government, you get a loan collateralized by these assets. So you're still holding them, right?

Yes, and they mature. So if the Fed takes an emergency posture and says, okay, guys, we want to avert a crisis in a year from now, and we're going to cut rates, these assets that these banks own will be worth more, which will allow them to repay the loan. As far as I can tell, all we've done is we've kicked the can down the road for a year. But I do think it's important for people to realize this doesn't solve the problem. It just means that marked your calendar for a year from now, we have a problem on March 15th, 2024, because all those folks that took money, what do we do?

Yeah. And so a year to work it out, Freeberg would seem like a good idea because the Fed is fighting inflation. They seem to have gotten some portion of it under control. It's not out of control, right? Inflation. And maybe if they can slowly, you know, either start rate cuts or pause. So let's shift the discussion to, hey, what are the changes we need to make to the system? And how do we think this plays out over the next year? Freeberg, Shamath had one suggestion, which was all of these banks should have a disclosure statement, mark to market every day, week, month, quarter, whatever it is, just like circles, USDC, their stablecoin has a page with their disclosures of all their holdings. So that seems to be a very productive one. We should have them mark to market the Dodd-Frank stuff, as Saq said, you know, Elizabeth Warren, probably correct. We need to reverse that. So those are two very tangible suggestions. What are your suggestions?

We need to have a real-time dashboard. We need to have a real-time dashboard at every single Fed that allows them for every bank that they supervise to know in real-time. They can choose to ignore it. I'm not sure that should be true, but they are their supervisors. They should see it. They should choose to ignore it, but they should not not have it. Freeberg, what are your suggestions going forward as to how we can learn from this situation? Right about the cannonball, as you vividly expressed there, I think very well, a great analogy. But just going forward, how do we keep the ship from taking on water if we do

have a cannonball hit it again?

We got a hard, that's a hard equation to solve.

Clearly that's why I'm asking you.

We got a lot of demands for money. You guys see, I think there's a lot of things that are seem unrelated, that are all pretty related right now.

There's a massive protest underway by labor in France.

There's a massive protest underway in the Netherlands.

There's strikes on the underground in London.

When we talk about global debt and U.S. debt, we often, I don't think, account for all the debt, which also includes promissory obligations made to a workforce, a global workforce that's been working for decades.

Individuals that have spent their whole lives committed to some company or to some government working with the expectation that they're going to retire and have some benefits paid to them.

There's this massive underfunding of those benefits and those pools of capital.

We very quickly talk about unfunded pension liabilities, but when you actually kind of account for the number of people and the amount of capital that those people are expecting, that the workforce, the global workforce is expecting to be paid to them in retirement, both public and private.

It's a massive amount of money that's not funded today.

You start to see the cracks in the system when that population says, my pension payments are not keeping up with interest, with inflation, or when there's a threat that pension payments or retirement benefits are going to kick in at a later age or you're not going to get them fast enough or you're not going to get as many as you thought you were going to get. We have that problem in the United States in the form of social security and these underfunded pension liabilities.

That is the critical macro tension in this equation that I think drives the real problem that's going to come to a head at some point.

We blew a hole in the boat, but we're also forgetting that there's like a massive amount of weight that's going to drop on the boat.

I think that it's a really hard equation to solve.

We can talk about keeping banks solvent and all this sort of stuff.

At the end of the day, the central bank, it appears in the United States and probably globally, it's going to be one big bank.

They're basically going to take on the whole balance sheet themselves.

At the same time, you've got a lot of folks saying, I want to get paid more.

I have obligations due to me.

Guess what?

Jason, to your important statements historically about the importance of democracies, ultimately, the members of that democracy are going to say this is a benefit that the majority erode and that's going to pull things out.

I think the only stopgap, I'll just say one thing, the only stopgap in the next decade is going to be significantly higher tax rates in the United States.

I don't see how you're going to fulfill the tension gap that's underway right now with respect to where productivity is going and where capital markets are going and where the demands are on the system from people requiring additional capital to come out to them without taxing assets away from the asset holders.

This would be corporations and high net worth people.

I think that's why you see this Biden proposal.

We may not like it, but at the end of the day, it's going to be the only way to create a stopgap that's going to avoid massive inflation in the near term.

That's how you see the Biden proposal.

Hold on one second.

Let me just say one more thing, Jake.

The only other way besides a massive long-term tax regime to fill the hole would be some extraordinary productivity gain and this is where we can all have a hope and a dream and an investment and an effort around technology, AI, automation.

People think that their energy job, energy, but if you can get energy down below three cents a kilowatt hour and you can scale its production by tenfold, if you can automate a lot of labor, if you can get AI to do a lot of stuff that we do today, productivity will go through the roof.

The economy will grow fast enough to get out of the debt bubble and meet all of these liability obligations.

So there are three ways.

Just a summarize.

To me, that's the long term.

The medium term is going to be this tax stopgap, this very high tax stopgap and then the short term is going to be all the shenanigans that we're talking about.

Okay.

I'll go to you in a second, Saks.

Just to recap, there is actually a third way too.

There are three ways productivity, as you variously point out and we just highlighted some of the ways productivity could help, whether it's energy, AI, et cetera.

The second is, of course, increasing taxation on the people who are at the top of the pile would be the likely solution.

The third is also austerity, cutting spending in some way.

But let me also propose one thing here.

As we look forward to what do people want out of a bank and how should startups or just individuals deal with bank runs and their trust in banks to Tramot's point?

I was thinking about this over the weekend and then this discussion that we would have based on a lot of things you said, Saks, which was people just deposited their money and they don't have the ability to assess if a bank is solvent because the FDIC can't do it and it's their full-time job, it's their mandate to make sure these banks are solvent.

So how is a consumer going to be able to do that or even a startup founder or even a sophisticated investor like Ackman or any of us if we're in fact sophisticated?

So let me pause for a second here and pause at something.

We don't want a bank, we want a bank vault.

Consumers do not want their deposits to be used for shenanigans, just like many people would rather pay for a social network than have their privacy data sold.

So I think we should bifurcate banks into bank vaults and banks.

Banks can do what they want with your deposits, you get free checking.

