Adam: **00:01:53** Happy Friday, Andy Constan, Damped Spring. Welcome back to Resolve Riffs. How are you doing?

Andy: **00:01:59** Thanks, Adam. I appreciate it.

Adam: **00:02:01** Yeah. It's great to have you here. Too bad there's not much going on in the markets for us to talk about.

Andy: **00:02:06** Yeah, it's been interesting.

Adam: **00:02:09** I guess, before we get started, we should remind everybody that this is not investment advice, this is for educational, informational and potentially entertainment purposes only. If you find anything we say today to be instructive, please run it by your own investment advisor and make sure it's perfectly suitable for your own situation. With that said, Andy, for those who've been hiding under a rock for the last year or so, maybe a super brief introduction so that people understand that you've got lots of credentials and there's a lot of knowledge and expertise behind the things we're going to talk about today?

Backgrounder

Andy: **00:02:44** Sure. Started my career at Solomon Brothers, spent 18 years there in the equity department doing convertible bonds and equity derivatives as well as managing the global equity derivatives business. There I started my own relative value hedge fund, which I did for -- with a few partners from Solomon, which I did for about five years. And then after the financial crisis, I saw the writing on the wall that I needed to understand macro well. And was fortunate enough to join Bridgewater Associates as a senior idea generator where I learned macro from, I think, the smartest minds in the world in macro.

After three, three and a half years, I sort of was burnt out and decided to leave and moved on eventually to Brevin Howard. And at Brevin Howard, I also saw a completely different way of doing macro. Both excellent, just completely different. And at the end of my time there, Alan asked me to open up Damped Spring to service him as a client, but also to offer my services to a wider range of clients. And that's what birthed Damped Spring. Short journey there, I started tweeting about a little over two years ago and had a hundred friends and family who sort of tweeted -- were on my following. And somehow my style, words, message, resonated and it's grown to a 75,000 person following list with just the greatest opportunity to meet people like you and also to interact with them and others to figure out what's going on in the world.

Navigating 2022

Adam: **00:04:31** Yeah. What a remarkable journey, Andy. We're lucky to have you on here to share your views. So, I'd love to -- I think it'd be great to sort of set the stage with how you navigated 2022 because obviously, this was a very challenging year for many and you were very active and public and how you were navigating it, your thinking, your framework on Twitter. And obviously dealt with all of the trolls and nonsense and what have you that accompanies putting yourself out there in that kind of way. But, yeah, how did 2022 go for you? What were you watching? How did you adapt your framework? How did your framework work? What did you learn? I think that's a really good way to kind of set how you think and adapt.

Andy: **00:05:19** Sure. Yeah. And I think that that just -- you roll it back to the big things that are happening in markets that started in March of 2020 with six -- in what turned out to be $6 trillion of quantitative easing and $6 trillion of fiscal stimulus. And from then on, I was essentially bullish assets all the way from '20, you know, near the lows of 2020, all the way to December of 2022. And -- Sorry, 2021. And when I was listening to Chairman Powell talk at the press conference after the December Fed meeting, he mentioned that they were looking at the balance sheet. And that's all he said. He didn't say anything else than that. And what I heard there was QT is on its way. They were still doing QE, they were still -- they hadn't started -- they hadn't even started thinking about raising interest rates. And he mentioned the balance sheet.

And I sent out a tweet that moment saying, this is a game changer. The world has changed assets. It's kryptonite for assets. Wrote a Damped Spring report, which is my flagship product for my hedge fund clients and called the drumbeats of QT and suggested that the highs in -- the high for the S&P would be in January and bonds and stocks would both sell off together aggressively and that was on December 29th. As we know, the world sort of became aware of that quantitative tightening idea in the minutes on January 3rd. And from then on, it was down. And so I fought it, actually. After a big sell off, I was thinking that this quantitative tightening front running had gone too far. And so I bought assets. I always -- I bought equities and pretty much Twitter only cares about equities. And so that's a public buy. And it didn't work out at all.

And, thankfully, I was short bonds, trade currencies and gold and other things. And so this kryptonite was really the whole theme of three quarters of 2022. But for a variety of reasons we had some fair amount of opportunity. Market aggressively rallied in March, once again, made substantial lows in June, only to rally very hard for the entire month of July and August, and then get hammered by Jay Powell at Jackson Hole. Again, a massive dip into September and then a rally to December. And then since then it's been mostly sideways. And the way I navigate that is by tracking those floats.

Normally, the Fed changing interest rates, the Treasury issuing bonds, spending its money, running a deficit of, matter to markets. But what really typically matters is growth and inflation. And so that's sort of table stakes in the old days to understanding how the market works. But when these flows that I'm describing of fiscal and monetary stimulus and withdrawal of stimulus are the -- are so large, that's pretty much all there is. And to understanding those things is key. And so I was able to navigate fairly well, calling the bottom in June and for my clients and telling them to sell literally the day of the Jackson Hole Conference. And then subsequently, I had a very good luck by calling the bottom on September 30th, which was also due to some very large equity derivatives transactions that was driving markets through that point.

Lately, haven't been that great. Sold all assets on December 1st. And assets really sold off all of December, and now they're all the way back. So, I'm breakeven on that trade. But I'm still short all assets. And so that's where we start January.

Flows

Adam: **00:10:00**

I want to talk about flows because you put out a really interesting chart maybe last week. I forget exactly when it is. I see so many charts flow by, but you put out a great chart that showed that -- because a lot of people have been focusing on sort of defining liquidity as Fed balance sheet, minus Treasury general account, minus reverse repo. There's like a general kind of framework for how to -- or equation for how to define that. And you made a point of illustrating that for most of history, the flows as measured by changes in liquidity conditions, actually didn't give you much in the way of information to allow you to forecast equity prices especially out for weeks, months, quarters, whatever. Right? It just wasn't very useful. Right? So, I think what I'm hearing you say is that the environment right now is -- that's the only thing that matters because the magnitude of those flows is so large relative to what they had been historically. Is that -- So -- …

Andy: **00:11:05**

Fair characterization. I think that's very much right. I would say that that formula is important to understand, because it has three important moving parts, which is the size of the Fed balance sheet, the amount of money in reverse repo, the amount of money that the government -- the Treasury department has to spend. And those are important and necessary items each as their own, and as a group. It's an interesting formula. I don't have any -- I think the formula's good and incomplete. And so --

And the way I look at it is a much more complete idea of each of those things, as well as other things that matter about liquidity. For one, you can have liquidity without the Fed balance sheet, Treasury or the RRP moving at all. You can have changes in liquidity simply because if you go to the bank and say I want to buy -- a regular old commercial bank and say I want to buy treasuries, they can say, sure, here's the money out of thin air, go buy your treasuries and pledge them to us as

collateral. And all of a sudden, a new buyer of duration happens. And the same thing can apply to the S&P 500 or any asset whatsoever. Commercial banks can create money out of thin air.

And so in normal times, when there isn't these governmental flows. That's actually the most important thing. But they're small now. So, anyway, all I'm saying is it's an incomplete thing and it's very focused on what I call cash substitutes. RRP is a money market fund vehicle for them to invest. The Treasury general account gets placed in people's accounts as deposits. When it gets spent down, it doesn't get placed in the S&P 500. And the Fed balance sheet, all they get when it goes down is they get paid their maturities, so they're not doing anything in duration. But what matters to financial assets is the duration that's being bought and sold because that's risk.

