

### ***Interview with a bond trader***

- SPEAKER1 00:03 We'll find out when we get going with the questions, OK?
- SPEAKER2 00:07 OK. All right. So first off, what sector is your firm or your, you know, have you been involved in.
- SPEAKER1 00:20 So, I'm primarily like OTC swaps market making role at a bank.
- SPEAKER2 00:33 Right. And what sort of products. It's so I mean, what's the on the underlying side of those swaps.
- SPEAKER1 00:41 So, it's not like interest rate swaps, so are the counter interest rate, your custom stuff.
- SPEAKER2 00:48 OK, and I mean, what would you say would be the goals of what you do?
- SPEAKER1 00:57 I mean, the end goal as being a dealer in the swap side is basically, you know, to try and meet the needs of all clients and find a fair market clearing price where, you know, everybody's hedging or speculative needs can be met and offset each other. So, I mean, it's trying to bring clients together is like kind of like the top-level goal, right? Whether, you know, people who need to pay FIX or receive FIX, you know, the object of the firm, the bank is to try and, you know, offset those flows within the customer base of, you know, what the clients and to do to, you know, help them achieve their goals, whether it's, you know, a pension fund that needs to put on duration, whether it's like a speculative hedge fund that just wants to pay fixed, doesn't think rates are going higher or whether it's, you know, a corporate client that either wants to switch their new insurance to a floating rate or the corporate client that wants to lock in future rate on future issues. I mean, you know, swaps can be used for multiple things in terms of rates. It's one of the deepest, most liquid and, you know, markets in the world and really, like in terms of the bank is just a matter of. And the dealer, like the sitting kind of in the middle of all these clients to try and find the liquidity points where, you know, everybody's needs for hedging and speculation can be.
- SPEAKER2 02:27 And do you in your role in your desk, deploy any algorithms yourself and what you do?
- SPEAKER1 02:37 No, we do not. I mean, still I feel that, you know, it's always kind of been a risk. I mean, sometimes there will be some like iceberg algorithms in that with some of the instruments that we will use for hedging the risk in term basis. Like I talk about how, you know, in the perfect world we offset all the client flows back-to-back perfectly. But, you know, in the interim, the bank always has to inventory some risk and there's like multiple different interest rate futures you can use, you know, to do those hedges in the meantime. And, you know, sometimes you use, like, you know, iceberg algorithms and whatnot to clear some of the risk in the market. But no, like, you know, positioning specifically driven from like any type of algorithm-based decision making.
- SPEAKER2 03:25 And how about your clients? I mean, and maybe wider market participants? Are you seeing deployment from them?

- SPEAKER1 03:32 The certain clients that are algo driven? I would say that's probably a large portion of the client base. I mean, defining large is on any given day that could honestly be 50 percent of maybe the duration or risk that we will see might be coming from that type of clients. I mean, it can be as little as zero or 10 percent. But I mean, from the institutional speculative side, I would say clients using algorithms to make decisions are definitely a significant impact in the market.
- SPEAKER2 04:09 I mean, and how do you feel about that? How do you feel about the proliferation of the algorithms?
- SPEAKER1 04:20 It kind of goes back to the response to my first question if I feel great about it. On a day when it offsets another client flow. Other days, I kind of feel worried about it. And, you know, they're not going the opposite way of what other people want to do. So, I mean, it's a welcome, those clients are not really predatory, you can kind of for the most part, a lot of some of them I know there's like secret accounts where you don't even know what they're doing. Like, it's not like a clear strategy. So those are just a little more challenging. There are others where they follow like clear like momentum strategies. So, you kind of know what they're doing. So, I mean, you can always kind of be careful or try to acquire that risk to like, you know, feel what they want to do ahead of time. But I mean, it becomes the days where they want to do what they want to do in a size that's larger than what that market can probably stand at that point in time because there are no offsetting flows at the time. So that's when the algo clients became the challenge.
- SPEAKER2 05:25 Is it your visual perception that they might be using things like deep learning, machine learning type stuff?
- SPEAKER1 05:36 I mean, I think for sure, like I mean, you know, they're just back testing results that have worked for a long time. The fear for me and I don't know if I'm going too deep into this, is that a lot of like these momentum type strategies, if you trade in a size that's too big for the market, like sometimes it might look like your size is fine for the market when there's offsetting flows, which happens 75, 80 percent of the time. But when the flows, there's no offsetting flow to the market and your size is too big, you're actually creating like a self-fulfilling prophecy in terms of your momentum. And that just triggers you to continue and keep doing this right? So, my biggest thing I'd like to know the most about this is how do they rebalance their sizing of their trades? Because it feels like there's not like a daily rebalance. There's no I mean, I don't know, maybe there is deep learning. I'm thinking the market is oversaturated with this and we've actually influenced our own results or whatnot. But I mean, you know, it's funny, like I'm talking about interest rate markets, but then you look at like, what was that hedge fund that blew up a few months ago, the hedge fund? It was like a self-fulfilling prophecy where he, like, rode like CBS or whatever all the way up. But his buyers were the ones that were moving in anyways. And, you know, you'd look at like the whole memes stock stack and whatnot. To be honest, to a lesser extent, I feel that sort of stuff can be happening in America as well.

