

### ***Interview with a regulator #3***

- SPEAKER1 00:03 OK, so just to start, could you just give me a sort of summary of what your experience has been in markets, the sort of roles you've performed and, you know, the sort of asset classes you've been involved with?
- SPEAKER2 00:23 Well, my background primarily started off in the physical markets working for a mining company, the metals that they dealt in primarily were nickel, copper and then some precious metals as a secondary, and they were sold things on a global basis. So, I worked in the marketing and sales department there and had sort of global experience traveling and meeting clients and global basis. It was in the specialty area. So, this was within batteries, powder, metal parts and semiconductor industries and the battery industry before it became sort of sexy as it is now. So, nickel metal hydride, nickel cadmium and then the lithium nickel hydroxides. So, I worked for them for quite a bit and then was transferred to from Canada, where they were based in London, worked for them. And then I moved from there into a research business doing research on nickel and stainless steel. From there, I moved to an exchange, the LME, and was doing research there, but working on the development and listing of new products, which brought me into the cobalt carbon steel listing of products for those markets. And from there, I moved to another exchange and look to develop sort of a comprehensive suite of derivatives that linked the supply chain within the ferrous industry. So, from precursory, so semi-finished products like iron ore through to or the raw materials of iron ore and coking coal into semi-finished like billets and slab rebar into finished downstream products, so hot rolled coil and stuff like that. And then from there, I moved to a broker looking to broker those types of products. And then now I'm working at the at a regulator where I'm looking at the wholesale market, the flexible brokers there and we just get allocated to a variety of different cases, looking anything from the financial through to their culture and governance arrangements. So, I've got quite a. Quite a large spread of experience.
- SPEAKER1 03:13 And I mean, it's interesting your background in the physical, because obviously in the well, currently there's this quite big debate raging, and we've had the consultation papers about the future of the. Yeah. And the market structure and the politics around, you know, are we going to be there for the physical uses? Are we being we wanting to open ourselves up to sort of new types of market participants, make it more attractive for them to trade in your experience, since you've sort of come to the market, how, if at all, have sort of firms and brokers adapted to the two electrifications? Is it being something which is being very marked and very noticeable to you? I mean, when you were creating your products, derivative products, was that in your mind about, you know, we need to make sure there's enough liquidity there for, you know, a different type of

market participants to come in? Or is it very much focused on the physical players?

SPEAKER2 04:18 Yeah, well, the LME, it was focused on the physical players where the risk sat. The issue we had with them is that they're the least good place to sort of build a contract around, they're not going to provide the liquidity, so you need the financial players, the LME was quite good initially and that they were member owned, so they kind of mitigated risk and they spread it around amongst themselves. You had in-house market makers, whereas when I was at the CME, you didn't really have that. Trying to sell the concept was a much harder thing to do, and especially if you are trying to get banks and funds to onboard new customers and new markets isn't something that they necessarily wanted to do, and we weren't really set up to pay them. The market maker type of fees, the way that you could get the LME know off the board and people are on the board agree to do something, they threw their weight behind it. And you've got market exposure. You got access to their research and their sales teams and their warehouse network. The problem with the LME when I was there is, is that everything had to be done on a physically delivered basis because the CAT1 members in the warehouses had played such a heavy role in on the board. So, if you tried to do something that was just financially settled. Went around them, circumvented them, they would vote against it, so you were kind of constrained by having a physically delivered product and that that constrain the enemy and it constrained what I could do. I didn't have that constraint that at the CME. In fact, they were. They didn't want really warehousing that because there's a bit of pain to have to get the oversight on it, but they wanted things more, more OTC type of products that you could people that were already trading it, you could just clear it. And then once you build up a certain liquidity and added in market maker programs, you could get these people to trade on a screen. So, like on their Globex. But you have to do that. Unlike at the LME where you would get in the house market makers that would paint the screen. You couldn't count on that at the CME. The members weren't necessarily going to be behind it so we won't have to go the route to build a certain amount of clearing , and that can you can put things on the screen , which then you would have a fight with the brokers who supported you on the OK side , that they didn't want things on a screen . They wanted them to be traded off screen and then just cleared.

SPEAKER1 07:34 So why was that? Why were they worried about new trading on the screen?