Adam: **00:13:26** Okay. I want to dig really deeply into that because I think that's so key, and I think you're one of the few people that I've seen focused on that sort of -- the constitution of where the Treasury is issuing and where the Fed is allowing things to roll off, matters a lot. But before we go there, you mentioned that for -- in normal times, monetary creation or liquidity that's created from commercial banks dominates the liquidity -- the changes in liquidity environment. I'm just wondering, what are some direct ways to measure the changes in liquidity from that channel?

Andy: **00:14:10** Well -- So, I like to think of *willing and able*. Willing is sort of a combination of rates and animal spirits for the banks, which my old boss Chuck Prince at Solomon was famous for saying, we're going to continue to make loans because everybody's on the dance floor and we need to keep dancing. And so that was a good measure of willingness and you can also see that in loan growth.

Adam: **00:14:37** So, like, loan officer survey type readings as well -- …

Andy: **00:14:41** Lots of ways to measure it, that's a reasonable way. There's sentiment and there's data and you know, the actual growth of loans, where those loans are going, to whom and what they're using them for. There's also demand pull, which is people who want to, versus banks. Banks are sort of neutral, but there's a strong demand from customers, and that can be measured. Late -- until recently, there was -- the reason why interest rates were very, very low is no one wanted to borrow. So, when no one wants to borrow, interest rates fall to zero regardless of what the Fed's doing. And that's because animal spirits were so negative. And -- So anyway, that's some of the ways to measure it.

And then there's ability which is a measure of bank health. And so the reason why 2007 and 2008 were so devastating is because no matter -- because if you had animal spirits to buy assets during 2007 or 2008, the banks were unwilling -- unable to lever you because they were de-levering themselves and so they

couldn't lend to you. And so it's a combination of ability and willingness and then measuring that to see how elastic it is, meaning how much price will be impacted based on the willingness and ability. For instance, there was just no supply at all in 2007 and 2008. So, you know, it was high inelasticity, which is when markets move. You're looking for certain situations, violent market moves occur when there's inelastic flows one way or the other.

Adam: **00:16:37** Right. And that typically shows up in the short term lending markets or at the Fed window or there's a variety of different ways that that pressure can be relieved, I guess. Right?

Andy: **00:16:46** Right. Sure. And we saw that, what was it, 2018 in the repo crisis, we saw the Fed had to act to calm the repo market that fall. Now this, ironically, that can't possibly happen this time given their $2 trillion looking to do repo. At the time, no one was willing to do repo. And so that had a big impact on the ability to finance long positions or short positions in various markets.

Adam: **00:17:20** That's very interesting. Richard -- I like some of the work of Richard Werner on the banking side. And I'm reminded that really banks can lend for three reasons. You can lend for asset based lending, you can lend for consumption or you can lend for business expansion. Right? Entrepreneurship. To what extent does the composition of the changes in bank lending books in each of those different categories matter to asset markets?

Andy: **00:17:54** So, my overall framework is at the overall impact than it is at the different sectors. Easy lending conditions in one asset tends to – versus another, tends to result in asset shifts. And so we're talking about credit versus equity finance versus building -- plant and material finance, consumption credit card. As long as conditions are generally easy, that tends to flow across the board and… but you're right. If you, and I don't do this, but if you were to look more directly at what form of lending is occurring, that can help you trade sectors.

Adam: **00:18:46** Right. That makes sense.

Andy: **00:18:47** But it's the same process.

Adam: **00:18:50** Right. Okay. Duration. So, I would -- I really want you to take your time, if you don't mind, and go into how you think about the decisions that the Fed are making as they're facing the Treasury and vice versa, and in terms of the composition of the duration that's either being issued or maturing, and how that impacts different parts of the asset markets.

Andy: **00:19:20** Right. So, I think the best way to look at that is, I think it's the most intuitive way is to start with how QE works. Which is when the Fed buys bonds in the marketplace. And when the Fed buys bonds in the marketplace, that means

somebody in the marketplace had to sell them. And now they have cash. And they don't want cash. The only reason why they sold the bonds to the government is because the government Fed was paying what they perceived to be a rich price so they sold. But now they have cash and they're investors, don't want them in cash, they want them invested. So, those investors are forced to, typically, it's not always the case, but typically, buy a slightly more risky asset.

So, for instance, they sell a 10-year to the government -- to the Fed and then buy a 10-year corporate. Now, of course, the seller of the 10-year corporate now has cash. And so what do they do with that cash? And what they do, particularly if they're a corporation, they use that cash to fund a share repurchase. And so now shares are being bought by the corporation, and the seller has cash, and they want more risk. So, maybe they buy a meme stock. But the meme stock seller now has cash and so maybe they buy random, I'm not going to use the term, random crypto coin.

Adam: **00:20:50** You can say shit coin on this show.

Andy: **00:20:52** Yes, buy shit coin. The seller now has cash. What do they do? I've heard they buy Lambos. That's my old statement. And then Lambos stimulate real consumption. And so when the Fed buys bonds, they eliminate an asset from the market that the market wants, and the markets chase assets because every buy is somebody else's sell, until it ultimately through the wealth effect, somebody finally says, gosh, I'm wealthy. I'm going to buy a Lambo. And that's how it stimulates both inflation, very weakly through this wealth effect idea. But it does bid up not just the 10-year that the government -- that the Fed bought, but every asset gets a little bit bid up. And when you do it in the size that the Fed did, you get asset inflation. And so quantitative tightening is just the opposite.

Adam: **00:21:48** Okay. Can I pause for a second? Because I think -- I just want to distinguish because my sense is that if the Fed had said we're going to buy up all the T bills that is a very different effect on markets than if they say they're going to buy up all the T bonds.

Andy: **00:22:05** Absolutely. And that's where duration comes in and Japan is the inventor of quantitative easing. Until we started doing it in the US, Japan focused on the short end. And they didn't get any of the effect they wanted. They didn't get any inflationary effect, they didn't get any stimulative effect because there's constantly almost an infinite supply of people who are willing to borrow and lend overnight. And so it just doesn't finance stuff. It doesn't push the money to risky assets. And so if the Fed were to buy T bills, they would have printed money and that might have resulted in some currency weakness, but it's unlikely it would have driven asset prices.

And the reason is long-term assets like 10 year notes or 30 year bonds or equities or meme stock or crypto, all have what's called a risk premium. And that's what the Fed is targeting. They're trying not to take 10 year bonds out of the market because they want to set the interest rate. They're trying to take assets out of the market to reduce the return one gets from holding risky assets, so that people will consume. And T bills because they don't change in price very much, depending on the maturity, a tiny, tiny amount, just don't have a lot of exposure to risk premium. And so they don't generate running on into the risk curve.

Rodrigo: **00:23:47** Right. So, they're just swapping -- sorry, Adam. They're just swapping a risk free rate for another semi risk free rate. Right? The money market funds are looking at those banks that can create infinite amount of money at a reasonable rate. That audience isn't looking to go up the risk curve. Or if they are, it's a very small amount because it's…

Andy: **00:24:08** Right. You have to take away risk. I guess the point is you have to take away somebody's risk to make them want more. And if you buy a T bill, you're just not taking anybody's risk away because they didn't have any to begin with.

Rodrigo: **00:24:23** Whereas T bonds have volatility, have a risk premia, so they need to find more of that. Got it.

Andy: **00:24:28** Yep.

Rodrigo: **00:24:29** Okay.

Adam: **00:24:30** So, I wanted to zero in on one thing you said there because I think you said the idea is the Fed wants to compress risk premia because at some point the risk premia will become so low that it will no longer make sense to invest in risk, so you'll instead take that money and us it for consumption.

Andy: **00:24:50** Right.

Adam: **00:24:52** I -- Do we all agree that that effectively had almost no impact, that that was the least efficient channel.

