

### ***Interview with a conduct risk expert***

- SPEAKER1 00:07 So should be OK. So, starting so just to kick off just a bit of background, so please, could you describe what your role is and maybe how you've ended up in that role now?
- SPEAKER2 00:21 Sure. So, I guess starting out when I was very young, I've always had a curiosity about what makes people tick and why they do the things that they do. And so, I was a very curious child, ended up doing French and German literature at university. And I mention that purely because I think of literature as being about people and what makes them tick. We tend not to write stories about inanimate objects. There are always people involved. And so, there's a clue. I then went into banking in various roles, ended up at a regulator, the takeover regulator. So that was my first sort of flavour of regulation. And then after the crisis, the FSA, as it was, were looking for people that weren't standard regulators to join them. So, I became an international banking supervisor here in London looking at banks for the FSA. And then I moved to the PRA when the FSA was broken up, continued in that role at the FSA. And the key component of supervising firms is really all about people and behaviours because it's human beings that drive issues within organisations. It's also human beings that the regulator that determines how to respond to this stuff. And I dealt with a number of incidents, particularly one firm, [REDACTED], which involved human decision making. So, they had a rogue trader whose handiwork became known seven days after I started my job at the regulator. And I spent most of time leading the international response to that. And it's one of the things I became CIO, the regulator, which gave me a sense of conduct and behaviours inside the regulator and the central bank, which was interesting. And I then moved to [REDACTED], which was the firm I spent most of my time looking at in compliance and operational risk, heading up a global function, covering the asset management business and the Europe, Middle East and Africa region of the firm as a whole. And there was I realised that what I was doing was actually influencing human decision making because people were at the core of compliance, both in terms of the compliance staff. But actually, if you look at what an organisation being compliant means, it means people doing things you want them to do, not doing things you don't, and oppressing one other. The largest single cause of operational risk is people either causing problems or making it worse. And as I looked at those and looked at how we in common with the rest of the industry were doing things, I recognise that our techniques weren't always landing with the target audience. And I recognise that because I'd been the person that had imposed many things on the firm. And so, I started to look for solutions because I wasn't happy with what we were doing. And it was all being done in my name, as well as the policies, being issued training courses, being invited to training by me, not literally by me, but by the machine. And so, I started to think, well, this isn't landing and if we're trying to influence people, how can we do it better? And so, I stumbled across this this idea that

actually if we were in the business of influencing Human Decision-Making, why didn't we do what other people who were in that same business did, which is marketing, governments and so on and so forth. And so, I came up with this idea of bringing behavioural science to compliance and started to apply behavioural science techniques that you would see in other contexts in the world of compliance and risk. Did that, a bit too well, and my boss said, how do you fancy doing this full time for the firm as a whole? And I said, yes. So, for a year or so, I was running a behavioural science function within [REDACTED]. And what I do now is the same thing, but with clients across different industries is really helping them to solve this challenge of what I call human risk, which is the risk of people doing things they shouldn't or not doing things they should. In other words, everything from deliberate attempts to commit fraud through to I'm a bit tired and have screwed up. And that, I don't think is an exaggeration to say, is the biggest risk facing most organisations because there's always human elements to these things going wrong. And so, I help people think about that and think about how you can design things more effectively to get better outcomes. So really starting to think about the human beings that you're trying to influence and how can you do that in a way that gets the best out of them, that actually provokes the reactions you want and understands the basics of human decision making. So, they get very long-winded answer, but I think necessary to get to the point of now

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| SPEAKER1 | 04:18 | In the cluster of your clients do you have many banks, investment firms?   |
| SPEAKER2 | 04:31 | Yeah. So, the core of my business is financial services because that's where I came from. But to give you a flavour of what's outside that, it's everything from chemical weapons inspectors, utility companies, pharmaceuticals. So, anybody that's regulated, I don't speak to everyone. It's regulated, obviously. But any industry is regulated. I speak to. So, there's a broad, eclectic mix across the planet. But the call, given my background, is very much financial services and heavy slants towards UK firms or at least firms with a big presence in the UK. Purely given my regulatory background and connections, which is a logical consequence of that, but the techniques that I deploy in financial services are replicable elsewhere, and I often borrow from other industries when I look at financial services |
| SPEAKER1 | 05:16 | And a lot of those firms are they are involved in trading activities, trading and FICC markets?  |
| SPEAKER2 | 05:23 | Yes, yeah. Yeah, yeah. And a lot of I mean, a lot of the people that are outside financial services are also operating in trading. So, again, like, I get things from that context. But yes, the majority of people that I work with within financial services have trading businesses in that space.  |
| SPEAKER1 | 05:41 | And based on the sort of broad view, you know, from the experience that you had when you were actually, you know, an employee in-house and where you are now, how is trading evolved in the sort of the last 20 years, in your view?   |