SPEAKER2 07:06 And in your sort of organization, is there is there any involvement of the first line or the first line of defence?

SPEAKER1 07:26 the first line of defence

SPEAKER2 07:28 should regulation of any of the tools that....

SPEAKER1 07:31 So, explain that, a little bit...

SPEAKER2 07:33 Sorry, sorry, first, let's go over here in the U.K., we have this concept of three lines of defence against risks that may be posed to the business. And the first line of defence is the eyes and ears for the firm in the market, they understand what's going on in the marketplace and everything. Second line of defence is compliance, third line defence, internal audit. And, you know, they've all got sort of different checks and balances. Yeah. Are you guys being involved at all i your organization's strategy to maybe mitigate some of the risks associated with the activities?

SPEAKER1 08:25 So, I wouldn't say that the position like the activity is so overbearing that that has even came up, to be honest with you. The other thing, too, is like all the institutional business just clears over LCH. So, like everybody considers all these trades versus LCH, they don't consider it like by a counterparty, by counterparty. I mean, that whole practice of like line of defence, like obviously you know, the first line of defence and like the responsibility sits on the front office and the traders. And, you know, I have gone through like the whole three lines of defence, but I wouldn't say that there's ever been, you know, meetings about like how do we have to protect ourselves against the algorithms? Like I mean, at that point, you could just not do any trades. No bank, like I said, is ever taking such a principled position that we would be so far on the other side of one of these algorithm algorithmic accounts where we would be experiencing massive losses right now.

SPEAKER2 09:29 What is your understanding of this concept of conduct risk? A view that's something which you've been exposed to over there or...?

SPEAKER1 09:42 So, if you could clarify in terms of like the conduct risk, you mean like how these types of accounts are behaving?

SPEAKER2 09:50 Yeah. So, are they?

SPEAKER1 09:54 So be honest. I honestly think it's just an honest mistake because I've alluded to sometimes, I feel they're overtrading like the size of what they're trading relative to what they should be. Trading is too large. But I honestly feel that it's kind of just some sort of honest mistake on their part. There's nothing predatory, like we don't see any type of predatory action from any of these types of accounts at all. Like I say, these are actually pretty decent clients. They're pretty standard in what they want to do, you know, what they want to do. And, you know, the pricing is fair and they're not in our markets. They're not viewed as very predatory and such. There's like, you know, there's no poor conduct on their behalf. And exactly. There's no like, the whole thing of like

going up the chain through compliance and audit of like, oh, they're just doing too much and whatnot. It's not happening at all.