But what I wanted a bank, what I want my startups to use, what I want my venture firm to use is I want to pay the bank for services.

Whether it's 10 basis points, 25 basis points, \$500 a month, I would rather see my startups pay \$1,000 a month in banking fees, \$2,000 a month on banking fees for \$2 million, whatever it is, and pay for each check, pay for wires, pay for Wyclef service, whatever they choose, but not allow the banks to take that money and loan it out or do things with it.

I just want a vault and I think a vault service is what the majority of consumers want and given what we're seeing with two insane bank run bailouts in our lifetimes as adults for those of us who are in Gen X, 2008 and now, we would rather pay for services and I leave it to you, Sax.

Is this a potential solution?

Because I don't hear anybody saying, give me a bank vault and why does that service not exist in the world?

Yeah, look, what people really want are they want a service provider who gives them the ability to make payments, which if you're a small business is payroll and payables, things like that, they want a money market fund to basically earn interest and they want all that to be safe.

I mean, it's very simple.

The idea that when you go open a checking account at a bank that you are making an unsecured loan to that bank, that is not something that any consumer or small business understands. That whole model, I think, is completely obsolete and outdated and what I heard so many people say, and I think this is not sincere, I think it's just because they hate tech, is that

depositors should take it on the chin because somehow they made a stupid decision when they opened a checking account.

It's like, are you kidding me?

Listen, what do you want the process to be?

You want consumers and small businesses, when they open a bank account, to have to review the financial statements of that bank, try to figure out all their disclosures, where their assets are, whether they have toxic assets on the books, and if they don't do a good enough job doing that, if they're not smart enough to do that, then you want them to be disciplined.

This is the word that I kept her being used, is we need to discipline the depositors.

The depositors are not in a position to evaluate the balance sheet of these banks.

That's what the feds are supposed to do.

That's what the regulators are supposed to do.

That's what Moody's is supposed to do.

You're telling me that a bank that had an A rating from Moody's the week before and had an FDIC seal of approval, that somehow they got it wrong, and the feds got it wrong,

but the customer is supposed to get it right?

I mean, come on, that's ridiculous.

In related news, Chamath, I would like an airbag in my car to protect my family, but I don't want to evaluate the airbag technology and unpack it and make sure that it's got the right seal to purchase in it.

Right.

Let me finish the point.

It's about consumer protection here.

I don't care who the depositor is.

If the banking system is going down because the feds haven't done their job, I mean, Powell, two days before the bank failures, was testifying that he didn't see stress in the banking system, so either he was lying or asleep at the wheel.

Sleep at the wheel, like a scenario.

Like I said, the feds had given the seal of approval to SVB and all these other banks.

They had all passed the regulatory exams.

To now put it on the depositor when the feds screws up and the regulators screw up and Washington screws up by printing all this money and creating this inflation that we've had.

Again, out of all the six parties that you could blame, I just think it's the least culpable.

Chamath, should there be a service that provides no interest, but is just a custodian of money that is absolutely protected?

Where is the bank vault product in the world?

Does it exist?

Because I can't seem to find it.

Some people seem to say, I think, Freberg, you alluded to this maybe in the group chat, if you have a brokerage account, that's kind of similar to what I'm saying, but it doesn't have it.

I don't want any interest.

I don't need any interest for putting this money in the bank for a startup.

They're not in the business of making 1% to 5% and optimizing for that.

I have founders who are now sending me five-page memos.

If the bank can't use your money, they're going to charge you.

So remember.

I want to be charged.

That's the service I want.

But I think this is an important point.

A bank is a service provider.

They spend a lot of money building technology, having people that work there, providing service and infrastructure.

So for the services that they're offering, if you're not going to let them use your money to make investments with your money, and they can participate on that gain.

They have to charge you.

They charge you.

And I think that's really worth it.

I want that.

But Freberg, Freberg, you're not a service provider under the current laws.

You understand how it works now is that what we're being told is that when you went to the bank thinking you were just getting a service provider, and frankly, largely a commodity service provider.

You're getting a fund manager.

You're getting a fund manager.

Yes

And you're being told that you actually made a risky investment decision.

Think about that.

When you opened a checking account, you weren't just trying to, you know, again, use a vendor.

You were actually making a risky investment decision.

That's what they're trying to say.

And you deserve to lose your money if you chose poorly, even though nobody else could figure it out.

None of the experts could figure it out.

You should talk about the challenges of your system to someone who lives in Argentina.

It's far worse in other parts of the world.

And we've come a long way in the last 100 years.

We talked about 500 or 600 bank failures on average per year in the 1920s.

So I'm not saying that, hey, that's not the case, but there's always been to some degree risk when people are giving their capital over to someone else.

And we've certainly made huge strides in progress.

But I think, Jake, out to your point, you know, there is a point of privilege now that people are saying, I want to have a position where I know that my money's not going to get used, not going to get moved, going to be completely safe in a democracy.

And what would you pay for that?

What's the price free berg?

What would you pay for that?

Now we're basically giving every crypto entrepreneur and zealot, you know, basically the high ground because they could make this product.

I would pay 10 basis points, literally \$10,000 a year per million.

Is that right?

Yeah.

Remember when you thought Jeff Bezos was going to be president?

I still think it's a distinct possibility.

Anyway, what would you pay for this product, Chamath or like Bloomberg or Bezos?

I don't want to speculate on new products.

It's kind of a dumb tangent.

I think the thing that you're bringing up though is dumb tangent.

Why doesn't a product like this exist?

And I think that it was very well explained.

It's that every for-profit business is in the business of making money and there are physical costs that you have to bear.

In the case of a bank, there is physical infrastructure, literally bricks and mortar that go into making the branches.

There are lots of people.

There is lots of software.

There's lots of complex back office and middle office things that banks have to do in order to accept money that has a cost.

So I don't see how it will be very easy for somebody to create a bank that just stores your money for you without you being charged quite a lot of money, unfortunately.

I think that there has to be a different way to solve this problem.

And I think that what we did after the great financial crisis was the regulators wrote down all kinds of new rules.

But the crazy thing in 2008 were those rules were written on paper.

And now we're in 2023 and these rules can be written in software.