SPEAKER2 07:37 They don't trade on the screen, and they didn't want liquidity to migrate from OTC and circumvent them. They wanted everything OTC to be brokered through them and just cleared. But once the price started getting put up on a screen, they kind of lost control over parts of the market and at least parts of what they considered to be the value chain. So, when it was

just OTC, you would need a certain number of brokers. You need their marks and forward curves to settle the market. When you have things that are that are cleared on a GLOBEX and that you really you know, you have the price, the price is there, and it trades out as far as it does. And you can then get financial players that would just trade the price. They knew nothing about the product, the OTC market, really. You had to be in the industry.

SPEAKER1 08:29 Yeah, so it's almost similar to an equities market where you have the sort of fundamental traders and then you've got these traders that are sort of quantitative to that. Yeah, that's right.

SPEAKER2 08:43 That's right. And I mean, if there's pricing, there's volume on it on an electronic screen, you will attract funds to traders, anybody, and they'll bring other liquidity. And that's a great thing for that market. But it isn't necessarily great for a broker because they don't need a broker to do that. They just access the screen. But if you're real participants, you need to access a broker if it's not up on the screen.

SPEAKER1 09:16 And I remember when I first moved to an LME broker back in 2007, I think on her around that time there was a second iteration of Select, which would widen participation from more sort of direct and indirect clients. And there was a lot of sort of. Commotion from some of the sort of traditional brokers and some of the physical players as well, they were a bit worried that that might diversify , get the power a little bit away from them. Is it inevitable that we are going to end up with, you know, fewer of those traditional brokers? I might get cold in the morning and talk about the football and then they go on to the market commentary and all that as the sort of demographic shifts....Yeah, I mean, is that something that you've noticed and seen yourself ?

SPEAKER2 10:23 Yeah, I think so. I mean, the way I look at it now and I'm trying to bring the mindset to the regulator is that brokers are the right companies. Now, whoever's got the best infrastructure, the best platform is going to attract the best clients or the bigger clients. And a lot of the client base that you're looking to deal with are, you know, they don't speak English and you just don't need to speak English. If you're trading numbers and just trading, you're trading volume and trading numbers. So, if you're if you've if you've got a screen and you can see, you know, you look at it like a trade port or something along those lines, you can see where the price is. You see the volume and depth of the market you can trade on. You can execute on that. The same thing if you can if you look at a clear part and you've got access to it, you can see that as well. I saw that at the LME. It was it was a big concern. The CEO at the time and I think it was the old version of Select. It was structured so that you couldn't physically deliver contracts, OTC products. You couldn't just pump in an index price. It to be physically delivered and connected to the warehouse. And I was constantly looking at

the numbers to see what the volume of electronic trading is coming across from select versus in the Ring. And that was a big concern and preoccupation with the market, not just because it went through the Ring, the better pricing was there, but also that was the structure of the market of the LME, it was centred around the physical market. But I think everybody knew that, that these markets were becoming electronic. You know, there was more and more electrification in the market. And that's where you're going to get the volumes coming through in the new participants. And that having these insular sorts of markets like the LME or like the Baltic exchange in that they probably have had their day. It's the search for liquidity. And you don't really care who's accessing it so much, as long as they're bringing liquidity and...

SPEAKER1 12:53 In other markets, the concept of direct electronic access, which still has a degree of intermediation from the broker versus sponsored access, where your broker arranges for you to have your own keys effectively, which you would trade on. I mean, that that's quite popular, I think, and again, in quite a few securities markets, but is that something which you've seen sort of develop and take off?

SPEAKER2 13:29 I think that's been developing for a long time. Even at the LME, you know, you can only access Select if you are a member. But all of the members would have their own limited Select screen. So, the client actually thought that they were trading directly with the LME, not realizing they were going through a Stone X or another firm. And they wear the risk really. As far as the LME was concerned, sits with the member. But the physical or the financial party thought that they were trading directly on Select. And in fact, they're not, they're just trading through an intermediate screen that gets transferred over to the members select screen that gets put onto Select onto the exchange. You know, they don't even realize what's going on.

SPEAKER1 14:26 But that members still got members still risking that right in the back?

SPEAKER2 14:30 That's right. The member is still risking it. But if a problem were to happen to the LME goes after the LME member, the CAT 1 or 2 or CAT 4 member, it doesn't go after the downstream members. It's up to the LME member to go after the downstream trader. But in terms of what the downstream trader, the little steel mill or the little copper refiner who's trading it themselves instead electronically, they think that they're trading on Select where they're not, they're trading on the member's DMA version of Select that gets plugged in to Select. And they're trading, really. But the risk is held by the LME member.