Andy: **00:25:02** So most people would agree with you. I am, at the high level agree, but I want to just say one thing. We don't know because we don't have a -- …

Adam: **00:25:13** Counterfactual. Right.

Andy: **00:25:17** The mechanism of handing -- of bidding up each little bit of assets till you finally get that last guy who wants to consume, is just weak. And so I think it was goods and it -- one thing for sure, it was asset inflationary because it was designed to be.

Adam: **00:25:38** Yes.

Rodrigo: **00:25:39** Including real estate. Right? I think we go into real estate, remodeling to sell your real estate, flip it. The Lambo is kind of the last thing.

Andy: **00:25:50** Right. Anything in which you're trans-- when you sell an asset, you'd side to buy another risky asset, bids that asset up and transfers the risk premium purchased by the Fed to some other asset. The consumption is just very weak. And so I think it's true that -- the higher level thing is, I think the Fed knows it's true. They didn't do QE because they think it's a great thing to do. They did QE because they didn't have anything else to do. Interest rates were zero.

Adam: **00:26:24** Right. Right.

Andy: **00:26:25** If you don't have an option, you try what you have.

Rodrigo: **00:26:30** And their options are interest rate and or liquidity.

Andy: **00:26:34** Well, I mean I think -- …

Rodrigo: **00:26:34** Not -- They didn't have fiscal.

Andy: **00:26:38** So, they don't control fiscal. If you remember -- so I watch all these Fed chairman go up in front of Congress every time. And from 2009 to 2000, I don't know, call it '19, every time they went to the hill, they said, we're doing our part, fiscal needs to do theirs. Fiscal didn't do much in terms of -- certainly didn't do what they did in the last time up at the hill. In that case, you had MMT, massive fiscal, massive monetization. And we're experiencing the result of that in the post opening up environment. But you didn't have that during the time when Adam correctly says, didn't do much. It did something. Just didn't do much.

Adam: **00:27:39** Yeah. But I think that …

Andy: **00:27:41** A lot on assets.

Adam: **00:27:42** A tremendous amount on assets, which I think we can all agree probably did a lot of damage too in many respects. But I think one of the major flaws in that mechanism is that it works in fixed income. It certainly works in rates. It probably works in credit because people that operate in credit and rates have a very strict definition of risk premium and there's a lot of regulatory apparatus too that limits the kind of credits you can invest in, etc. The problem is risk eventually is pushed into risky assets. Right? It's pushed into equities. And the equity owner reaction function is flipped on its head. Right? It's literally stocks go up. The anticipation is the stocks are going to go up even more. Right? The equity owner buys equities because the prices have risen, because the risk premia is lower. Right? And so you've got this flip -- it just -- .

Rodrigo: **00:28:42** Well, there's a belief that there's…

Andy: **00:28:43** Adam, we're going to disagree on that.

Rodrigo: **00:28:46** Well, there's a belief that there's future cash flows.

Andy: **00:28:47** Right. I think momentum is momentum. And every market, currencies, gold, fixed income, operates the same way as equities, which is momentum is a thing. And people who get in early and sell to the last person in, in every market, benefit from the momentum of animal spirits. And I think equity people do the same thing. Listen, I come from equities, but I spent my time at Solomon Brothers, which very well known as a fixed income firm. I've seen it both, and I've seen the macro, and more importantly, I've looked at the assets and how their returns are. And momentum is just as powerful a force in non-equities as it is inequities.

Rodrigo: **00:29:37** Yeah. Well, look -- look at the…

Adam: **00:29:39** … cross-asset momentum. That's one of our concrete things.

Rodrigo: **00:29:41** But from the perspective, I think what you said, Adam, is that it's very clear you get a risk premia. It's the yield that you get on the bond. But then you see German bunds have momentum to a negative 75% print. That's got nothing to do with the risk premia. Right? That's negative risk premia in your face and it's just people bidding up that bond. Right? So -- …

Andy: **00:30:03** I'm not going to go down --

Rodrigo: **00:30:04** Yeah. How do you explain that? It doesn't seem to matter what the risk premia is.

Andy: **00:30:07** I don't want to go down the rabbit hole of Germany, but I would say that the negative rates indicated that there was still extremely tight money in Germany. And that the rates actually needed to be a lot more negative to be stimulative, which is counter intuitive. Just at the high level, a 2% rate can be extremely tight or extremely easy and a 10% rate can be extremely tight or extremely easy. It's just whether borrowing is a good thing or a bad thing relative to what you use the money for.

Adam: **00:30:45** Yeah. And then you got this reflexivity of the signaling mechanism. Like, if rates are so negative, what does that imply about growth? And then should I be making these investments?

Rodrigo: **00:30:54** What's the real rate, maybe. Right?

Andy: **00:30:56** Yeah. Yeah. Absolutely. But as it relates to risk premium, I think the best thing to do when you think about risk premium is, I think equity people pay in front, understand PE. And PE is really the inverse of risk premium in that PEs expand

when risk premiums contract. And so the effect of quantitative easing on equities, risk premium expansion. I'm sorry, multiple expansion.

Adam: **00:31:22** Multiple expansion.

Rodrigo: **00:31:23** Multiple expansion.

Adam: **00:31:23** I mean, you also have this explosion of SPACs and meme stocks. And I mean, eventually, we had release valves everywhere for speculation. But -- Okay. So, let's put that aside. So, let's go back to duration and why duration matters? Yeah.

Andy: **00:31:38** Right. So, now let's talk about QT. And it's not as easy to conceptualize it versus the Lambo thing. But now, what I think is people misunderstand the mechanism, and thankfully to the UK who can make it simple. They sell their bonds to the marketplace in an auction. And it's very clear what that, the BOE is doing. They're selling 10-year notes. And so the same exact thing happens where now somebody who had enough 10 -year notes, the private sector in total, had enough 10-year notes, needs to take on the 10-year notes that the BOE is selling. And so that requires them to get paid for that, and they get paid for that by a concession or an increased risk premium.

Now that increased risk premium, they had to raise the cash somehow to get that 10 year note. They couldn't just, maybe we'll get to whether banks can create it. But if they did, to assume that extra duration risk that they didn't want, they may say their portfolio's too risky and sell equities, their multi-asset portfolio. Now an equity guy is like, *I see equities for sale. I'm going to bid down for that,* but they don't have any money either. So, they have to sell something else, maybe a meme stock. Then the meme guy says, gosh, I don't have money to buy this meme stock. I'm going to have to delay my purchase of a Lambo. And so that's how quantitative tightening works in England where they're actually making at the market sales of their SOMA portfolio. That's not what's happening in the United States.

In the United States, the Fed is doing runoff. And what runoff means is when a bond matures, they don't reinvest the proceeds. And so their balance sheet shrinks over time. But, and this is the subtle thing and why -- it's very confusing, but it really matters. Somebody has to come up with the money to pay the Fed. And that somebody is the US Treasury. And the way the US Treasury gets money, assuming they aren't raising taxes or cutting spending or spending money they've already borrowed, which is what the TGA is, they go out and sell a bond.

Now just -- so, now let's pair that together and just say the Fed and the Treasury are the BOE. Now that entity sells a bond to the market and QT works the exact same way as it does in England.

Adam: **00:34:34** Okay. Hold on. Because I just want to clarify something because I think some people may not quite put all those pieces together. I think the missing piece is, the Fed owns a bond. The Fed either needs to get paid back par on that bond when it matures. Right? Or if the Treasury doesn't pay the Fed back, then the Fed has just printed that money. Right? So, in order -- the Treasury needs to neutralize that asset by paying the Fed back. And now we can move into what you've been saying. Right? The Fed -- the Treasury then needs to issue more debt to pay the back.