And so I think what it requires is some amount of tactical real-time intelligence that regulators need to have over those that they regulate.

And I don't know why we're so afraid of demanding that the next time some of these complicated real-time laws are written in law that they also need to get written in code.

And I think that that's a practical solution.

It should be the case that every bank that's supervised by the Fed has a dashboard that has all of the key levers that allows what you said, Jason, to happen, which is a real-time mark to market.

Should those or should they not be disclosed to shareholders?

That's a different discussion.

What the regulators should have 100% transparency into how these organizations run, because as SAC said, they are an enormously critical institution that at best case after this fiasco, what we've realized is very poorly misunderstood by consumers.

And that at the worst case is being mis-marketed to us.

And I think that that shouldn't be allowed.

We're also missing the other side of the balance sheet.

We haven't talked about it at all.

But banks play a really critical and important role as lenders.

Banks act as the channel for lending capital to small businesses, for lending capital to individuals to buy homes.

It's the primary place where capital is provided to help fuel economic growth and prosperity, particularly in the United States, where we have such a liquid, fluid, and available mortgage market to support home buying in America.

And the absence of, Jason, what you're talking about, having the ability to use deposits to make loans and have what banks have fundamentally been in this country for over 100 years, which

is taking short-term deposits to make long-term loans and making sure that there's some degree

of balance and availability of liquidity to support transactions.

And ultimately, mortgage securities came out of the need to generate more liquidity by banks to support depositors.

And obviously, there was all these inflationary things that happened in that market and bubbles that happened.

But it's an important role that banks play, and the lending aspect of banks, if it gets stifled too much because we swing too far the other way, it can actually have a really adverse effect on economic growth and prosperity and the ability for people to afford homes in this country.

So that's the other side of the coin and where things can go bad.

So this is where I find the current banking model to be sort of weird and maybe obsolete and definitely not what consumers expect.

So for example, if you go to a bank and you put your money in a deposit account and then they loan it out to make mortgages, do you realize that you're an investor in those mortgages as the depositor?

I don't think you do.

No, because what they do is they take those mortgages stocks, they package them up, they sell them, and they get an origination fee and they get the money back.

Not always.

They're not always.

But maybe they should be.

Maybe they should have to.

B of A Wells Fargo do not.

Exactly.

So B of A Wells Fargo, for example, they do a lot of that.

But if you look at First Republic, they have a \$90 billion loan portfolio on their balance sheet that they've not packaged up and sold.

So the packaging and selling of mortgages generated the liquidity that the banks needed, but there's a cost to that.

So a lot of banks will try and balance out their loan portfolio where they'll package some of it up and sell it.

But when they do that, they take a loss or they pay a fee.

Maybe they should be required to do that because that might be because I mean, look, to the point about mark to market assets, it's very hard to mark an asset to market unless it's liquid and publicly traded.

Let me give you an economic point.

I think that there's about \$7 trillion in deposits in banks.

So what you guys are saying happened, you're basically sucking \$7 trillion out of the system that's being used to fuel purchasing in the form of loans.

And you're taking that set or call it a 10% discount to that.

So about call it \$6 trillion.

And you're saying, we got to go find a market for \$6 trillion of loans.

And then we're going to have \$6 trillion of cash sitting in a bank account doing nothing.

And that challenge is the way that cash will go into money market funds.

So in other words, like you'd package up all those mortgage bonds, you create a mortgage bond security.

And then if consumers, if depositors want that product, they'll just buy it, they'll just buy it.

But what is a money market?

What is a money market?

It ends up being the same thing where money is, you earn interest on cash that's being used to make investments elsewhere.

So ultimately, if you want to earn interest on your cash, it has to be loaned out somewhere to someone.

I understand.

But what I'm saying is, look, I'm just brainstorming here.

I don't, you know, I don't have the, I don't have the answer.

Spitballing.

Yes, exactly.

I'm not saying this is what should be done.

I'm just asking whether it might make more sense.

What if on the depositor's side, all of the things you put your money in are money market funds?

And then when the bank goes out and does its lending business, it does ultimately at some point have to package those up and they get turned into securities, you know?

But money market funds, you know where that cash goes?

So when you invest in a money market fund, you're giving that money to someone who's using it to make a loan.

Like it is also.

I understand.

But then the deposit would never be a risk.

But it would be marked to market as sex's point.

The deposit would never be a risk, it would never be a risk of bank failure.

I just want to give.

You're shifting the risk equation to the fund manager or the money market instead of the manager or the bank.

And at the end of the day, that money has to be loaned out by someone.

Just the owner of that security, that money market fund.

That would take the hit.

Okay.

Just as we wrap here because I want to talk on some other issues as well, there's two things that are super tangible that founders can do right now or people who want to mitigate against these kind of issues.

There's something called ICS, insured cash sweeps.

These are accounts that automatically, you know, will put your money into multiple FDI insured institutions, 250K at a time.

We talked about this previously.

There's a bunch of folks doing that in fintech.

I won't give any of them free plugs here, but you can just go look and search for ICS.

There is also maybe some thought here that the FDIC, 250K limit, maybe that's outdated certainly for businesses it is, so maybe that should double or triple.

And obviously that cost would be spread out.

And then finally, you can go to treasurydirect.gov right now and buy short-term government debt.

And I literally have startups doing this who have major treasuries.

They're going there and buying short-duration stuff themselves, holding it themselves so they don't have to worry.

This is provided by the government is my understanding and people are buying direct from the government.

I personally am not a fan of startups buying T-bills because of the duration mismatch problem.

They always underestimate when they're going to need their cash, and so I don't like tying up cash.

This is if you had a giant treasury, but this is for giant treasuries and a small point.

I see this all the time, whenever they try to, let me just say, when startups try to create laddered bond portfolios, they end up needing the money sooner than they thought.

What I'd much rather see startups do is buy 100% UST bill backed money market fund run by the absolute biggest of the big financial institutions because you can get in and out of it at any time you want and without paying a fee.

And that's so much better than trying to manage your own bond portfolio.

Let a professional fund manager do it.

Well, there are people who do provide these kind of bond ladders.

I'm just telling you what the best practice advice going around is.