SPEAKER1 15:18 I mean, MIFID has clearly delineated between sort of three types of algorithms which investment firms could deploy. So, they had the small to the very basics. Smart order router, which you probably know, doesn't

attract that much regulation. Some people argue it should attract more. But it's at the lower end of the scale and I haven't seen too much deployment of that in the commodities markets. Just given that there's not the same level of fragmentation as you have in securities where you could be trading the same stock or sitting across multiple markets. Then there's the execution enhancement sort of tools where you have to, you know, things like iceberg orders, auto spreads or that type of stuff, which effectively are making more efficient what human beings used to probably do themselves manually and also helping them to manage flows discretely and things like this. And then you've got all the way out the other end of the scale. You've got the sort of investment decision algorithms with where the machine sort of looking at, I don't know, Donald Trump's tweets saying, you know, oh, look, this sanction may push the aluminium price up because it just sanctioned Rusal or something like this. And that is going off in trading. In your experience, what do you think the balance is between those types of deployments? Do you think that the market, since, you know, the metals markets or commodities markets, you think they sit in in one of those camps and are using more of them predominantly, or do you think there's a sort of even spread between them?

SPEAKER2 17:03 I think the more steel and metals is still more predominantly fundamentalist type traders look at fundamental data, you know, supply demand analysis, because it's maybe a bit different in oil, but you don't have the same liquidity in those markets that you would with equities and eFX. And that's where people are just trading on sentiment and they're looking at their technical traders. Right. You're not going to have as many technical traders in metals because there is a fundamental basis for it in the liquidity is smaller. And I think the physical guys do can play a bigger role in that market. They could suddenly, you know, if the price is quite high, some of them could suddenly deliver in or really commit to something on the market where there's so much liquidity in others that you might get your icebergs and stuff like that. But it still ends up being pretty, pretty small. So, I think the metals market, it's probably more to the first example that you said and less spread out. But I can see. And here, here's I think some of the concern that members have is if you look in the Chinese market, it involved a bit differently where on the Shanghai Futures Exchange, there were no physical participants. In fact, when they were the government state owned, the CSRC prevented any physically owned or state-owned enterprises from hedging and trading on the market. So, it was all small. You know, Ma and pa kind of traders in their house trading on the copper market. And now that there were huge amounts of people, people there are contract sizes were fairly small, so they could trade the monthly allowances if they wanted on those markets, and that's what they did. Now that the state enterprises are getting into that market there, the liquidity continues to build up. And I

think there's a lot of interest in Western exchanges and trying to tap into that consumer, that small consumer trading market in China.

SPEAKER1 19:35 I certainly mean that that does match my experience because, you know, my experience of sort of indirect business is quite often a British broker might face a Hong Kong extension of what is a mainland Chinese business. And they have lots of their own punters behind them. As I said, a lot more sort of retail type sponsors, but they're trying to come through to us as they came through to us as genuine market trades on a metal exchange or something. Yeah, and a lot of these people that quite young as well, and then they're trying to do new things and maybe on API access, you know, trying out things which. Maybe in the U.K., you know, there's a sort of different level of discipline with conformance testing and all this kind of stuff. I mean, how much of a challenge do you think that poses to regulators and exchanges? I mean, because obviously brokers and intermediaries, they can only do so much. Right. And, you know, this is not something that keeps regulators up at night?

SPEAKER2 20:49 Well, I think it's a big part of what prevented the evolution of some products and some contracts sold, the ones that I tried to list at the CME for example, I couldn't get the counter parties on, they'd never pass through regulation. But at least in Western exchanges, what I found is, is a lot of the counter parties would deal on SGX. And the reason is this. SGX is government owned and the government kind of backs everything up. And the questions that were asked as to who's behind it wasn't there. So, I found it. You would you'd have lots of small Chinese companies, brokers being set up in Singapore. And they were offshoots of brokers that were physical brokers in mainland China who would have a physical broker and then they'd have 25 or 30. Punters that were would be trading on the physical price in China and then these guys would pass those orders from broker to broker and onto SGX when we tried to do that on the CME, there are none of this or even on the LME unless you went through a Chinese state owned entity, you could never get those entities on. You just couldn't get the information so you wouldn't know the passport. You couldn't get the bank account details. And in the West, we'd be very concerned about them politically exposed person. So, anybody in China is a PEP potentially. And so, unless you were dealing with a big state government owned entity, you couldn't on board them as a Westerner and deal with them. So, I think what the LME tried to do is it's looking to bring on some Chinese state-owned entities. And they did. You had some bio different banks here and then the. For example, the one who bought Outstand Standard Bank so they could on board all of the Chinese clients because they did in China, and they would say that was OK for the for the regulators. But if you tried to if you had a Western entity tried to on board them. It just wasn't going to happen in the what the concern that we have, or I have as a regulator is kind of our some