- SPEAKER2 10:50 It's interesting because in some of the other sort of FICC markets, you know, me myself being working in compliance for a long, long time, I often get approached by brokers and sometimes clients as well, saying, oh, you know, this this activity has...you know, the quotes are not stable, know they're not, I'll go and try and hit one of the quotes that will disappear or die.
- SPEAKER1 11:22 So that's definitely, I think, what's going on and like listed like futures type business. But like in an OTC market, there's not really like an electronic platform. So, I mean, you know, given I am non-US non euro G10 currency in terms of interest rate swaps, you know, there's not as much of a full electronic. Business or platformed versus like, if this was in US dollars, these accounts can go do most of this business, probably electronically on a set and like the whole transaction is done electronically. We are still in the format that most of these inquiries come in in an OTC fashion where it is confirmed over like phone or chat and not like a truly electronic transaction.
- SPEAKER2 12:14 Do you foresee a time where maybe, given how the markets have evolved in the last 10 years, where, you know, maybe the likes of yourself and other front desk staff that the role changes radically or that they don't even have a problem and everyone's been bracing for that?
- SPEAKER1 12:37 I would say, like, I've been in the business 10 years now, and I think even 10 years before I started, everybody thought, you know, everybody's going to get replaced with computers. I mean, I still think the end goal is that. But I just think there is still such a need and for very bespoke one-off type transactions. Where clients really need customization, whether it's for accounting reasons or whatnot, where they really want like an over-the-counter product that, you know, can be hedged with a more standardized product, which would easily be able to trade purely electronically. But there's still this need. I feel the clients will still always have a need, whether it be because they actually want a very specific proper hedge or for actually legal and accounting reasons, or they need a very specific hedge like day per day cash flow hedge for something that they're doing. It still keeps swap dealers involved in the interest rate market and other swap markets. For the foreseeable future, especially in less liquid currencies than like euro sterling or dollars.
- SPEAKER2 13:51 Do you think demographics has a role to play in? You know, the continuance of certain types of trading practices, because, you know, I mean, when I started out, it was a very different type of demographic. You know, the people that were leading the business had grown up in a different era, basically. And so that shaped how they built the business to maintain the business.
- SPEAKER1 14:19 I most definitely think there is a shift. You know, it's funny. Like I always think like you look at some of the more senior portfolio managers, like a non-algo type, you know, institutions. And it just always felt to me like especially earlier on, like still five, 10 years ago when there was even more around like that. They wake up in the morning, they roll

out of bed, and they think, like, "I want to go buy a bunch of 10-year bonds. I want to sell a bunch of 10 year bonds", just like, you know, it's a gut feeling versus now like as the more junior people who came up, you know, now more in the technology era are starting to move more and more into the management roles where, you know, your decision making process should be somewhat a little bit more technical. And I feel that that is just going to continue to increase over the next like 20, 30 years, like more and more and more. So are you saying personally, I personally, for me, like, I think that's where I have a niche in my market where there's still a lot of like the old school old guard type decision of just, I want to do this. I want to do that without any type of like technical analysis or like, you know, fundamental or looking at stuff in a very technical fashion. And I think that leaves opportunity for someone like me who's like probably not as technical and quality as someone who's 10 years younger than me, but is much more so than those, you know, who have been managing me over the last ten years.

SPEAKER2 15:51 Are you seeing some of the guys maybe of, you know, maybe from the same sort of intake as yourself? Are you seeing any move to sort of reskill or learn new skills as a result of...

SPEAKER1 16:10 Honestly, I don't think so, and I think the problem with that is just going to be like the sensation, like, you know, despite like there being what you'd call like a drag and finance compensation, like it's been kind of stable to like maybe slightly down trending over the last 10 or 15 years. It's let's be honest, it's still an industry where the compensation is well above the average. So in my view is if you're in one of these positions right now, you take for granted how lucky you are and you think it's is going to last forever and you become complacent and you're not willing to learn all this type of stuff that you might need to know because, yeah, the end goal is eventually a computer runs at all and you just need someone there that understands the computer and supervises everything. It's just it feels like it's still going to take a long way to get there and some more have some more liquid markets.

SPEAKER2 17:04 Do you think there's any do you think there's any complacency?

SPEAKER1 17:13 Like I do think, like you want the firms or there's not going to be an incentive to start doing that because, you know, because it stems down from the manager, like the one making the junior person would probably say, "oh, that sounds great", versus the manager's not going to want to do that because, you know, they're afraid it's going to lose jobs. They just don't understand it as much. So, are they being complacent in that like someone else, something else is going to do it, and still their business like is going to take over and all that? Possibly. But the other thing, too, is, like I said, like people have always thought this for the last 10, 15 years, but yet it doesn't seem like the robots are taking over. I mean, at least in our market, I can in the in space, like dollar interest rate swaps, I feel the computers are like almost fully taken over. Like, I would not want to be a trader in that market. It seems very difficult, you know, to trade that market. I feel like I would you would be much better off. You need to have much, much higher technical data driven, like I approach in that market to do well than just randomly making decisions out of like, you know, very, very liquid market, very not much bid

offer, like everything trades around made in that market. So, I mean, again, that's like a much more technically advanced market than mine.