Why don't you just buy a ticker symbol through like a brokerage account? Sure.

It's one of the ones, right?

But now this is, I think, speaks to Chimoth.

The fact that we have startup founders and people having to measure, manage a treasury, this granularly, is this a failure or is this what should be happening?

Should we have to have treasuries in the \$10 million or \$20 million range be this granularly managed or should this just be FDIC rates, you know, should be just a 10X?

Well, in the absence of regulatory changes that protect this money, you need to have a financially sophisticated actor on the board.

And again, I go back to that should be your venture capitalist.

And that person should not have conflicts of interest with the banks that they direct you to.

I mean, I don't think that that's a very controversial statement.

Yeah, it's just not happening.

And I am just flabbergasted that people are not even doing the basic blocking and tackling here of having three or four accounts.

I've always had three or four banking relationships, always had it split up.

Should we move on to some of the other pressing issues there?

Was a really interesting Founders Fund story about them breaking their latest funded half and then there is Stripe closing their funding.

Which one would you gentlemen like to go to or a different story on the docket?

I think there are four things that are very interrelated in startup land.

So Founders Fund took there just to make the math simple because I'm going to get the numbers not exactly right.

But like a two billion dollar fund that they're going to break into two one billion dollar funds

I think that's one story.

It's a 1.8 billion dollar fund.

They're going to break it into two 900 million dollar funds.

It's their eighth fund.

It's being cut in half and it'll become eight and nine.

I think what that speaks to is valuations and the marks that we think we have for existing companies and the future value that smart investors like the C all roads lead to it's is we're in for a slog.

And so trying to put a two billion dollar fund to work doesn't seem to make a lot of economic sense to some of the smartest people in the room.

So that's that's that.

The second thing is according to Axios Peter Teal led this charge and he is the contrarian's contrarian.

He was the one according to Axios that led that cut of the fund size with Summit Founders Fund according to the reports opposing him.

I'll say the more important thing which in Peter and I are the same.

We're the largest LPs in our funds.

And so, you know, as the largest LPs in our funds, I think this is a no brainer decision.

Number two, Stripe basically takes a 50 percent haircut, which is the single best run most highly valued company in Silicon Valley.

Again, that's going to eviscerate the company.

Yeah.

A lot of TV PI and a lot of people's portfolios, a lot of theoretical money that LPs were going to get.

I think the third thing is there is a person that went and filed a FOIA request that you see Berkeley to get Sequoia's returns.

And it turns out that the best investor in the game, quote unquote, since 2018 has not really done that well.

And I think in the University of California invested over \$800 million in Sequoia since 2018 and I think has returned, what, some 40 million bucks on that number?

And then the fourth which just came out today is that Tiger wrote down the value of their private book by 33 percent for 2022.

And so, you know, I think Tiger's AUM basically has gone from 100 billion to 50 billion in

a year.

There's one more note to add to that.

YC basically let go of their growth team this week.

Y Combinator for people didn't know what was called the Continuity Fund.

They were doing late stage investing and that got cut, which is a signal and the 17 employees are gone now.

And Gary Tan, I think, is making the right decision.

You know, they have to focus on what they're great at, which is the earliest stage of the company and they had conflicts with this one.

Look, this is the most interesting thing for me in the following way.

I think the Y Combinator unicorn hit rate is 6 percent, right?

So every hundred companies that come out of YC, which costs only about \$10 million to seed, right?

Six of them become worth a billion dollars or more.

And obviously some become worth much, much more.

And so if you see how difficult it is, even for a growth fund that's attached to that

funnel to be successful and make money, because obviously if this thing was toning cash, you would not have cut it.

I don't think anybody would do that.

So I think it was a very challenging strategy at a challenging moment in time.

And so I applaud these guys for having the discipline to do it.

But if you take them all in totality, it is a complicated place in venture capital and startup land.

Holy mackerel.

Like it's a reset.

A, it's tough to make money.

B, a lot of folks may not know exactly what they're doing.

C, a bunch of valuations are totally wrong.

And D, we're going to have to start doing the cleanup work now of resetting all of it, which just takes years, as you guys remember in 2000.

It took us, it took us five years to fix this.

Yeah, it's a hard reset.

Saks, what do you, when you look at these in totality, what would you say?

Well, I agree with what Chamath just said.

I mean, it is going to be a hard period with a lot of resets, a lot of restructuring, a lot of cap tables, there's a lot of mess to clean up.

All of that being said, I think I'd rather be an investor today than an investor two

years ago or one year ago, because at least the valuations have corrected to some degree.

And then also, we have this really interesting AI wave happening now, and there's a lot of opportunities to invest in that new cycle.

So at least there's an interesting product cycle.

It's getting me excited to go to work and see these new demos from all these different companies, whereas you go back a year or two, and just the product innovation doesn't seem

as world-changing as it does now.

So I think that as bad as things are, my guess is that the new vintages of VC are going to be better than, you know, call it 2021 for sure.

That's not going to be a high bar.

It's not a high bar, but still.

Well, that's the thing, but actually, Chamath, this is the contradiction.

Trash.

Trash.

This is the contradiction, is that it felt better to be a VC in 2021, but in hindsight we know that the vintage is going to be not good, whereas today, hold on, but today it feels not great to be a VC, but I think the vintage is going to be a lot better.

But anybody would tell you that at some point you're going to have to divorce yourself from emotion to be a reasonably good investor over long periods of time.

How many data points do we need to realize that too many people were put into this game that may not have known what they were doing?

And we're going to have to go and work through all of those excesses.

And I think it's just going to take a lot of time.

US limited partners are in a really difficult spot.

European investors, I think, are probably in a pretty difficult spot.

There are a couple of bright points around the world, the folks that are still optimistic and doing well.

I think Middle East is one, Southeast Asia is another.

But other than those, it's just a whole group of folks that just have to get completely re-underwritten from first principles, even when you have an incredible platform like Sequoia, five years of no returns on \$800 billion for somebody like UC Berkeley.

What it really means without commenting on Sequoia's performance is that UC Berkeley is effectively out of business in being a limited partner for the foreseeable future. And I think that that has implications.