Andy: **00:35:16** There is an alternative to the Fed to say, yeah, forget it.

Adam: **00:35:19** Right.

Andy: **00:35:20** Now that's called debt monetization and is not something the Fed has thought much about. There is a discussion about whether the Bank of Japan will one day monetize the debt and just forgive it essentially. But that has major implications, which is … So, they get -- …

Rodrigo: **00:35:39** So, can I -- sorry, I just want to make sure I understand what both of you just said. We're talking about runoff. The Fed owns a treasury. Besides to run it off, meaning it's not going to -- not buy a new one from or just roll it back into their sheets. So, they need to get paid for that and the Treasury needs to pay them back somehow. Right?

Andy: **00:36:01** Yep.

Rodrigo: **00:36:02** And this is where I don't know what's happening right now. Is the Treasury then paying them and they can have cash? When you said, oh, it doesn't matter you can keep it, isn't that the same thing as debt monetization? Like, what am I missing here?

Andy: **00:36:15** Right. So, when the Fed gets paid back.

Rodrigo: **00:36:20** So, the Fed does get paid back by Treasury?

Andy: **00:36:22** By Treasury. Meaning, Treasury just says, here's a check from my checking account to cover the maturity. The Fed, which is independent of that, gets paid just like… by the way, every -- the bonds that the Treasury -- that mature at the Fed, other people own those bonds too. The Fed -- the Treasury doesn't discriminate. They send the check to the holders. The Fed just happens to be one of them. And when the Fed --

Adam: **00:36:50** And that check comes from the TGA.

Andy: **00:36:53** Yes. That's their checking account, essentially, conceptually. It's probably not done with a paper check though.

Adam: **00:36:59** Yep. Yep. Got it.

Rodrigo: **00:37:01** Okay. So, now the Fed balance sheet is shrinking.

Andy: **00:37:04** Right. So…

Rodrigo: **00:37:05** The TGA is shrinking.

Andy: **00:37:06** Well, let's just play that last bit. We wanted to talk about duration. So, let me just close that thought and then we'll get into the plumbing a little bit if you'd like.

Adam: **00:37:15** Yes.

Andy: **00:37:16** The Bank of England sells what they want to sell because they want to have an impact on the markets in a particular way. They want to expand risk premiums and take -- add risk to the market. The Fed has completely ceded the control of where the money is raised, to the Treasury department. And so the Treasury department can choose what duration they want to sell. And so let's say they owe the Fed $60 billion this month, which is what is the runoff. So, that's what they owe every month that they need to fund. Remember we were talking about how little impact on financial assets, bills buying and selling has. If the Treasury decided to issue bills to fund the government paying it back, it's not going to have any impact on the -- on anything, on asset markets, really on the economy.

It'll just get absorbed by the almost infinite liquidity in people who want to borrow and lend short-term. But what if they sold only 30-year bonds, which are the most risky bonds they could possibly sell? Well, damn, that would have a major impact on the risk that the private sector needed to own, and that would have a significant negative impact on asset prices. So, now Janet has the lever. The BOE has the lever. Nobody gave the lever away at the BOE. The Fed decided to give away the lever. And now Janet can actually determine the impact of QT, totally her call.

Adam: **00:39:22** Got it. So, the Treasury pays back -- the Fed's allowing a 10-year bond to run off. The Treasury pays that back along with all the other holders of that bond. And in order to pay that back now it gets revenue from taxes, but notwithstanding that. In order to pay that back it issues a security. Right?

Andy: **00:39:42** Yep.

Adam: **00:39:43** If it chooses to issue a T bill security, has no impact on asset markets. If it chooses to issue a T bond, could have quite a negative impact on asset markets. Right? So, in effect, Janet Yellen has, you know, control of the puppet strings on what happens to risk markets in the intermediate term.

Andy: **00:40:10** The impact of QT. She owns that. It's her ball.

Rodrigo: **00:40:17** So, the Fed has a QT, they impact how much their balance sheet is, but ultimately it's Yellen who has the impact on financial markets.

Andy: **00:40:29** Yes. Now they could choose to sell out the bonds they have. They haven't. In fact, they've repeatedly say they want to only own treasury bonds while they still own, I don't know, two -- I don't remember, I didn't look recently, two and a half, three trillion dollars of mortgage bonds, that are also running off at $35 billion. And by the way, those run offs are not paid back by the Treasury, they're paid back by the private sector. And that already is tightening financial conditions, just that runoff. But they could sell mortgages outright and they just have, for whatever reason, they haven't decided to do anything that is, except seed control to the private sector for how the mortgages get repaid, financed and repaid, and the Treasury for how the government bonds they own get repaid. And it's just interesting.

Now, what does that all mean? It just means Janet has a lever. And it's interesting to me that she chose a year ago to issue a ton of money in Q1 of 2022, just a ton across bills, bonds, everything.

Rodrigo: **00:41:50** The whole spectrum.

Andy: **00:41:52** The whole spectrum.

Rodrigo: **00:41:52** Okay.

Andy: **00:41:53** Even though it turns out that in Q2, we had massive tax revenues and because nominal growth was so high and wage, though lagging, were up, and that created a huge tax -- not increase, but tax revenue. Such that in Q2 and in Q3 she hardly had to issue anything. Well, wait a second. Q1 QT was happening. Sorry, QE was happening. But Fed was buying bonds. Let's jam them while they're buying so we don't have to jam the public in Q1, Q2 and Q3 because we've already sold the bonds we've already issued, and saved the money. And so I think part of the reason why we rallied so hard in July and August was the lack of treasury bond supply. Even though QT had started, there were no bonds necessary to be sold because the Fed had -- the TGA had already grown so large that they could have paid off the bonds in that cycle, once the Fed demanded payment, with the same money they actually raised selling to the Treasury -- to the Fed in Q1. And so though that subtlety is what I'm trying to explain to get an understanding of the various levers.

Rodrigo: **00:43:38** So, it's an interesting subtlety because the question is, is the Treasury on the side of crushing inflation like the Fed did not? Because it would seem counterproductive if they're all pulling in the same direction here. Right? Clearly,

the Fed wants to crush inflation. That's not helping when you get animal spirits up thinking that it's over now and we can turn risk on again.

Andy: **00:44:02** Sure is. Yeah, it's a dilemma, isn't it?

Rodrigo: **00:44:06** It's a conundrum. Why is she doing that? What's the incentive? You're political? Is it an election year type of thing? Help me understand.

Andy: **00:44:15** So, the big story is she hasn't done much to pull these levers. And yet, we had legislation that funded a $100 billion worth of spending on chip plants. And gosh, I don't even know the number. Was it 400 billion of spending to reduce inflation?

Rodrigo: **00:44:50** What is it called the Reduction Act?

Andy: **00:44:51** Inflation Reduction Act. It's an inflation reduction act. And so I don't know. I'm not a political analyst, but I would say that their interests are not perfectly aligned.

Rodrigo: **00:45:06** Also their timing might be off. Right? Maybe that's an inflation reduction of five years from now. Whereas the Fed's trying to fight inflation today.

Andy: **00:45:15** Gosh, I hope inflation isn't reduced in five years because then it'll be minus 2%.

Rodrigo: **00:45:21** I'm thinking more secular. Well, yeah. Okay.

Andy: **00:45:23** I know. I know what you're thinking. I'm just playing devil's advocate. So, again, the SPR. You know, Biden is going to go down and it's better than I knew a great oil trader named Andy Hall at Solomon Brothers, *Fibro*, who was the best oil trader I've ever seen, but Biden's looking like he's crushing it.

Rodrigo: **00:45:46** Yeah.