SPEAKER2

05:57

So, I think it went through a really interesting evolution, which was we need to kind of go back to Big Bang a little bit to see what happened there in terms of deregulation and opening up. And I think that brought in some different people that have maybe never contemplated that particular career before in the nature of what you could trade started to expand. And I think that took banking away from what you might have historically deemed to be its core activity into a space where I don't think the term casino banking was entirely inappropriate in the sense of one, the sorts of the size of bets that were being placed, the speculative nature of it. And of course, there are you know, I can point to sort of asset management and say, well, here's a much more tightly regulated thing where it's not kind of wild speculative points. But I can also point to sections of investment banks and other trading houses where it really is closer to that that sort of speculative punt. And we had people operating within that space who were incentivized to take more risk. And I think as we as have always been the case in financial services, but particularly probably in sort of some of the golden years, you know, the personal wealth of individuals engaging in that activity was by any stretch of the imagination, astronomic. And there were big, you know, the big, hefty rewards of people that, quote unquote "got it right". And I think the driver of one opening up to bringing people who might not have historically thought themselves as bankers, but were kind of excited by the nature of the environment and what the potential for what they could do, the introduction of technology and the continued enhancement that allowed the creation of all sorts of interesting, you know, I'm thinking of sort of CDO squared and cubed and those sorts of types of derivatives that are miles away from what you might call the traditional banking activity and things that anybody who, if you would, looking at it from a social perspective, would say was worthwhile and sort of, you know, that ought to be so. So, you had these machines that were ostensibly there for good reason, which is to allow society to continue to do it, allow businesses to get out and do things to raise finance and to hedge risk that were also involved in a number of other activities. And they brought in some very you know, they brought in a lot of people that were good at trading. They brought in people who were who were very smart. And so, as technology got better, there was much more of a shift towards, you know, building smart models to do smart things that I think led to the people who were running the function, not necessarily having the level of oversight they should have done. I'm not sure the compliance or risk functions caught up. And so, we had this interesting culture that was a little bit kind of make as much money as you can as quickly as you can and, you know, risk on. And that's what we're here to do and masters of the universe mentality. And so, when I look at the crisis of 2008, I think a lot of it came from that cultural imperative to just be seen to be freewheeling and doing whatever you could. And salaries were such that people were incentivized to behave in that manner so that I saw that build up. And then the crisis happened. And I think we saw some changes and a little bit of retrenching, but nowhere near as much as I would have expected. And

you know, though, that there has been clearly with some of the regulatory interventions, there have been some changes. But I think we're still in that space where, you know, banking perceives itself to be in a position and particularly trading of there's a slight sense of superiority, master of the universe element that's still there, slightly chastened in some cases, but the astronomic pay scales is still there. And that's you know , the fact those dynamics have remained unchanged is why we need things like the SMCR regulation , which is basically a way of saying the only way we can get a handle on this stuff is to put senior people within the organisation in the frame and get them , if you like , to solve the problem underneath it , because it's not something a regulator can get its hands around . So, a little bit of a wild ride. I think that continues in many respects up until today.

SPEAKER1      10:06      I remember when I first started in the markets and I think when I came into the markets, which is sort of, you know, early 2000s, I started well in London, at least I saw in a sort of metals brokerage firm. And it was still very much still sort of very voice driven emails, that kind of stuff. And then during the course of my time there, they introduced a sort of electronic trading platform, which was point and click. And then I saw gradual introduction of things like auto functionality and then API and all this type of stuff. How do you think that type of development is shaping how, you know, focusing on human risk and human behaviour, how humans perceive risk and actually interact with, you know, how they own conduct risk, if you like? I mean, are they starting to view it as not really their responsibility because the machine is starting to do these things? Or is it something which actually you think is very much still residing with the human body and that's the widely held sort of perception?