So even if you think these vintages are great, I don't think they're open for business. And frankly, even if they want it to be open for business, how do you go to an IC when they look at all of the totality of those dollars that have not made anything? How do you justify the next \$800 billion?

I just think it's very hard.

While I agree that LPs are out of it, I think the story was garbage because all funds go through a J-curve and they're literally talking about the majority of the funds in that vintage 2008, 2019, 2020, 2021.

They're all in literally the definition of the J-curve, the third, fourth, fifth year.

One of the most important things you need to be able to do is measure how long does it take the Delta T to 90% of calling committed capital?

And how long does it take the Delta T to return 1x DPI?

I can tell you, Jason, if you're a reasonably good fund, those numbers should be between five and seven years for both, which none of those funds have hit.

The average for a normal venture fund is around five to seven years to call 90% of the capital

and around five to seven years to return 1x DPI.

I'm just telling you, that's what the average is.

And if you talk to firms, so all I'm saying is there was a period of time where in the absence of getting money back, again, this is not a Sequoia thing.

It just means that there was an entire cohort and years of capital allocation that is not necessarily in a J-curve, it's impaired.

Because if after five years you've returned nothing, sometimes you just have to see the writing on the wall.

Sax, explain the J-curve one more time for folks and then what is your analysis of that Sequoia story?

Well, the J-curve, the theory behind it is that when you start deploying a new fund, you're drawing fees down to pay for the firm and the investments you've made have not been marked up yet.

So the value of the fund is actually going down because some of it's getting eaten up in fees and you haven't really had a chance for any of those investments to be successful. And shut-downs happen early.

Right.

I don't even know about that.

I just think they haven't had a chance to get marked up.

But then what happens is you start getting markups and now, at least on paper, the value of the fund goes up and then, hopefully, those markups eventually turn into distributions or DPI like Jamath is talking about.

Yeah, we have a vintage 2017-2018 fund that's actually fully returned at this point.

You exited some secondaries or acquisitions?

No, we just had some exits.

But look, I think that is a little bit on the early slash lucky side.

But we haven't really seen much of the J because you should be getting markups within two years, I think, on your investments if the companies are looking good, at least historically, that was the case.

Freeberg, any thoughts on this collection of stories with venture basically having the great venture reset?

The end of the supercycle, the beginning of the next?

It's happening.

Okay, we're in the thick of it.

But by the way, I would just go back to the point that with all the problems Jamath is talking about, the reset and the wipeout that needs to occur, I think this is still, I think that's part of what makes this a better time to be an investor.

This is what I'll say about that, Sax.

I think I agree with you.

I disconnect asset values and asset prices from fundamental business value being created. So the market bid stuff up, prices went up.

That doesn't really mean that businesses aren't fundamentally good, that there aren't amazing technology businesses being built today that are going to affect billions of lives tomorrow.

If you are tracking a public company stock and you like the business, you spend time with management, you see what they're building, you see their revenues growing, their profits are growing, they're making great products, people are happy with what they're doing, but the stock's really expensive.

You don't want to buy the stock.

Suddenly the stock drops by 80%.

Nothing about the business has changed.

It's just that the market is paying less to own shares in that company.

That's a great time to buy that stock.

I think that's the moment we're in in Silicon Valley.

Everyone's like, oh my God, it's over, things are terrible.

Just because the asset prices of the shares in companies has gone down does not mean that the quality of the businesses has changed or that there isn't fundamental value being created in Silicon Valley.

In fact, the contrary point to Sax's comment is that it is a great time to be buying these shares and it is a great time to be investing and it is a great time because as we've talked about countless times, there are extraordinary technologies from AI to biotech becoming software to fusion to novel applications with AI and SaaS and on and on and on. Many of the amazing things we've talked about that I think can and will affect many industries and billions of lives are being built today and they're not going to stop being built and you can now buy the stock at 80% off.

If you're investing today and if you're a builder today, as long as the capital keeps flowing to support the building work, which I think to some degree it will because there's still enough of it sitting there, you're not going to have a lot of these crazy growthy rounds with high prices and all the nonsense that went on the last couple years, but there's certainly a lot of opportunity to greet real business value and right now an opportunity to buy shares is pretty cheap and participate meaningfully in that value creation. I'll tell you the thing I'm seeing on the field and playing the game on the field is something we've been talking about for the last year.

We started a program called founder.university and it's basically like a 12-week course on like how to build your MVP.

We had 350 people join the last one.

What's the discount code people can use to?

There's no discount code.

It's free for founders basically.

It's free for founders if they come to the 12 weeks.

But anyway, what I did was I said, no, it's founder.university because it's an extension.

In the words of SaaS, let me finish.

Please let me finish.

What we did was we just said anybody who gets to an MVP and it's two or three builder co-founders will give them a 25K check.

And I did 20 or 30 of these 25K checks in the last couple of months of just the founders right now who have been laid off by other companies.

They're dogged, pragmatic, absolutely customer-centric, product-centric founders, whereas the last five years have been filled with theatrics and white papers and ICOs and just nonsense and absurd valuations and people wanting credit for work not done.

And now people are actually building MVPs and they're dogged, product-driven founders, customer-centric, mission-driven founders and it feels to me like 2010 all over again.

That first part is so well said.

People wanted all this credit for work not done and for progress not achieved.

That game is over.

Finished.

Finished.

Which means if you are a product-led CEO and you're a mission-driven CEO who actually built something, you stand out so much in this ecosystem and have people begging for money, sending me long emails and decks and total addressable market.

I'm just like, can you just build a product and show me that you can actually deliver a product and then we'll start the process of the rewards-based system here.

The reward-based system in Silicon Valley is so magical when it works.

You get money from Founder University or Techstars or Y Combinator, then go to a seed fund, then go to a series A fund.

That milestone-based funding was so broken and now it's back and it's so functional when it's working.

It's just the magic of Silicon Valley is when people work and get rewards.

Work and get rewards and it just creates this great pace and dynamic that I'm glad to see.

Just as we wrap here, everybody's been begging for a science corner.

Enough about the chaos in the world.

Everybody wants the sultan of science to tell us and educate us about something and Saks needs to use the lu anyway, so let's do a science corner here.

Room temperature superconductors, you sent me a link.