Adam: **00:45:46** Yeah. That's a good point.

Andy: **00:45:48** But that was anti-inflationary it appears.

Adam: **00:45:52** Yeah. The timing does appear interesting given the midterms. But let's move on from that. What I wanted to ask and actually someone in the chat has just posted, TGA in early May 2022 spiked to 945 billion, now down to 491 as of Jan 25th. So, how do you view the current state of the Treasury fiscal situation or the Treasury's balance sheet vis à vis some upcoming auctions, and they need to declare what their expected issuance is going to be some time in the next couple of weeks, if I remember.

Andy: **00:46:36** Yeah, so I'm very focused on this. You know, the Fed's talking next week on the -- we'll have a press conference I think I'm the first, an announcement at 02:00 and a press conference soon after. And there's a lot of focus on that. Looks like 25

basis points that seems in cement. And we'll look to Powell to see whether -- how long interest rates will be high. That's not something I care much about. It's very followed. What isn't followed is a meeting that happens at the same time. And that is the meeting of the Treasury Bond Auction Committee. TBAC it's called. Anyway, I get the acronym wrong all the time. That's a bunch of people from the sell side and the buy side who advise the Treasury on what the demand for duration is in the context of what the government needs to issue to fund itself. And they announced their auction schedule at 08:30 before the Fed meeting. And that'll tell you what the amount, whether they'll change the auction schedule for the rest of this quarter and what it means for the next quarter. And so as I said, what really matters is how much bills versus duration gets sold. And so I'm going to pay attention to that, both in quantity and in composition.

Adam: **00:48:18** Is there typically language around that that also might give you clues on motivations or general sort of shifts in direction of thinking?

Andy: **00:48:28** There is. They have minutes actually. And if you recall last summer, there was a lot of interest that lasted until the following November meeting, that the TBAC was asked to determine whether there should be treasury purchases done by the Department of the Treasury in the open market to assure liquidity in the treasury market. And people actually thought in November when this information came out, again, right around the Fed meeting, that the Department of Treasury was going to actually go in there and buy duration and essentially do an operation twist, which again would be exactly the opposite of what the Fed's trying to do. And so, of course, they didn't do that. But that minutes of the TBAC actually created a fair amount of speculation that something like that would happen. So, there is information that comes from those minutes, and I recommend reading some of the back history of them. It's interesting. I find it interesting. I'm a little bit of a nerd on that stuff. But this one is going to be all about the debt ceiling.

Adam: **00:49:46** Right. So, before we get into the debt ceiling, can you guys hear me, by the way? Because someone touched my microphone?

Rodrigo: **00:49:49** We can, yeah.

Adam: **00:49:50** Okay, good.

Andy: **00:49:51** Yeah. He was off and on.

Adam: **00:49:52** Before we get to the debt ceiling, if Janet again decides to sort of stay neutral. In other words, she says that we need to raise this amount or this is our estimated amount for this upcoming quarter. And we're going to do what we've been doing all along, which is kind of just issue along the curve in a relatively neutral way. What do you expect that kind of impact to have on markets, if any?

Andy: **00:50:20** Yeah. I mean, I think that's what's – so, let's step back for a second. What have they been doing, over the last, as the needs of the government to fund dropped throughout 2022, due to this big bolus of tax receipts, they did two things. One, they went on a path of reducing coupon issuance, which means that -- which is good for the markets. And part of the reason why I got bullish in markets in the summertime is they had undergone a strong path of reducing overall coupon issuance, and they've stopped doing that.

Rodrigo: **00:51:08** Wait. Can I just -- I don't understand what that means, sorry, Andy. Coupon issuance is -- what do you mean by that? Do you just mean anything that's on a T bill?

Andy: **00:51:16** Yes. Coupons are not T bills. T bills are issued at a discount so they don't actually have coupons. And coupons are anything longer than a year.

Rodrigo: **00:51:25** Just wanted to double check that I understood that.

Andy: **00:51:26** Yep. Yep. Duration reduction has been their -- was the word for 2022. And again, you wonder why because it does mute the impact of quantitative tightening, but I don't want to go back to that political discussion. At the same time, they couldn't reduce coupons enough, so they actually had to significantly reduce T bill issuance during that period of time. And so in fact, in Q2 of 2022, the total amount of bills outstanding went down by $66 billion because they just didn't need the money. They were reducing coupons as fast as they could and they didn't need any more money because every time they issue a bond, they get money. And so coupons -- bills actually went negative. They paid off bills, which of course resulted in a bills desert. What happens when there's a bills desert? People look to deposit money with their bank instead of being in bills. The banks because of changes in the supplemental leverage ratio couldn't take on deposits, but there was the RRP. And so what happened? All the money flew into the RRP, which was an alternative to bills and still it's.

Rodrigo: **00:52:57** So, that's the -- So, the banks couldn't -- weren't just mechanically able to lever up enough to get the demand, and that's when it transfers over to ...

Andy: **00:52:06** It was not an attractive place for the Fed -- the banks to lend. They wanted to -- the rate that they -- the rate was going to be low anyway. But they just didn't have the regulatory room to take on more deposits. And so those people that were chasing bills, and there weren't any more bills, ended up going into the RRP.

Adam: **00:53:27** Which is why I guess the banks haven't -- we haven't seen the banks raise deposit rates very much. Right? They actually are not trying to attract more assets. Gotcha.

Andy: **00:53:38** They are not trying to attract deposits to and that's because -- partly because deposits are low NIM. You can't really -- a wholesale … Checking accounts still pay

zero and that's criminal. Large brokerage firms pay 35 basis points on cash. That's criminal. Retail gets completely railroaded in that sort of thing. But real savers, like corporations and wealthy individuals, they don't keep their money in checking accounts. They go to what are called wholesale deposits. And wholesale deposits pay very little NIM to the bank, net interest margin to the bank and are -- because of this chain, not because of the return to a regulatory regime where deposits are expensive to keep, banks have no interest.

And so there's a possibility, and I'm going to be paying attention to that. Some reporter every quarter, every meeting, will ask something about the SLR and whether the Fed is going to make deposits more attractive to banks to hold. And then you'll see the RRP collapse when that happens. And so that's a way that the Fed can drain the RRP. And we'll see – that'll happen one day. It just hasn't.

Adam: **00:55:06** Interesting. Okay. So, at $491 billion in January, how does that – is that low, high? Is that about average for this time of year?

Andy: **00:55:17** The TGA?

Adam: **00:55:18** Yeah.

Rodrigo: **00:55:18** Yeah.

Andy: **00:55:19** Yeah. So, every day, the TGA changes because of a variety of things. They send money to bondholders that are getting a maturity. That's an outflow. They send money to the economy through fiscal spending, that's an outflow. They receive tax receipts and they receive issuance proceeds. And so that number is pretty volatile. What's the big picture now? The big picture is that number is going to zero in the next six months. Because tax receipts and spending will be what they are. Let's step back and say, what's actually going on is we're running a trillion dollar deficit this year, just the normal deficit. And we owe the Fed a trillion dollars. So, that's $2 trillion of money we need to fund. And so, okay, how are we funding that? Well, that's going to have to be net issuance, but wait a second. We're capped.

Adam: **00:56:31** Debt ceiling. Right.

Andy: **00:56:33** And so that's the conundrum. And the first thing we do is we spend all the money we got. And so that's going from 490. It was 350 a few days ago before the auction settled, to zero.

Adam: **00:56:49** So, they're not allowed to issue any more bills or notes until after they get approval to issue? I thought that that deadline was not until June, but they're held hostage until that date is what you're saying?

Andy: **00:57:06** Right this very moment, the debt ceiling is in place and they cannot exceed that.