- SPEAKER2 18:46 Are you aware of major incidents involving algorithmic trading in the markets that you're involved in in the last few years?
- SPEAKER1 19:02 To be honest, I don't know that there's been anything yet in like an interest rate product that has driven. And moving markets, there hasn't been any, like, fat finger or, you know, adding like selling a million call options instead of a million dollars' worth something like that, I can't recall. I mean, I know we've had like a few fewer inequities that, you know, then come back and also create panics in our markets, but I can't think of off the top of my head like any type of incident like that.
- SPEAKER2 19:36 How would you how would you rate the ability of a human
- SPEAKER2 19:43 broker, to be able to spot.
- SPEAKER2 19:49 you know, potential incidents or potential misbehaviour by algorithmic activities in the products?
- SPEAKER1 20:00 I put in terms of like the high frequency trading side of things, I would say it's close to zero. And I mean, I would have no idea, you really have to go in and look at all the films and the time stamps on the films, and I guess that information is available. But to be in my market, it hasn't come to a point yet where it's costing us any money in terms of like when we do like hedging with, like exchange listed products that I've ever, you know, put too much stock in. Would you? But I mean, for sure, there's a there is algos scraping like a penny here and there on bonds when I was trading them on an exchange,
- SPEAKER2 20:46 How confident would you be in the ability of people like regulators and maybe compliance staff to identify potential issues?
- SPEAKER1 20:59 I mean, I guess unfortunately, I have to say I'm not very confident because, you know, like you just know, the high frequency trading exists, and they hide behind the fact that oil provides extra liquidity in the market. But come on, it doesn't provide excellent liquidity in the market is just scrapes a little bit of extra money out of the people that are really doing the transactions is my view of that type of behaviour when it comes to the high frequency stocks.
- SPEAKER2 21:31 One of the things that we have in the U.K., our regulator has been very hot on trying to obviously deter traditional traders, brokers from poor behaviour. Yeah, for the use of traditional tools like discipline and things like this. But the but on the flip side of that, they've also tried to incentivise good behaviour by use of remuneration in particular. So, if you do something above and beyond to try and reduce risk, help markets function effectively or whatever, that this is actually a positive reflection in your variable remuneration or other similar initiatives. Now where you're sitting and I mean, is there possibility that that kind of thinking where the human being is always liable is always going to be? It possible to incentivize them as maybe going to disappear as a result of. You know, these changes to the markets?

- SPEAKER1 22:54 This is a very interesting. Concept, I mean. I'm not sure this is applicable in my specific market or how you would apply that, I would like to think that they would definitely consider some sort of system like that. I just I don't know how you would get the application of that, but I mean, certainly compensation to incentivize proper behaviour in the market. You know, I just. I honestly feel a lot of the business is moving to like non transparency instead of transparency. So, like in our markets, you know, you used to actually trade with another counterparty. So, your name was at stake. Your reputation is at stake when you're trading with a counterparty, but it's slowly moving to where you are just all trade to a clearing house. So, the counterparty sits, you know, your counterparty is anonymous because you face a clearinghouse. And that's where all of this business is going. Which, you know, when it's when it's anonymous, it's much easier to have poor behaviour than improper behaviour. And I'm kind of going off track your original question. Yes, yes. It just kind of doesn't seem like there's actually much going on to incentivize good behaviour. Well, you know, if there was if there was a remuneration for incentivizing good behaviour in the market, I mean, obviously, I think that would be a good thing. I mean, obviously, I in our markets like some and it's not computer driven, but I mean, I feel that market manipulation happens a lot and people just kind of get away with it or accept it, which is kind of scary.
- SPEAKER2 24:46 Why do you think they can't wave it out of interest?
- SPEAKER1 24:49 Just because I think it's viewed as acceptable in a lot of instances or like, you know, you don't really know because like, you know, a lot of this is LCH, a lot of this is anonymous. You don't know who's putting up prices were just I'm saying, like, it'd be nice to see that, like, you know, a good word about it. That might be like some award for that. You're not going there. I have no idea how you would possibly implement that, but definitely, definitely might have an impact. But I mean, again, it's kind of going on this is kind of just market behaviour, which I feel is not tied at all to like the algo trading part of it and our business. This is just, you know, the people aspect to it. Which, to be honest, like I don't know what it was like 15, 20 years ago, I think it's actually come a long way, but it still exists, unfortunately. I mean, from the stories I hear from, you know, the more senior people, it used to be a lot worse than it was these days. But I mean, I think that's also. A matter that financial markets are just much increasingly more liquid now, so it's much easier for people to get done what they need to get done. In the market today than it was a long time ago, so, you know, it could just be the appearance of getting better or whatnot.
- SPEAKER2 26:09 Do you see that with some of the clients that use algorithms? Do you see any sort of correlations in terms of the geographies that they hail from, in terms of their levels of deployment?
- SPEAKER1 26:25 And they come from the major financial capitals of the world Primarily, like, you know, from New York and London would be those accounts, I don't know, you know, obviously I don't know if the research is getting done anywhere else, but I mean, I would say that New York and London are kind of at the cutting edge of these types of strategies.