I read the abstract of this paper and I don't know which language I need to put this into Google Translate, but I couldn't understand any of it, so I literally read the abstract and I was like, I couldn't get through the first two sentences without having to start doing searches.

It was just like the simple explainer on superconductors.

Materials that conduct electricity are called conductors.

Conductors electrons move through them like a copper wire.

That's how electricity flows and all conductors have some amount of resistance, meaning not all the electrons kind of flow through at a perfect rate.

They bump into the atoms in the material in the wire and they generate heat.

You've ever felt a wire while electricity is flowing through it, it gets hot, right?

So that's because the conductor has some resistance, which means the electrons bump into the walls of the atoms in the material.

They generate heat and you lose electricity, you lose energy, you lose power.

And so in 1911, it was discovered when mercury was reduced to a very, very cold temperature that there was a point at which the material conducted electricity with absolutely no resistance.

So the electrons flowed through the material, completely unbounding, you know, not bouncing into the material, not generating any heat.

And having no resistance means you're losing no power in transmission of that electricity. But a number of other super interesting effects occur.

Number one is that magnetic fields now reflect off of that metal perfectly.

So if you put a magnet, you ever seen that image of a, Nick, we could probably pull one up in the YouTube video, we put a magnet on top of a superconductor, it actually floats because the magnetic field like the north and the north pushes against each other and it floats up.

So superconducting materials kind of became this fascination in the early 20th century that oh my God, if we can actually make materials that superconduct, there are all these amazing benefits.

One of the benefits is you could have no loss in electricity being transmitted.

Today, 15% of power is lost in the transmission from the power station to your home.

You could also do interesting things like create magley or frictionless trains that

float, you know, like magnets floating off the ground on top of a superconducting track.

And by having no friction, you could push the train once and you wouldn't need to use any energy to move it along.

So you could have basically powerless transportation.

You could have really powerful new microprocessors.

So a superconductor microprocessor instead of a traditional semiconductor microprocessor would use just 1% of the energy of a semiconductor microprocessor.

Think about that.

All the AI stuff we're talking about, all the chips that we're talking about, dropping the energy needs by 99% if those chips were made from a superconducting material. And one of the more interesting applications of superconducting materials could be infinite battery storage.

So you could take a superconductor, turn it into a coil and the electricity would just flow through it infinitely because it would never turn into heat.

And then when you're ready for that power, you just plug in and you get the power out.

The actual loss of energy in a superconductor battery is less than 5%.

And that's compared with significantly more energy loss used in chemical systems.

And you wouldn't need to kind of get all the materials that we're struggling to get now to generate batteries.

So the idea of generating superconductors in industrial scale has always been super interesting.

Today, the way that we generate superconducting materials is we have to make a material supersuper

cold.

In 1987, a physicist named Chu developed one of the first ceramic superconductors where they discovered a new way of generating superconductivity.

It wasn't just taking a metal and cooling it down very, very cold because when you get it very, very cold, the atoms stop moving and the electrons inside pair up and it's

called Cooper pairing and they flow through.

And he said, we could actually do this with a hotter temperature.

And he demonstrated this in a ceramic, yttrium, barium, copper oxide, super confusing name.

But basically he took a bunch of materials and baked them in an oven and they turned into this really interesting material that became superconducting.

And then the race was on because what he did is he made a superconductor that could superconduct at the temperature of liquid nitrogen and liquid nitrogen is really cheap.

So we can just use and that's actually how all MRI machines run today is you have superconductors that reflect the magnetic fields in the MRI machine and they're using liquid nitrogen to stay cool.

And so there's a lot of industrial applications today that use superconducting materials using liquid nitrogen.

But in order for us to do all the stuff I mentioned like maglev trains and infinite battery storage and superconducting microprocessors, we have to get superconductors.

We have to discover a material that can superconduct at room temperature so that we can sit with it in a computer on our desktop or we can have it run on a railroad track or we can put it in our backyard to store energy.

And there's been this race and there's all these different classes of materials that physicists and material scientists have spent decades trying to figure out what can superconduct at room temperature.

We started with metals, you know, copper and we tried carbon nanotubes and fullerane tubes.

We had all these different ceramics like I talked about and there have been literally tens of thousands of ceramics that people bake in ovens and try and see how superconducting they are.

Basically you take the material and you cool the temperature and you measure the resistance and as soon as it hits superconductivity, boom, there's this magic moment where it drops to zero and it becomes superconducting and there's this big changeover effect.

So everyone's trying to find that temperature which it can happen at room temperature. And people have found superconductivity on the surface of DNA and organic molecules, but you can't scale that.

People have found, you know, superconductivity on all these weird kind of material on the surface of things, but no one's ever been able to industrialize it.

In 2015 there was a new kind of material called a hydride, which is basically taking a thin metal and putting it in hydrogen gas and kind of baking it for a couple of days and the hydrogen sticks to the metal and then you would use this hydride as a new kind of conductor. And hydrides, it turned out, had really good superconducting potential.

They would superconduct at room temperature, but they needed super high pressure, so you'd actually have to leave them in like something that's like hundreds of times the pressure of the atmosphere.

And so that's not really technically and industrially feasible either.

So this guy named Ranga Diaz published a paper a couple of weeks ago that got a ton of press. And a ton of controversy.

And basically he said, look, I've got this new hydride and it's, I've got this really, you know, weird metal that no one ever talks about and I faked it with this, with hydrogen gas and this hydride can actually superconduct at, you know, room temperature and at only one giga Pascal, which is still greater pressure than room temperature, but it basically starts to show on the chart of are we getting there?

Can we actually get there?

That maybe we are.

And so this paper was published in nature a couple of weeks ago and it got a ton of coverage because everyone's like, oh my gosh, the problem is this particular individual, you know, the lead research of Ranga Diaz on the paper, he's pretty controversial because he made a room temperature superconducting claim back in 2020 in a paper he published in nature. And after he made that claim, a lot of scientists tried to replicate what he did and they were not able to.

And then the journal retracted his paper and he had a method that he took data noise out of the measurement system he was using and the way that he took the data noise out, people said actually skewed the results and made it look like it was superconducting when maybe it wasn't.