Adam: **00:57:14** Understood. Got it. So, the reason the market is not currently panicking is because there's still a half a trillion dollars in the TGA to, you know. And I guess the Fed could back off its QT for a few months if -- to ease some of the pressure if they couldn't resolve it politically.

Andy: **00:57:31** Sure. They could reinvest the pro-- the problem is they need to reinvest proceeds. Where are they getting the proceeds from? I guess they could pay to the Treasury, but then the Treasury raises their indebtedness. That said, net, you're right. That could happen, because their indebtedness drops by the amount that the Fed gets paid back. They issue zero debt change, that's not the big picture. The thing is that currently, there are people out there in the market who I talk to all the time, professionals, name brand professionals at the big dealers, who actually think that this quarterly refunding next week is going to show that they're not going to issue. They're going to spend down the TGA and they're not going to issue, because they can't. And so that talks about what are called extraordinary measures. And extraordinary measures is essentially, it's very nerdy, but one particular obligation that the government has, which is about $325 billion, they can cancel if they promise to repay it eventually. And that frees up $325 billion of issuance.

So, there's the 490, there's the current debt ceiling, which is, call it, 50 away. I don't know if it's a 100 or 50 right now. By the way, it's on the Treasury site every single day how close we are. If they use these -- they've said they're going to use these extraordinary measures, that's going to give them $325 billion of issuance room. That plus 490 billion of TGA gets you to June. Because you've got a, what I say, a $2 trillion hole to fill and you've got $800 billion of room. And so that's why June is where June is.

Adam: **00:59:39** Gotcha. So, do you have a view on how this is going to play out?

Andy: **00:59:46** Yeah. I think there's -- So, we'll know. And so what I'll do is just look at the data. I think that the Treasury is in a position where it has to -- that's going to issue. It can always get below the debt ceiling by paying off some t bills instead of rolling them. Instead of reissuing, they could just let them run off. And that'll get -- lower the debt temporarily. So, I think there's going to be some movement with bills; how many bills are issued during this period of time, how many bills mature during this period of time, all in the context of making sure to maintain an orderly market in the duration market. Because the moving part, bills can move very easily. They can issue some today and let some redeem tomorrow. But coupons, the auction schedule is you know, they want to make sure people show up to the auction. So, they want that. And they're literally -- one of their basic principles in the TBAC is to maintain an understandable, and consistent issuance pattern for risky coupons.

And so to me, that lends to probably more coupons than bills as we approach the debt ceiling. And so if you remember what that means in terms of duration …

Rodrigo: **01:01:19** Right. That's why you're short all assets.

Andy: **01:01:23** That's one reason.

Rodrigo: **01:01:25** That's -- okay.

Andy: **01:01:27** I expect further tightening of conditions as coupon issuance remains high even during a debt ceiling period.

Adam: **01:01:38** Okay. So, that's one reason. What are your other reasons?

Andy: **01:01:44** Yeah. So, like this is the question of where I'm at right now. And where I'm at right now is, there are lots of outcomes and no outcome is going to be exactly the same as it was. But just broadly, I'd like to characterize three outcomes that I think are pretty much what people think could be the case, subtleties around it. One is that the economy, that the Fed has done too much. All of these negative inflation prints are just the harbinger of further weakness in prices, CPI's dead, and the economy is weakening quickly. You know, we had a 2.9 GDP print, hard to believe, but okay. We're going into a recession imminently, or we're in a recession, or any of those combinations of things. But it's a recession. That's one possibility.

Another possibility is a soft landing. In that case, the Fed is done -- tuned with their creaky levers, some of which they've handed to the Treasury to actually manage, have just hit it. And here we are with a soft landing in which we see no job declines, no recession, and inflation returning to target. And that is a Goldilocks environment. It's possible. It's just is a potential outcome. And then I guess the last outcome is, gosh, the Fed really hasn't done enough and this temporary drop in inflation with easing of financial conditions or rally in asset markets, the perception that the pause is permanent, and we're about to end the hiking cycle for good. Lots of animal spirits, both in financial assets and then in Lambo buying is…

And then a much bigger point, everybody has a job. Everybody's wages are going up even while CPI is going down. Wages have lagged. They were below -- they didn't keep track of real -- real wages were down. But now, wages are up. Top line is flat because CPI is flat. And so that dynamic of strong labor conditions, which is what the Fed is talking about, is inflationary. And I don't know. Maybe it comes back. And so that's an outcome. And that requires further tightening of financial conditions by the Fed to offset this inflation and finally kill it dead, which sort of delays the landing. It could be soft after a tightening cycle, a new tightening cycle, or it could be a recession after a new tightening cycle. But new tightening cycle.

First we have a new tightening cycle. And so those are the three outcomes, and you can fool with them however you want. And what it means for individual assets or individual sectors is very important. But two out of the three, everything but the Goldilocks, financial conditions get tighter. Which means that cash is -- what does it mean for financial conditions to get tighter? It means holding cash versus holding a portfolio of bonds and stocks and gold and commodities and whatever, is more attractive. That's what it means, literally what it means.

And so the reason why that happens in a recession is because people lose their jobs, they can't spend, that reduces incomes for others, which reduces the ability to pay back debts, which means people scramble for cash, which means financial conditions are tight. In *Higher for Longer*, which is the thing I call the inflationary case, the Fed engineers tighter financial conditions by creating another tightening cycle. Both of them are bad for assets. Now, higher for longer is good for equities and really bad for bonds. And a recession is really bad for equities and pretty good for bonds. So, I don't know which it's going to be. And so I'd rather be short assets expecting that we're not going to get a soft landing, than have to choose between a recession or another tightening cycle. And this is a cheap way to do it.

Higher for Longer

Adam: **01:06:36** So, walk me through the equity bull case for higher for longer.

Andy: **01:06:39** Sure. So, there's two cases. So, now that we're getting into the subtleties. But higher for longer -- so we've had a higher for longer. And what that has done is all of 2021, 2022, CPI was high, which is revenue. Commodities broadly fell which is expenses and wages were below -- rose slower than CPI, thus real wages were down. What does that mean to margins? Margins expanded. So, there's two higher for longer cases. Wages sort of slow. Now wages right now are catching up the CPI and through CPI in that wages, real wages are now higher or now positive, which should shrink margins, because the input costs are going up. Similarly with commodities, but who knows, maybe CPI is what roars back and wages come down and you stay in the sweet spot of very strong earnings and earnings surprise on the upside. Even with potentially lower margins, they surprise on the upside because CPI inflation drives revenues faster than expenses.

Rodrigo: **01:08:09** And higher for longer is just observing nominal CPI, nominal growth be above what the Fed is tightening. And so -- …

Andy: **01:08:19** Right. And what I'd like to say is -- right. What I'd like to say is it's revenue inflation versus expenses inflation. Both are going to go up in a higher for longer environment. The bull case is the revenue expansion goes up faster than the expense inflation. The bear case is the opposite. Now both of them are negatively impacted by both -- in equities, you can't get that bullish in the higher for longer case because bonds are going to sell off a lot. And that's the discount rate for all

these flows anyway. So, there is a headwind of higher yields and tightening financial conditions that -- sorry -- that are negative for equities. But the revenue side, the earnings side can surprise significantly on the upside.

Adam: **01:09:12** Gotcha. Yeah. So, I keep focusing on the discount side. Right? If -- I mean, let's face it, I think the dividend yield on the S&P is 1.6% and you can get four, four and a quarter on a high interest savings account or a, you know, money market fund. Right?

Andy: **01:09:31** Yes.