of these big Chinese owned entities, are they buying Western companies to circumvent the normal channel of becoming a regulator, of becoming a regulated entity? Because when I try again , when I tried to set up my this Western this brokerage here in the UK , which was an arm of a Chinese brokerage firm based in Shanghai , and then we had an outfit in Singapore , in Singapore , you know , just trying to get the information in order to get to become regulated here . The amount of information was there's no way I could do it. It was the best way for that entity to get a footprint. To do business here in London was actually just to buy a regulated entity already. So, they would buy that regulation and then they would circumvent the rules in that way. And that's the issue that as a regulator that that we have as is enterprises not going through the regular channel, but just buying an entity here or if you're using an R type of arrangement. So, you kind of lose track of what is exactly going on.

SPEAKER1 24:47 It's interesting because, I mean, there's always been obviously conduct risk and trading, there's always been a sort of a sort of inseparable twins, really. And I think most people on the street, when they think of, while they wouldn't do it, is conduct risk. When they think of some misdemeanours, they probably think of Nick Leeson and then people like that in the army, probably most famously, we had Hamanaka and the squeezers, Mr. Five Percent and everything. Do you think that the electrification of trading was slower moving perhaps in the LME than other markets? Do you think that is changing the types of risk that the market is exposed to, or is it really just sort of rehashing pre-existing conduct already there, amplifying them or mitigating them in some way?

SPEAKER2 25:39 I think it may give regulators a false sense of security because you think, oh, I can see the numbers, I see where the numbers are coming from, but they don't necessarily know the backroom dealings that have been going on. So, in one way, you think you're adding light to something. So, you think that you think you're seeing more of a picture and that it's an open exercise and that the prices there and the volume so anybody can come in and can trade on that. But, you know, will there be the are you actually creating dark pools that are on the side? And I personally. I think so. Maybe in metals, maybe in other markets it's not the same. But in metals, I mean, I know how the business gets done over in Asia. And it's not on the computer screen. It's very much in the KTV and all these other relationships people have. So, the regulators wanting to push that above ground and put it on an electronic screen, it looks like a good thing, but it's also a way for some of these bad actors to mask maybe what they're doing.

SPEAKER1 26:54 And I mean, from your sort of perception of how a regulator supervises, you know, firms in the wholesale trading sort of area, you know, with the different brokers and stuff, I mean, a lot of these brokers are very and there's a mixture of firms. But some of these brokers, especially the

European ones, they are really the products of empire history. You know, they've got a lot of history behind them and everything. Do you think that they're sort of. Systems and controls, and they are ready for. And so, in front of these types of changes in the market, or do you see a lot of variances in the sort of levels of sophistication that we're brokers are out and sort of trying to make some of these challenges?

SPEAKER2 27:37 Yeah, there are lots of variation here. I think in the market now, you're going to see maybe a consolidation because, again, you're there having to be committee companies. And the requirements that that the regulators are asking for are increasing due diligence, at least on the face of it. Is there we're looking to shut down, say, appointed representatives who don't like that kind of model where you're sort of outsourcing your kind of responsibility. At least that's the way I look at it. And just letting anybody trade on you on your regulation and making the assumption that they're doing all of the due diligence and that I think we're looking to clamp down on that. And we want more of. Direct people access in the market, direct with the broker, not through our type of arrangements, but that, of course, is going to be costly and the systems and controls are going to be more costly. I don't think people be able to keep up with that. And I think you'd probably see a consolidation. The costs will get to the point where some of these smaller brokers, they'll have to either sell or they'll have to go into very niche markets where it's just doesn't pay for the bigger players to participate because there just isn't liquidity.

SPEAKER1 29:09 Do you think the senior management of firms of more traditional firms in particular today, have they got a real grasp of what some of these sorts of structural changes are? Because a lot of them seem to me and myself in my time working in the markets. There's a lot that come from sort of classical sales or trading backgrounds. And now things are moving at such a fast pace, with these new regulations coming out almost every month, it seems? Is new technology coming out? You know, yesterday, the sense that firms in the investment firm sector, do you think they're sort of on top of the challenges that they face? Or is it just a constant struggle just to sort of keep your head above the water?