And he actually had a talk that he did that was published on YouTube a year later where he said he raised \$20 million from Sam Altman and Daniel Lek and a bunch of other investors. And it turns out that also wasn't true.

And then he came back and said, well, I didn't actually raise the money.

I was talking with them about raising the money.

So this guy's kind of a sketchy character in the space, but the temperature at which he was able to generate or claims to have generated and he did get peer review and did get published, a superconductor is at room temperature.

It's at slightly high pressure.

But if it's real and it does get repeated, it's one of the next steps that we're almost going to be getting to this point of true room temperature superconducting materials. And then this whole industry will blow up transmission lines, battery storage, maglev trains, superconducting microprocessors, you know, many new industries can and will emerge from this material discovery if it's proven to be real.

So you know, it's a super interesting storyline.

A lot of people in the material science world and scientists, chemists, physicists are kind of going crazy about this.

And there was a survey done by Quanta Magazine and half the scientists were like, this is bullshit, and the other half was like, this is going to change the world.

So we don't really know yet where this is all going to settle out, but I thought it was worth kind of talking about and bringing it up.

Because if room temperature superconductivity is really realized in the next decade, it's another one of these kind of black swan technology discoveries that none of us are thinking about right now, but it totally transforms all these markets and very quickly kind of increases like we were talking about earlier, productivity makes renewable energy super, super cheap, it's computing power, 99% less power intensive AI chips will explode using this technology.

So a lot of super interesting applications if room temperature superconductivity comes to light, super interesting story.

I thought we should share it and talk about it.

Yeah.

Shamath, I would love to get your insights on it.

And then Saks, I would like to understand how many emails and what you order from UberEats during that segment.

Go ahead, Shamath.

Venkat Viswanathan, who runs a battery group at Carnegie Mellon, introduced me to Ranga two years ago.

And me and my partner, Jay, we were like, holy shit, this is outrageous.

And we tried to spin it out into a natural company, but the University of Rochester blocked it.

And so we've been following this guy for two years and all the trials and tribulations, but it's a really, really exciting thing if it does come to pass.

You've got capital blocked.

Explain why you would get capital blocked in a situation like that.

Why wouldn't they allow you to spin it out?

It is interesting because typically universities have a tech transfer office and you can do these deals pretty cleanly.

So when you go to Stanford, the tech transfer office is quite sophisticated at MIT.

It's quite sophisticated.

There are these pretty standardized deals and royalty percentages.

What is the standard deal?

Explain to the audience how a tech transfer deal would work and how does the university make money from it?

If you're a prof and you invent something or even if you're a student, it's technically owned by the school.

And so if you want to commercialize it, you go to them and you basically say, here's a capital partner of mine and we want to go and start a company around it.

And what they will normally say is, okay, great, give us a piece of equity and give us some royalty in some cases, depending on what it is, especially.

The equity tends to be in the mid-single-digit percentages.

The royalties tend to be in the mid-single-digit percentages.

It depends on how.

Okay.

Yeah, call it five, five, six, seven percent.

But it can be a lot when you think about a school like Stanford who's spinning out hundreds of these things a year.

But if you're a school that doesn't historically do a lot of tech transfer or has a lot of cutting-edge R&D, you wouldn't have that team.

And so Rochester didn't necessarily have it.

Now, look, Runga's probably getting bombarded by 30 other people who'll pay 10 times more

than what I was trying to pay 18 months ago.

It's a really interesting thing.

And I think there'll be some.

What's the greatest...

Does anybody know what the top tech transfers of all time were?

Like, was Google a tech transfer or Freiburg, do you know?

Yeah.

Yeah.

Like, was out of the, what did Stanford make?

Stanford make.

No.

Yeah.

Larry and Sergey gave Stanford, I think, one percent.

But they didn't give Stanford.

Yeah, they gave them a percent.

Yeah.

Stanford's really good about that, though.

Stanford's really good.

Yeah, Stanford's really good.

Because Backrub was written while Larry was a PhD there.

So technically, they, you know, they had some part of it.

Carnegie Mellon ranked as top tech transfer university, I'm just seeing here in terms of the rankings, University of Florida, Columbia, Stanford, Harvard.

Does anybody know?

It varies so much.

Some of them are terrible.

And some of them are cronyism.

So like, you go to some of the universities and the tech transfer offices have deep relationships with certain VCs and investors that they'll only work with.

Oh.

And they always get first picks and first dibs and they're super tight with them.

They don't run a real market process.

And then some tech transfer offices just give away the farm for nothing.

And then some tech transfer offices think that they own it and they should get paid 60 percent royalties for the thing.

It's all over the map.

And some of them are sophisticated and some of them are not.

So it's actually quite surprising, J. Cal, how different all the universities are in

terms of their level of sophistication and the types of deals they'll do.

But I will say this work in superconducting research, it's another good example going up to, going back to the point a couple episodes ago about the importance of fundamental research and the importance of, you know, the support from academic institutions and governments and other aspects.

And you're still not sure what the technology is that to do that fundamental discovery work, I think is a good collective social benefit.

And then to industrialize it and commercialize it requires, I think, a market-based approach, which is you take that capability, you try and build a business, find customers, make money.

And that's really how you get it to be funded, to be scaled, because you're never going to, you shouldn't have to put, you know, government and academic money behind that sort of effort. But private market participants should.

And so, you know, it's interesting, I mean, I think, I'm not holding my breath.

I've been, you know, I did a science project in 1993 when I was probably 12 or 13 years old on superconductors.

And I got an yttrium barium copper oxide disc and I got some liquid nitrogen from UCLA and I poured it on the disc and I floated a magnet above it and I had a poster board and a computer presentation back then and I was super enthralled about the future of superconductors and exactly what I said today is what I said back in 1993.

So, you know, 30 years ago, it was so busy dating, I didn't think you had time for superconductor experiments.

Yeah, look, I don't think that this stuff has really, it's been like fusion.

It's always been a promise around the corner, physicists have always had hope, we've taken incremental steps towards it, but it's always felt like one of those things where you're always getting 50% closer to the wall.

It's like, you're never actually reaching the wall.