Adam: **01:09:31** So, it -- you know, at some point, you've got to think that equity investors are going to be questioning whether the ERP is competitive against the -- what they can get in for risk free. And that seems to have impacted pretty dramatically, right, multiples. And I mean, we're expecting 200 -- 220, I think, in earnings in 2023?

Andy: **01:09:55** 29 is the most recent one I saw, whatever.

Adam: **01:09:58** Yeah. So, we're looking -- we're still at 18 times forward earnings. So, it's the earnings yield is pretty weak. The dividend yield is pretty weak and cash rates are looking pretty darn attractive. This is why I struggle to make a strong bull case for the higher for longer scenario.

Andy: **01:10:14** Yeah. No. I think that's right, but I do think it's higher. Like, I wouldn't bet against stocks if I thought with certainty inflation was going to pick up. And because it also operates with a lag, which is gosh, I don't know. What if inflation picks up in the next three to six months and the Fed pauses before hiking? Well, damn, I'd like to own equities in that case. I wouldn't want to own bonds.

Adam: **01:10:45** Yeah. For a trade.

Rodrigo: **01:10:46** Right. Yeah. A trade. Yeah.

Andy: **01:10:47** You know equities can rally on just the Fed pausing to hike. Right?

Andy: **01:10:52** Right. Right. Yeah.

Rodrigo: **01:10:55** Yeah. Yeah. And I think -- and as we talked about earlier, you're looking at your trading horizon is between, I think, one to three months. Right? I mean -- …

Andy: **01:11:05** That's generally right. Call it three months.

Rodrigo: **01:11:07** So, that's, in that horizon, it's super important for you to understand the risks of directionality for that time period. And all these levers could for a year bring us to what Adam's case has given us. Right? Because I think your case, Adam, is more of a broad multiples are still high, cash is king, we're going to -- I don't see a case

for that, but if we're looking at two to three months, then you can navigate around that much better by understanding these dynamics. So, that's a key point, I guess, in every macro discussion. Right?

Andy: **01:11:37** Yeah. Sure. And then you come to the possibility that we're wrong, and it's not higher for longer. It's a soft landing. And a soft landing has you know, listen. So, one of the things I've noticed in the last two months being short assets is that the probability of each of those things has shifted. I would say that soft landing has remained -- remains very crowded as it relates to expectations of Goldilocks that the Fed has nailed this. But the recession case is very heavily priced into, not completely, but heavily priced into the path of interest rates. If you look at two-year … contracts in … 24, they're priced that Fed funds will be 175 to 200 basis points below peak. That means in 18 months after peak, the Fed's going to cut 200 basis points.

Now in most recessions, they cut 300 basis points. And so it's not 65% that's not how it works. But if it was 300, would you be betting on that? That means that a recession was a certainty, essentially a certainty. So, there's quite a bit of recession priced into the short-term interest rates? And no recession priced into equities, which I think is an interesting thing. And to me, looks like a trade. That isn't the same trade as I have now. I'm actually in the midst of coming up with the way I want to play this. But I think the recession case in bonds and the lack of -- and the soft landing case in equities, it represents an interesting opportunity to me.

Adam: **01:13:28** Right. So, bonds are overbought, equities are overbought and so hence your short both. Yeah. Okay. Yep. That makes sense.

Andy: **01:13:40** David Zervos, who I love, I don't know if you know David. He works at Jeffries and is a macro analyst, coined the term *blues and spoos*. And this was during a time when quantitative easing was the thing. And all he did was buy four year bonds, which are the blues pack in the euro dollar contract and spoos. And you didn't have to do any fancy risk parity stuff. They both rallied. We might be time -- it might be time for blues and spoos. But just short.

Adam: **01:14:12** Right. Interesting. And then how do you weight the impact of your -- the evolving views on how the different scenarios are being priced against the liquidity situation. Right? So, we're going to get information about where Powell perceives the inflation trajectory, where Powell perceives the employment trajectory, next week. We're also going to get information about treasury issuance. How do you weight those two factors? I know that's a nuanced question, but I just -- I'd love for you to just talk it out.

Andy: **01:14:53** Yeah. To me, it's basically fairly straightforward that I'm pretty much ignoring the hike issue. What I want to listen to reminds me of December of 2021 when he

mentioned the balance sheet. There's a very subtle issue coming from the Fed that is, how long are they going to do QT? And will they continue to do QT while they're cutting rates? And so that's the thing I'm listening to on the speech, the minutes three weeks after, and the -- sorry, the statement's not going to have that information. But the speech, the minutes three weeks after, the -- I'm sorry, not the speech, the presser and three weeks after to see if I can get a sense of how committed to quantitative tightening they are. And frankly, it could be the case, that they say, you know, we're thinking about when we're ending this thing. If so, lightning fast, I'm going to be long everything.

Adam: **01:16:08** So, I mean, if it wasn't the previous meeting, it was the meeting before where Powell was unequivocal about the fact that they are going to play out their QT as scheduled.

Andy: **01:16:20** Yep. I would say, so I mentioned that because I'm just telling you how I would flip. It's not my expectation. My expectation is that Governor Waller last week commented on quantitative tightening. And he said that the effective quantitative tightening is a reduction in the asset side of the Fed's balance sheet, which means a simultaneous reduction in the size of the liabilities of the Fed. And let's ignore the volatility of the TGA, but just look at the -- let's assume that stays where it is. The government just issues what they need, gets what they need, spends what they need, and the TGA stays where it is. By the way, that's the way it used to be for decades. The TGA was not a thing. It's only recently that it's become a thing.

But what would happen in the balance sheet reduction, mechanically, is that reserves would decline. And reserves are holdings, are essentially the deposits that the commercial banking system leaves with the Fed. And the way the mechanics works is a reduction in the asset side is a reduction in reserves. But there's this other balance sheet item now called the RRP, which is really deposit-like in all ways, but it's -- instead of involving the banking system, it's money market funds depositing cash with the Fed, that the Fed securitizes with securities so that the institution doesn't have any credit risk. And the Fed pays interest on that cash. And so it's just like a deposit, but direct from the private sector without the bank is the middle man. And the reason why the banks don't want to be the middleman is because of this supplemental leverage ratio that makes it unattractive for them to hold deposits.

So, Waller said that what he wants to do is keep doing QT until reserves fall to 10% of the GDP. Now that's a number of about two and a half billion dollars. Currently reserves are around $3.1 billion. So, jeez, that's like 600 billion away. We're going to have QT end before the end of 2023. Wow. That's a big deal. I want to buy all assets. But what he said and I think this is extremely important and possibly something that gets discussed in the weeks to come that I'm going to be paying most of -- significant amount of attention to is what he said is I think RRP plus bank

reserves is really reserves. Now that number is $5.1 trillion and a long, long way away from 10% of GDP, which means QT forever.

Adam: **01:19:34** Yeah. That distinction -- …

Rodrigo: **01:19:36** The clarity on that will be important.

Adam: **01:19:37** -- has a very big impact. Right.

Andy: **01:19:39** Right. So, I'm going to look -- pay a lot of attention to that, on discussions around that, which could happen in the minutes or could happen. I tweeted at Timiraos and Leesman and Mckee, just ask a question, how long is QT going to last? And by the way, another subtlety is, Waller said, you know, I could see us continuing QT while we're cutting rates. Which is odd because we're hitting financial assets, which is anti-inflationary and negative growth, while we're cutting because we're in a recession? That seems odd. But he said that. And so I'd just like to know, is QT going to end six months from now? Or is it going to go on for two and a half years, dry out the RRP, dry out the reserve amounts to a sensible level of reserves? We're over reserved right now in the banking system. And end up with again, a two and a half year trajectory that continues when they're cutting rates.