SPEAKER2 29:56 I think it's a constant struggle. The regulations are desperate. They're changing. It isn't necessarily harmonised. I'll give you an example of it. I mean, you saw the gold markets, what happened there. And you had I mean, even Scotiabank gets out of the gold market, they made a wrong bet on gold. In the end, they treated gold as though it was it was like a currency, and it was sitting in one desk. And then , of course , at the one time in the history of a trader where you needed to actually have an understanding of the physical market was when you had this covid crisis hit and the gold price went all over the place and they got burned for huge amounts and they were the only ones. Just because they had you have a head, a desk, and you



have people in management who understand trading and they think everything trades the same, they don't understand the fundamentals in the background to it. And you don't like 90 percent of the time you don't need to. But the one time that you do need to, they are scrambling around, trying to find out what's going on.

SPEAKER1 31:09 I mean, are you seeing the profile of people with the type of people that have worked in firm, does that slowly changing in terms of the backgrounds that they have?

SPEAKER2 31:19 Yeah, I think you're looking at more technical type of people who just trade based on just the pricing and stuff, I don't think the fundamentals are there. The. You know, I don't think that that's the thing that is as important to them, it's all of them. It's more of the mechanics and how the systems in that work and regulation, rather than needing to know what the fundamentals of the market are.

SPEAKER1 31:55 Can you see any sort of merit....?I mean, FCA as an example, has in the rulebook for certain types of regulated activities. So, getting personalised advice, you have to take certain qualifications before you're allowed to do that. And you've got to prove that you've taken it from one of the approved organisations. Do you think we might head to a time where , because of how complicated technology is becoming and certainly with things like the advent of artificial intelligence and stuff like that , as that starts to enter certain markets , do you think there might be any merit in sort of saying, well , OK , senior people in certain positions in organisations have to demonstrate qualifications in understanding certain technologies and things like that ? You think that could happen?

SPEAKER2 32:46 I think so, under SMCR Definitely. It's one thing that I tried to push through here with some of the firms that I look at is to make sure on the board that they have an expert. So, I've gotten a bit of pushback here about that, saying we should be pushing telecom firms about makeup of their board. But I've been increasingly arguing that brokers are becoming I.T. companies. It's all about the IT and when the IT shuts down and you can't access the market. That's the problem you need. You need somebody who understands that risk there, and so I've been advocating here that on every board of at least certainly the large brokers that we deal with that they should have ahead of it. That is prominent in a position that sits on and understands those risks to the firm. And especially an example that I was giving was, you know, these Russian cyber-attacks where they get hold of clients' accounts, and they freeze it, and you have to pay them off that you've seen it happened in the US. God knows how many of them that we haven't been aware of. That's a real risk and it's not a risk that you would have had happened for, but it's a risk now that somebody accesses your computer trading screen and locks it out and can do whatever the heck,

they want on it. So those are emerging risks that I think are the brokers don't have a firm handle on, banks are getting better at it, hedge funds are certainly aware of it. Brokers haven't been, but I think they're starting to realize that, especially the big ones who are moving more into global franchising and consumers are going to start to probably demand that level of sophistication. So, I again, I think you're as electrification grows, the competency is expected as well.

SPEAKER1 34:53 It's interesting that one of the things I always found interesting when I was in the city myself is. How often you see enforcement notices from US exchanges, US regulators in relation to trading incidents, it could be that it was something which was a systems control failure. So, somebody had some sort of algorithm which malfunctioned and then, of course, disrupted by hitting those voters off. Or it could be that it was a deliberate sort of layering, spoofing. And you see the CME almost every certainly every quarter, they would do some sort of case where they were fighting somebody and then suspending them for 90 days, then tend to be banned for life. It seems so much that the only one I can remember in the UK, really from the sort of commodity side, was the Michael Coscia case. I don't know if you're familiar with that one where he was sort of, I think that was because it was an American led initiative and he was done. He had a firm which I think was as well, he claimed it wasn't. But that was found sort of layering and spoofing. And I think the UK authorities took action there as well. I mean, what do you think there is that sort of difference in the sort of hit rate? Is it because the Americans do it differently? Is it because actually, you know, firms in the UK are better equipped or that they've got more sophisticated controls? Is it being it something maybe it's a resource issue?