And so, it's a dream, yeah, by the way, I will say one area that a lot of people think holds a lot of promise for superconducting research is in quantum computing, because you can actually model on a molecular level what might be going on.

Right now, the BCS theory is this theory on cooper pairing that happens in ceramics is the only way that we really understand how superconducting actually works, why it works, why there's no resistance at certain temperatures for certain types of materials.

For most materials, we have no frigging clue why it happens.

We don't understand the physics of it.

There's something going on on a quantum mechanical level that we just don't get. And so, if we could understand it better through quantum modeling using quantum computers, all of a sudden, we may be able to actually start to come up with ideas for molecules and crystal structure that would allow us to make superconducting material that we simply don't have enough time in our lifetime to run all the experiments in a lab today and we can simulate it.

And so, that's why quantum computing could play a real role in advancing our ability to do discovery in superconducting materials.

And like I talked about, these are like not just one, but like two or three order of magnitude improvements in the efficiency of certain systems of industry on Earth today.

So, it shows how the compounding benefits of technology and things you cannot see around the corner can suddenly cause these explosive growth moments in technology and in industry. I don't know when quantum computing gets here.

When it gets here, it might discover superconducting.

And then when that gets discovered, boom, energy costs dropped by 99%, computing goes up by 100 fold.

So, there's these amazing things that are still like in front of us that each one of which could be, you know, really great exponential triggering events.

And we're seeing a little milestone today, but yeah, I don't know.

Sax reaction?

Sounds good.

Sax, how many moves did you play in your 12 chess games with POTL?

Did you read your little score?

Guys, I got stuff to do.

While Treberg was talking about superconducting.

Yeah

How many points did you go up?

All right.

Look, I got shit to do.

Come on.

Let's go.

Oh, Sax.

All right.

Listen.

This has been a great episode.

Hey, Sax, give it.

You have a comment on the Atlantic article that says Ron DeSantis has peaked already.

Don't forget that.

Uh-oh.

Don't do it.

Don't do it.

Don't do it.

Why you got to troll him?

I didn't see that, but it's in the Atlantic.

Oh, you want to know why the Atlantic suddenly has turned on him is because they're the biggest backers of the war.

Those guys have all these like neocons over there.

And so he gave a statement saying that, you know, our support for Ukraine shouldn't be a blank check and some other comments expressing, let's say skepticism of what we're doing over there.

And that was totally unacceptable to them.

So all these neocons are registering disappointment.

But I would argue that's a electoral asset, not a liability.

I have a prediction given what's going on with these banks and what's going on in this

kind of a, I think we all agree, the soft landing concept is over, we're going to be in a recession.

The war is going to end there because we're not funding this.

And the American public is not going to want to see tens of billions of dollars go into Ukraine and to fund this war in year two or three.

Hundreds of billions.

What are you saying?

Every month.

Yeah.

I know the spending run rate of this war is actually greater than what we did in Afghanistan. And Afghanistan ended up being a 20 year multi-trillion dollar operation that just flushed all that money down the drain.

Are you serious?

We're in a greater run rate than Afghanistan?

Yeah.

Do we know what the monthly run rate is for this?

Oh my God.

How is it possible?

And do they pass back?

We've appropriated over 130 billion, Chamath.

And Afghanistan, we spent 2 trillion over 20 years.

So it's 100 billion a year run rate.

Yeah, this is...

Think about what a monumental waste of money that was.

And now look at the financial crisis we're in.

Can you imagine if we could have 2 trillion back?

I mean, all these trillions that we just squandered...

We would take it back instantly.

We would take that back instantly.

Just all those trillions and trillions we squandered on stuff that didn't matter.

And now we're paying the price for it.

That could be education, could be universal healthcare, could be paying down the debt.

How about paying down the debt to remember all this inflation?

Exactly.

Let's think logically here the number one issue for this country in the next election.

And with Friedberg, his great prediction from the year-end show, is we need a president, and we need an administration that is fiscally responsible and controls the balance sheet in a logical fashion, like the last two administrations have not seemed capable of doing. I am with Friedberg, single issue voter, balance the budget, get spending under control.

Austerity measures, hashtag.

All right.

For the Sultan of Science...

Sorry, what's that?

Can you repeat that?

What I wanted to say, Tramot, is are there any plugs for the remaining part of the episode? Mr. Beast is curing blindness and buying people's shoes.

Has he been canceled yet?

Dex, aren't you excited about superconductors and the benefit for AI and energy storage and energy costs and humanity?

Yeah, what does it do to burn rate of assassins?

Yeah, but I'm not like an expert at assessing like hard science or hard tech.

I mean, I'm a software investor.

I'm just a simple man.

I'm just a software investor.

All right, everybody, for the rain man himself, David Sacks, the dictator, Tramot, Polyhapitia, and the Sultan of Science, the Prince of Panic attacks, no more.

Mr. David Friedberg, I'm the world's greatest moderator, undisputed.

Congratulations, everybody, on another successful episode.

And Friedberg, when are we locking in the date for all in Summit 2023?

My replies, my DMs are filled.

People want to know.

Do you have the date?

Have you locked it up?

Soon, soon, soon.

We had a parking issue where they don't want us parking there.

That's fine.

We don't need to park there.

Everybody.

That's what we told.

So now they've gone back to their committee to get approval for us doing it without parking and just doing shuttles or walking.

Shuttles or people.

Uber, Uber, Uber, Uber.

Let's get that in your shot.

Hopefully, if they accept it, then we are okay.

How many shuttles do we have to take to Uranus?

Yeah, exactly.

How am I the Prince of Panic attacks?

I think you're the king of caps locks at this point.

They were calling me Jaycaps.

Jaycaps was the best one I heard.

Talking about panic attacks.

Jay Cal this weekend, man.

Panicking, panicking.

I was a sheer terror, a sheer terror.

I have literally gotten rid of the caps lock.

Everybody relax.

You can follow me at twitter.com.

We'll see you all next time.

Bye-bye.

We'll let your winners ride.

We should all just get a room and just have one big huge orgy because they're all just useless.

It's like this sexual tension that they just need to release somehow.

Let your feet be.

Let your feet be.

We need to get merch.

I'm going all in.