SPEAKER2 26:52 We have, [in] the markets that I've most been involved in, especially around commodities, we have a lot of Chinese participants.

SPEAKER1 27:04 Interesting.

SPEAKER2 27:05 And we noticed that their approach is very different to traditional European hedger.

SPEAKER1 27:13 Just rate futures and the rate futures markets, but there are a lot of that, there are you know, there's activity out of like East Asia. Not necessarily out of China, but.

SPEAKER2 27:29 And quite often they just want to trade; they don't really want a lot of contact with the desks like. And we have you know; I've seen a lot of businesses which offer sort of API access where the client has some delegated form of platform access to an unlikely that even aware of as a business. And these guys are sitting in their bedroom somewhere, you know, and they might go and stick some sort of algorithmic functionality onto the thing that they're using to send orders that hasn't been conformance tested, hasn't really been for any systems or controls and yeah, poses some interesting risks, so, I mean, that sounds like a...

SPEAKER1 28:24 There's definitely a lot of like honestly, like I for some reason, I just can't think about this ever happening in our markets. But like I said, like, you know, I've been focusing more on my answers in terms of like our market making decided the OTC product. But we do use a lot of listed interest rate type futures and buying futures to hedge. But I mean, there's definitely I mean, I am circling back to your question of have you seen evidence of it and it's like whenever you see a large order go through in something, it just completely overwhelms the market and like everything just starts moving like a knock-on effect. And there's like that can happen for no fundamental, like macroeconomic reason or whatnot. It's just because, you know, all the orders were probably algo based or at least a very good portion of them.

SPEAKER2 29:22 And I mean, do you think when they're doing that, is that any sort of rhyme or reason behind it like that targeting sound?

SPEAKER1 29:28 Just like one like OK, comes like on a phone call or whatever, and then you decide to like, you know. So, one interest rate future, one product. Then they all follow suit, like it's like if your order overwhelms the market, like it's just, you know, it's off to the races.

SPEAKER2 29:51 Is there much talk amongst, you know, maybe yourself and your peers in other firms? Is there much sort of collaboration in terms of in terms of anti-competitive stuff? Because obviously you can't do that, but in terms of maybe identifying some of the challenges that new types of trading might bring to what you do or you know, or is it is it pretty much?

SPEAKER1 30:20 No, not really. It's kind of kept tight, like haven't worked at a couple of different firms. I mean, when you move to the other firm, they always really want to find out, like, how this was handled at another firm. Like, it's very tight. Let the firms all kind of operate their own way. I mean, you know, there's the fear of, like, you know, you don't really want to talk about it with other firms because that could be viewed as collusion. And I

mean, you're also competitors, too. So, like any advantages you have, you want to keep as well. So, it's really not discussed amongst firms and peers.