SPEAKER2 36:35 Oh, I guess maybe in the UK is just got maybe a smaller footprint and the people involved in these types of markets are maybe a bit more sophisticated. The US just may be a huge, greater variety of participants. I notice and if you look at some of the in the crypto space or the recent shenanigans that have been going on with Game stock and things like this, I mean, that really took off in the US. It didn't so much take off here. Maybe it's just the nature of the character of the individuals in the US, the bigger risk takers and people who get involved more readily in these types of things. The same thing is in China, the average individual has got a much greater appetite for gambling. And then we would hear and that's....in other European countries, it's just it seems to be the nature of the way things are done or the economy works.

SPEAKER1 37:46 How do you say I mean, with those hosts, again, with those sort of forest clients that might be building things, doing things, changing things with the with their electronic access? I mean, I don't believe there's any requirement much to actually train clients and also indirect clients, which are even bigger challenge, do you think that something which might come in the future

from our actual requirement to say , well , before you gain access to this market , you know , to demonstrate that you understand , but then even then , how effective is that going to be ? Because e-learning is not great, and you've got different languages and cultures and stuff. I mean. Well, I found that to be a big challenge myself.

SPEAKER2 38:39 Yeah, well, I think that it's definitely going to happen. And I mean, you know, the old the adage that they use in the US is as if it moves tax it. If it still moves regulate it, if it stops moving, subsidize it. Governments like that kind of methodology. And it's a way to give them make them feel comfortable and add to the population that they're actually in control of something whether they understand it or not, shows that they're doing something you have to get regulated. And so. Competence to just do anything these days, and I could see that happening. I could see that being something that regulators put more and more into the market. Make sure that that your employees are fully trained and everything else, but then moving downstream, make sure that your clients really know the risks. Do they really understand the risks? That that seems to be a big thing here in Europe. That. That that you know, we look to do is try to there's a bit more of a nanny state here than, say, in some other places. But I see that. Yeah, definitely. Definitely happening as things get more and more complex and that governments and regulators look to try to protect the population, particularly on the retail side. You know, from scams and stuff like that, so to gain access to these types of things, I think I would see that happening.

SPEAKER1 40:17 I mean, again, if MIFID II brought in short code and stuff so they've got to put their PII into whatever trade platform they're using. So that prints to the effectively to the transaction reports which go to the regulator T+1 and give it sort of fingerprint as to who's been doing what in the market. But again, you know, if you've got indirect sort of relationships and even longer chains, you're not necessarily going to know from that who the actual source of a problem is. And I think from an intermediary, it's a very, very big headache because you could try to stop something and then you're your direct client may cut that person off, but then you might have another direct client that allows them to come onto their platform again. And the only way you're going to identify them is through similar patterns of trading. There's no real way of sort of forensically examining from their actual ID or anything. Is that something which concerns the regulator as well? And I mean, how do you think I mean, how do we stop that? How do we deal with that, given all the data protection constraints, everything that exists?

SPEAKER2 41:31 I mean, with the shutdown here, we've been constrained in what we can do , so I think there's going to be add after the fact looking at trading patterns and that one of the concerns that I have here is , is this how much personal , like personal account dealing has been going on off the back of trading ? And so, when you look at gold or what happened with WTI in oil. You'll see

people working from home, you didn't have the same systems and controls that you would normally have, so you're just wondering how many people traded through their own brokerage accounts or trade or groups of friends got together and pooled money together, traded based on the inside information? I don't know. I think we're going to look at those trading patterns and analyse them. And that'll be over the next few years that we start to maybe see any pattern. I don't know how you go about doing it other than to be more regulation coming in, about not using personal devices on trading floors. The monitoring people are monitoring now personal, you know, your personal devices and that which get into some privacy type issues, the firms, should firms have access to your WhatsApp or your other emails to make sure that you're not doing some things you shouldn't do? I don't know how they're going to tackle that.

SPEAKER1 43:04 I mean, how many of these firms actually deploy systems that they've developed themselves versus sort of vendor solutions? I mean, what's your sort of sense of that? Is it quite vendor oriented or are you seeing a lot of folks building in the house, a lot of their own?

SPEAKER2 43:25 I think that buying vendors, you know, to get the getting the experts to come in and to do it and do something bespoke is pretty difficult.