And the important part about that, the continuing while they're cutting rates, the rate cut can help the economy. It can act on the economy, making people say, jeez, I'm not going to keep my money in the bank account. I'm going to go give it to, to consume because -- or I'm going to buy assets. Now that's less so, they're more likely to just spend. But you can do QT and still hit financial assets, which are potentially still bubbly relative to the amount of stimulus that has been put into the system over the years. So, I think there's a complex case for allowing QT to go on while you're -- even if you're in a rate cutting environment, but that's all I'm paying attention to with the Fed.

Rodrigo: **01:21:45** Well, we -- this is the -- we've been talking a lot about this, the idea that the economy can continue to chug along while financial assets underperform the economy. And because we've seen the opposite of that in the last QE cycle. And we saw -- well, we, in the 70s, it was the economy outperforming financial assets. This is -- they're not -- we talk a lot about what's going on, whether it's a recession, it's not a recession. But the more nuanced part is always when the rubber meets the road. What are assets going to do? And can we see a managed situation with the economy while also continuing to see a deterioration of equities and what other assets -- …

Andy: **01:22:29** Yeah. And to me, I look at these things and say, these are just crude levers. Crude levers that you've handed to the Fed, you've delegated to the Treasury through this thing I talked about earlier in terms of issuance type and are all happening, all happening with the most fiscal and monetary stimulus as measured by percentage

of GDP we've ever seen, and China and Japan are in a completely different time frame and economic condition. And Europe has a war and a variety of other different economic conditions. And they're just embarking on their tightening cycle. And so with all of those things, man, I just don't believe we're going to land this thing softly.

Rodrigo: **01:23:25** Well, Adam, what's your analogy? I've been liking your analogy about the car and you know -- …

Adam: **01:23:31** Yeah. I've been using the analogy of someone driving a car in a simulator. And if you're able to see exactly what is happening in the game and react to it in real time, then you can learn and adapt and do a pretty good job of steering. If you're driving quickly and you're -- there's a delay between what you see or what's happening and what when you see it happening, then you're going to be chronically over steering. Right? They actually have done these experiments, and they measure displacement based on the delay of the signal. Right? And I think this is a really good analog for the problem the Fed is facing. Now if you're just driving and there's no inflation and all you need to do is figure out how much you want to put on the gas in order to -- because growth is slowing, then you're driving in 2D and the problem is less hard.

When you've got -- now you have the inflation axis, but you've also got this policy asynchrony across, like you said, China, Japan, Europe, etc. And you're driving basically, having to steer through the rearview mirror, then I think this is why we often see in these inflation cycles that you don't just get high inflation. You also get really a huge increase in the wobbles. Right? Because it's kind of the Fed and other actors, big actors in the system that are over steering in both directions. Right? And so you better be fairly agile in being able to swing trade or trend trade what have you in these environments. You kind of can't rely on being able to set your sails and go in one direction.

Andy: **01:25:15** I agree. And you throw that -- throw in the monetary and fiscal being so large. And it makes --you know, imagine how difficult it was for Burns and Volcker in a world in which pretty much the interest rate policy could really directly impact consumption because people were buying big heavy stuff that landed on, if it landed on your foot would hurt. They aren't buying services. They weren't buying services. And our consumption patterns now and the huge size, just makes it, you know. Take your analogy and say, now you have to do it at 3X speed.

Adam: **01:26:07** Yeah. Right.

Rodrigo: **01:26:08** I think, take the analogy, you have to do it, like, before you're driving and simulating a car or you have to do left and right on long road, long and wide roads. So, you know, you got off track, you were fine. You're going right and left. You're now driving an airplane.

Andy: **01:26:23** Right. I like -- I like to think of it as like, the cliff, two cliffs, these roads in Europe that where there's, like, cliffs on either side and they're really, really, really deep in this particular case relative to any other time in history and equally narrow.

Adam: **01:26:42** Yeah.

Rodrigo: **01:26:43** I like that comment.

Andy: **01:26:44** Or narrower than ever before.

Rodrigo: **01:26:46** The comment from … are impossible. When I was a kid, they had a simulator like -- at a children science center, and it was to simulate drunk driving.

Andy: **01:26:57** Well, I think the policymakers are doing their best. And I will definitely be impressed if they land this thing softly, here, on time, in 2023, and then Europe on time in early 2024, and then China, whenever it lands in 2025, and all these planes come in just right. And if so, I'm going to lose some money being short all assets. But yeah, it's -- … financial condition's tight.

Rodrigo: **01:27:30** So, generally, like, we want -- we hope that they find an economic soft landing. Right? We want the world to kind of ideally get that Goldilocks scenario while also, I like the angle of, while also increasing risk premium for investors over the next two to five years, right? And seeing those asset prices become a more reasonable, if possible.

Andy: **01:27:54** Again, I have a three-month horizon. So, I'd like to make money on this trade and then have everything work out for humanity and the best possible way.

Rodrigo: **01:28:01** You know what? I'll do that. I'll make that happen for you, Andy.

Andy: **01:28:04** That would be great.

Rodrigo: **01:28:05** I'm with you.

Adam: **01:28:06** Very practical. But look, I know you've got a dinner that you're preparing for -- maybe for a crowd that I wish I was there -- …

Andy: **01:28:15** Not tonight. Sunday

Adam: **01:28:04** Oh, it's not tonight. Is it? Oh, I see. I gotcha. Gotcha. Thanks. Still respecting your Friday, your Friday evening. And I feel like we have really put a vacuum to that big brain of yours and extracted a huge amount of value. So, thank you so much for sharing. All of the plumbing exposition was really fascinating and super helpful. And I for one look forward to seeing how your positioning and thinking evolves over Twitter. And before we go, talk at least briefly about your new venture with Gray Beards and how people can find you with Damped Spring, etc.

Andy: **01:28:54** Sure. You know, Damped Spring is something I've offered to clients for a while now off of Twitter. It's at capacity and I have a very long wait list, so I'm not going to market that. I think people enjoy it. I enjoy helping them, and my goal is to help sophisticated investors up their learning curve. Nick Giovannic, who is Nick @Nickgiva on Twitter, who worked at Solomon Brothers for many years, older than me, less of a beard than I do, came to me and said, how about we do something together that helps the investor whose financial adviser may have failed them over the last year, staying with 40 years' worth of 60/40-like portfolios. And do it in a very timely way that they can consume 20 minutes a week of what happened last week? What's going to happen next week? Not predictions, but what actually -- what news is happening and how that might impact your portfolio.

And then we come up with a portfolio together that reflects our views on how to manage money from a long only standpoint, simple execution. We put it in an Interactive Brokers account and track it for you. And the idea is not for you to follow our trades. We're not a financial advisor. We can't offer financial advice. But for you to look at what we do and the questions we ask, so that you can ask the same questions to your financial adviser. Like, why am I so heavy on equities? I've have this -- been experiencing all this risk, and that's not consistent with what I'm doing. Or is it the right time to buy inflation linked bonds given whatever? And just so we can arm in a very short way. And so that's @2GrayBeards. We produce a video a week on YouTube and we're excited about it. It's about a month old.

Adam: **01:31:12** Fantastic. And you are @DampedSpring on Twitter and an extremely worthy follow. So, with that, unless, Rodrigo, you have anything else you want to ask or say?

Rodrigo: **01:31:22** No. Andy, thank you so much.

Andy: **01:31:25** Thank you both.

Rodrigo: **01:31:26** That was great. I really appreciate time.

Adam: **01:31:27** Yeah. Thanks a lot. I'm sure we'll get together soon and enjoy your weekend.

Andy: **01:31:31** You too.