- SPEAKER2 30:56 And do you think that [their] building these algorithmic tools themselves or they're using vendor solutions, do you think?
- SPEAKER1 31:11 I think. It's a very good question. I mean, I'd love to know, but having dealt with some of the bigger ones in the world, I'm pretty sure they are more like in terms of like the percentage like the one inquiry that we see is coming from homegrown grown algos for sure. Like I'm talking the ratio is probably like ninety-five to ninety nine percent of the duration risk that we see comes through from like a CTA type account is coming from. You know, their own algorithms, not like outsourced ones.
- SPEAKER2 31:52 What would you perceive to be the sort of merits of an industry led sort of approach to sort of maybe identifying and mitigating the risks associated with writing versus one that's top down from sort of legislation and regulation.
- SPEAKER1 32:15 So, an industry approach to mitigate the risks. Yeah, yeah, so again.
- SPEAKER2 32:23 So, we have like these industry groups, so, for example, one of the ones that we have that's very prominent over here is the FIA, Futures Industry Association, there is also ISDA should be aware of. And they have their own little groups, and they work, they work out stuff and they try to sell.
- SPEAKER1 32:40 So, like I said, so like on the OTC side of it, nobody's really concerned. There's kind of nothing going on to mitigate the risk. So, like on the side, we're like I make markets and whatnot, like on the futures side of it, where it's listed products. I would say, like, you know, the mitigation factor there is I feel that this is actually kept a lot of large clients away from doing futures for the exact issue that I've told you that I've mentioned, like on a couple of answers previously. First of all, it's almost impossible to tell at the moment that they're involved, but you just feel that the algorithms are involved in the futures also. I mean, it's also like any type of large order that goes through in the future seems to move the market more than if you're calling somebody up and dealing OTC. So, in our market and I mean, this is why I feel like everybody thought it's going to go electronic for 10 or 15 years, but the clients still feel they get a better price if they just call up at a dealer confidence and tell them what they want to do. If it's a large size trade and that they are trying to work it instead of like putting an order in the market, then the whole market moves against you, and you don't get what you want done at the price that you could have got done. If you just call somebody up the old school way, told them what you wanted to do, trusted them and got that done. So, I still think there's a big belief and a lot of the large players in the market, but that's the way to do it. And I think that keeps them out of interest rate futures where they could probably achieve the same goals and keeps them coming back in an OTC setting. And so, yeah, like if anything, I think the algorithms, you know, the volume numbers might look high, but I don't like the actual amount of end users. Using the futures is probably not as big as it could be because I think a lot of people are trying to steer away from them.

- SPEAKER2 34:43 Interesting. I mean, isn't that sort of undermining efficiency in the market you don't think?
- SPEAKER1 34:55 I mean, whenever I use futures, I don't have to disclose everything I want to do. I can do a little bit at a time. Yeah. I mean, I honestly, I very rarely disclose anything I want to do first is like they like to call up the dealer and they think the dealer is more efficient. It's, I would say the way that it is right now. You know, from a technical perspective, no, it's not as efficient. Would be nice if everybody could anonymously put into the middle of the real market participants, the ones who actually need to move risk that you hedge. You know, as I said to starting a bank job is really to try and pair off clients that want to speculate or hedge risk or whatnot. If all the clients could put, you know, what they want to do or what they need to do in the middle and at what price they need to do it or want to do it and then make it all anonymously. Look at it. Yeah, that would be great. But the problem is, as soon as you go going to an exchange and it's full of like algos and whatnot, they don't trust doing that anymore because they don't trust everybody who's looking at their little ticket there. So, they still want to partner with the dealers who they trust to go around and have that discussion with all the clients and then pair off the clients that are at work that, you know, are willing to transact at any given level. I mean, I feel that that's why at our market, you know, there's still a trading floor with humans and why people still pick up the phone or go on a chat confidentially, tell you what they want to do instead of using computers to execute your strategy.
- SPEAKER2 36:31 So, much like that even though you might not be using the algorithms yourselves. It's almost like they're still their presence is shaping your behaviours?
- SPEAKER1 36:43 I just I mean, yeah, like a lot of accounts shy away from using futures. But like, if I need to move to two hundred thousand K of duration. Right. I can't put that order in a future. It's going to move the market too much like everybody will see and it's going to move the market. So, I'm actually, you know, the market standard is I'm allowed to do have a little bit size I want at a time versus a client wants to do that type of size. Like they also know they can't go into futures and do that, but they're happy to tell like their trusted dealers. But they need to get something done or the like the dealer makes a price for that size right there. And they take the risk of like what they're going to offload. Interesting.
- SPEAKER2 37:36 Finally, what would your principal concerns for the future be? In fact, the presence of this activism?
- SPEAKER1 37:47 I mean, my concern right now is the sizing of the trade, so flip back like not into the futures market, but back to the OTC bit where, you know, computers are spitting out orders to execution teams who come to us on chats and telephones, execute the orders on an OTC product or whatnot. My concern is like the sizing and like this self-fulfilling nature of a lot of the strategies. A lot of the strategies are based on momentum. If you get your sizing wrong and you trade, your sizes overwhelm the market. So, you know, it's like, you know. Back in, rates now are trending lower interest rates, so people want