SPEAKER1 43:40 At the moment, I mean that that the vendors really are sort of quite a critical part of market infrastructure, but they're not directly regulated themselves. And I suppose, you know, there's the rules on outsourcing and things like that which do play a role. But the one challenge I can see with that is that if you have a vendor and I like CQG or something like this, and they're offering services to connect to European vendors, they might not be providing that platform directly to, you know, one of the British investment firms or something. They might be providing that directly to a client based in China or Vietnam or wherever. Yeah, I mean, could you foresee any interest in potentially bringing certain vendors into the regulatory perimeter?

SPEAKER2 44:36 Yeah, I could see that. Or at least asking if you're using a vendor, what how do you decide what vendor you're going to use with due diligence? Do you have the monitor X, Y and Z? I can see us asking questions about that. I mean, do we really have the skill set to be doing that? What do we know about these things in this area? You see there's quite a few people that have left and retired, some people that were old school have kind of gone. We've lost quite a bit of on the technical side, some good brains, people who knew who knew that we could have fed into this kind of project, the work. But all our investment here is going down the roads of data. We're becoming, you know, the big data crunch. We're turning, I think, away from using supervisory judgment, more towards looking at the data and preprogramming the systems to look for infractions and then go after. After firms that way, so

I could see there being a big appetite once we get this system up, up and really tried to quantify the harm at every level within the supply chain, if that makes any sense. Well, yeah, we're competent to do it.

SPEAKER1 46:10 Yeah, and that's the interesting point, because, of course, there's always been that power imbalance, I suppose, between well, to start with firms themselves who can pay people a lot of money. I mean, how do you I mean, how can a regulator compete with some of the salaries some of these quants get paid in some of these proprietary firms and stuff?

SPEAKER2 46:34 We can't. And even here, when I mean, I've got 20 years in the market, is anybody going to listen to me when I say something? No, because, I mean, we're going down a road of what do we think is important in that? So, we're looking at behaviour and a lot of the stuff that. You know. We're accused of becoming a woke regulator. What's the make-up of the board? What's the makeup of the client? What are the issues and things that they look at? And those are things that you can play around with forever. But they're not technical. And the market is becoming, I think, increasingly technical, so I don't think even the things that we're looking at as being important factors are reflective of the real risks and harms in the market.

SPEAKER1 47:32 Because that's the problem with vendors, I think, as well, because, you know, you could say to broker X, Y, Z as an example, I'll make sure that you do your due diligence on the vendor. And quite often the vendor would say "we'll give you an information pack with some stuff quite often based on an industry template". And it's the same thing they've given to pretty much all the other firms out there. And you, because you're not you don't have sight of the code. You have sort of, you know, the blueprints behind it, because that's obviously their proprietary information. You are limited in how much useful information you're going to get, which is probably, you know, not already in the public domain. I mean, and that's for me seems to be quite a persuasive argument, I think maybe in the future for. Maybe it's kind of similar to some of these audit firms, you know, used to go into firms, do audits to sort of say, well, did do they need to have I think it was a discussion a few years ago. Do they need to have some sort of regulatory responsibilities themselves? Just given the nature of what they're doing, and you know, how influential they are in the market.

SPEAKER2 48:46 Yeah, I don't know if we're on our risk appetite, that kind of stuff is where we're looking at. At Culture and diversity, and those are the things of drivers of bad behaviour and stuff like this that seems to be where we're at right now. Or whether we start looking at the sort of technical competencies in the future. If we're ever set up to do that, I could see it happening. I don't know how far out it is. That doesn't seem to be highest on our list of priorities at the moment.

SPEAKER1 49:33 Have you read the book Homo Deus by Yuval Noah Harari? There's two books. This one called Homo Sapiens. It is normally in the of top twenty-five nonfiction bestsellers, an airport lounge,

SPEAKER2 49:52 No, I haven't.

SPEAKER1 49:55 Yeah, it's well worth reading, it's very interesting. The second book because he talks about it all, looking to where humanity is going and the whole concept that in the informational food chain, in the intelligence food chain human beings have always been at the top of the tree, if you like, but the level of technological development, you know, especially as AI becomes more sophisticated and just the amount of information and data that is out there in the world that can be drawn upon. He's sort of saying, well, actually. You know, in the not too distant future, we may end up in a point where we're not the most intelligent pair in the world and therefore we might have to rethink how we look at things like liability, where as a regulator or as a as a legal as a court system, whatever, it's always been a human taking responsibility. They have legal aid that they can make a decision. They have sound mind. Is there a possibility that things like SMCR, which really came from the last financial crisis 10 years ago is already becoming out of date because of these some of these changes?