to keep buying or receiving fixed in the long end. Well, if your size is too big and you keep doing that and there's no offsetting flow, your strategy, the momentum strategy, your rate goes lower every day. It looks like you're doing amazing, but it's only going lower because you're the only one acting. They're moving the rate lower. So how does the computer not know how to do that? How does the algorithm know that their size is appropriate for that market not to own? It's not generating its own signals to keep doing this trade because, you know, the data looks like it's good. But you're comparing against data at other points in times where there was a lot more stuff going on. Now, you're the only thing going on in that, you know, in that area. So, of course, it looks like you're doing fine. You're making money. You keep going, going, going. I just I worry about their measurement of liquidity and the size of their trades and how they revisit that and keep track of that.

SPEAKER2 39:30 It was basically like a feedback loop, isn't it, feedback loop?

SPEAKER1 39:33 Yes, this is exactly what I think is going on in some markets. And then it goes back to like you are, the saying goes, the other ones doing the same thing. So, then you get several accounts doing the same thing with the same type of strategies. It's a kind of feeding on itself, but if the overwhelming volume in that market at that point in time, when someone comes in the other way and is like a non-algorithmic decision to make, it needs to go the other way and pick sides and put a stop to it. All of a sudden, you know, all the algos kind of go haywire. I'm like, oh, you know, we've got to go do the other thing and then it's a rush to the exits the other way. So, in the long term, it's just going to create this massive volatility event. I fear in the market. Because like the whole way, everything looks like it's turning along great, like you can't tell that your size is too big for the market because it's slowly moving your way. And then all of a sudden, it's going to start snapping the other way. So, I mean, just the more it's like the same minute anything, right, the more you apply one strategy to something, it's probably better to take the other side. So, the strategy becomes overbearing in the market like it's not going to turn out well.

SPEAKER2 40:46 So, if you were a regulator, I mean, what would you do to try and mitigate this risk?

SPEAKER1 40:54 To be honest like, you're very right. Like in terms of like the bank, you know, we we're not a hedge fund. We don't really carry that much risk at the end of the day. But at the end of the day, like. Yeah. Interest rates, you know, the lots of things in the world depend on interest rates, and if you have these accounts that are basically through their strategies, moving the market and nobody can really tell it can have this massive impact. So, it could very well see a point where this type of behaviour becomes regulated from a regulator. Now are regulators sophisticated enough to pick up on this and what can they do about it? That is a very interesting question and I mean, to be honest on this, this call I cannot come up with, like what, you know, they should start doing to think about it, but I do feel that over the last two years, this problem is getting worse and worse, and like I said, it's not always a problem because a lot of times they actually want to do the opposite of what all the clients want to do. So, then it's fine, but you don't always know that. So, it's hard to tell when institutional account, you know,

you can do all the business you want now because it's actually there's an offset in the market or you restrict how much they want to do. So, let's take the flip side of like, you know, these accounts do sometimes provide an offset to real flows going through the market. And everybody loves those accounts during those times. It's the times when that's not the case. So, it's very hard for regular to come in and say, oh, now you can't trade that. But oh, yeah, there's actually an offset. You can. So, I mean, it's a very tough situation. I don't know the answer to that.

SPEAKER2 42:45 Yeah, in Europe, they've tried to introduce the sort of market maker obligations. Because what they were finding was that in certain markets, pretty similar to what you've said, yeah, there's not a "normal", quote unquote normal...Interesting, but a norm in normal circumstances. Yeah, that is a sort of one sided, sort of maybe uninformed activity. And then on the other side, you've got the either the informed we've got this sort of high frequency activity, yet they're matched up and those high frequency traders are providing liquidity to the uninformed traders and stuff at the time of abnormal conditions. However, when the market takes a turn, what they were finding is a lot of liquidity flight because those HFT and stuff were just saying, well, actually, you know what, we're not interested now, which is a shop for a few hours. And then you have a bit of a spiral because there's no liquidity anymore. So, they actually brought, and they actually brought in some rules to try and force certain types of high frequency traders to actually they've got to commit to providing liquidity, even in times of stress. But they haven't been called upon yet. I don't believe so it's not being tested whether this actually doesn't work. Yes. Well, thank you very much for your time.