SPEAKER2 51:18 Yeah, we're always hindsight trying to catch up. And what I see us as a regulator focusing on right now about diversity and inclusion and some of the softer kinds of things is. You know, is it's what we're looking at, but I think that's hiring people with those kind of skill sets in those kinds of interests and that it's not going to protect us. It doesn't protect bad actors from misusing and the manipulating the market and doing all these sorts of bad things. It doesn't seem to be that we're hiring based on that technical expertise, and can we compete with the market and doing that? No, I don't think so. You can hire some young, bright people out of school who will come in and they've got great potential. But once they learn a couple of things here, they'll leave to go where the money is and they'll be hired by these big firms and how to go and circumvent the regulator or how to go about, you know, applying their knowledge to make the firm for a better body. So, I think we're always playing catch up,

SPEAKER1 52:46 We are coming towards the end. I mean, the cooperation between different firms in terms of maybe trying to address some of these issues. So far, what I sort of found is that each of subsector is kind of slightly different, I mean, partially owing to the way they've been set up. But I mean, do you think that firms are sort of cooperating to try and meet some of these challenges? Or are they sort of working in silos and missing opportunities to maybe share experiences which could help prevent serious problems?

- SPEAKER2 53:27 We've got an adversarial system, the firm set that I've dealt with, my experience is they'll do anything we ask them to do. We just need to know what we're asking them, which very often we don't, or we change our view, or we ask people to do something. But just for the high-level firms who don't ask that, this is equally shared across the market. You've got so many smaller players that just circumvented and don't go after them. I find it that firms are reticent to deal with us. You know, again, when they speak with us, many of them don't want to talk to us without the lawyers present because they're afraid if they say something. You know, a regulator who puts them on the hook and keeps asking them questions forever in a day based on one word. So, I don't think firms are forthcoming, they give us what we want when we ask for it, but they don't want to overshare. We don't have the consultation type of process where we sit down and work together. The way I feel it is there are a lot of people here who kind of think it's us against them. They see conspiracies everywhere without realizing that because many of them don't have any real industry background, don't realize that the industries you're dealing with are just regular people. They're going about doing their job. They have no desire to circumvent any rules and regulations. They're just trying to do business as best they can for their clients. There are a few bad actors out there and they want to get them removed as well. But we don't operate that way. We kind of look at there's a bad action and everybody is guilty of it until they've proven themselves innocent. And it. It makes it in some ways a level playing field, but it makes it very difficult to go after somebody or somebody is identified. Everybody is always potentially capable of doing some harm.
- SPEAKER1 55:55 Yeah, it's certainly well, obviously, I've had some interesting experiences, from a personal perspective, I always try not to do that. But, um, but yeah, it's interesting because I think in many cases, you're dealing with cultures which have been like that for years, decades. And that mindset, I don't think, really will change until. You have demographic change and a lot of places, because people have grown up and they have their formative experiences. In a different era. And I find it very difficult to move on from.
- SPEAKER2 56:46 Yeah, I think you're right, I know again, what we seem to be trying to do here is force that diversity within firms, within boards, within management. And maybe with that with that idea in mind, but it doesn't...you run the risk of just putting people into places to make it look diverse, but do they really understand the technical side of the business, the operational side, the real mechanics of it? So, they take some of the boxes and some side of the equation, but on the other side, they don't. Can they learn on the job? Yes. But again, I think if you haven't ever been a trader, trying to understand how trading and trading floor works and clients' demands are trying to understand that from an academic perspective is very difficult. And that's one of the challenges we face as we here at the regulator, you have such a

number of people who've been here for 20 plus years, who've never worked in industry, who don't know anything about how the markets are, and they're trying to create policy for the market to follow in in a silo without consultation the market. And the last thing any CEO at any firm wants is to be asked by us to consult on something because are there going to be ignored or they're never going to be left alone. You know, you keep pestering them and they're always afraid of putting a foot foul and then once you've identified as being such and such a type of firm, you're in the system as that firm. And forever and a day you're viewed as that. You're always on the hook for this potential kind of problem. You're always guilty by association with something that happens.

SPEAKER1     58:45    They're certainly going to be an interesting few years, I think. And well, I mean, there's been a lot of changes, obviously, and in the senior management of quite a lot of key organizations in the city, and it's going to be interesting to see how they meet some of the challenges that we're going to face in the coming months. That concludes the interview. It was very helpful. Thank you very much. I'm going to switch off the recording now.