SPEAKER2      11:15      No, I definitely think it's not perceived in that way. And I think there are several dynamics as to why it is not naturally perceived in that way. And I come back to the comments I made before about SMCR, which I think is if everybody did perceive it in that way and they were incentivized to perceive it in that way, then you wouldn't have to have the regulatory response that you've got and why. So, to list some of the factors had nothing to do with technology that are driving that. I think, for example, the way organizations have presented their compliance and risk functions is very often seen in the same way. And I'll be slightly facetious here as potentially the facilities managers in the buildings. Right. So, I don't have to worry about with the toilet paper there because somebody else has gone out and done that. That's what the facilities people do, detect compliance and risk management. You know, I'm here to make money. They're headed to sort that stuff out. So, I'll just crack on until they tell me I can't. And that was very much this kind of, you know, and partly the compliance functions didn't help in the way. And the risk function didn't help in the way they communicated in the training they gave in the systems that were in many cases very restrictive. That looked really like it had risk management under control. And, you know, if a system allows you to do something, you could make a natural presumption, well,

sure, if they didn't want me to do that, then the system would have blocked it. So, I'm just good to go. I don't need to think for myself. I've outsourced that, if you like to those particular functions. So, I think all of that was sort of there. And as people were paid, like, you know, by any stretch of the imagination, like rock stars and, you know, kind of like hefty. So, I'm here to make look. I mean, look how much money I'm making for this organization. I'm just going to crack on and do that. And none of this other stuff is my problem because I'm here to do that interesting stuff. I've been hired because I have brain to do. I've, you know, an ability in that space. And so, I think a lot of that just ignore what the technology existed or not. You would have that dynamic. What I think technology adds to your point of several things is, one is more opportunities to push the envelope because you can do a lot more things that you used to be able to do. You can do it much more quickly. You can do it on a global basis. So, the opportunity is there. And if you've got a particular mindset, bearing in mind I was talking about hiring, you know, I think there's a lot of people working in banking who, if the pay scales there would be finding themselves doing something else. They're not desperately interested in that context. It just pays really well. And it allows them to geek out on the thing that they're potentially very good at. So quants for example, they could have gone and worked for a while, you know, maybe scientific organizations, maybe tech companies. They're in banking because it pays really well, and they can exercise their talent in that particular environment. And so, again, very limited interest in thinking in terms of more broadly than what they're being asked to do. And I think the challenge with all of this is then exacerbated by technology, because what technology does is makes you even more distant from the underlying thing. So, I think in the old days when banks were much more you know, if you look at the buildings, you can sort of see what they were there to do, which was provide safe deposit boxes and security and all those things. And there was an element of interfacing with the customer face to face dialogue. And you were dealing with physical cash. I think what digital interactions they do is remove us from that. So, we're not thinking carefully in the same way that I as an individual, if I'm spending physical cash, that is a different form or, you know, have a different engagement with that than I do if I'm spending money on my credit card or if I'm using some other form of digital payment. And the further we are away from the physical, the more we're slightly inured to the impact of having. It's easier to spend money on your credit card than it is spending money on physical cash just because we don't notice it in the same way. And so, I think technology is just one of the factors. It is a pretty big one, because it's permitted all sorts of things, but from a psychological perspective, I think you're spot on in that it makes it feel more distant. It doesn't feel real. I don't feel the impact that I'm having. And if I look at what you know, historically, when people if you think it's something like subprime mortgages and trading of those in the in the sort of secondary tertiary markets on those that is miles away from somebody is buying a property, can they afford it or not? It's just a

lump of debt that is shuttered together. And I can't see anything on the lines. And I'm dealing with things. And people are used to handling massive numbers with no real sense of what's underlying it or underpinning it. And I do think that is one of those problems. The further we are as human beings away from the thing that we're impacting, if we can't see it, we can't touch it. We can't feel it. We're not very good at assessing the impact of what we're doing. And, you know, we are very, very good assessing the impact on our personal bank balances if we if we pressed the buttons in the right way. And that's what I think is driving stuff. So, I think the idea that people are taking personal accountability is fairly limited. And I think technology isn't helping in that in that regard. It also doesn't help because you make a presumption that control frameworks will be able to constrain you. And so. Well, you know, I know what this technology can do, so I'll just make an assumption that they've got it all under control. And they you know; they tell me they're monitoring what I'm up to. So, if they didn't like it, they'd be able to stop me. I can literally go on autopilot, do what I'm here to do. And they had to sort of stop that bad thing from happening. And if it does happen, they can clean up the mess afterwards.

SPEAKER1      16:37      Do you think with the presence of, say, algorithmic trading in the markets now, especially reinforced learning type stuff, do you think that that is creating new conduct risk that wasn't there before, or do you think it's maybe just turbocharging stuff that was there before and it maybe made it more dangerous just because of the scale of it and maybe the lack of understanding that some people might have in the food chain?

SPEAKER2      17:11      So, I can paint a picture that says, actually, algorithms and AI are admittedly good for some of the outcomes that we're looking for because they're more consistent and they need to be programmed and they're not prone to human whims. The challenge with that is that all of these things need to be programmed by human beings. So, you've got that element of it. The second is the data sets that are used to program them come from one place, which is the past and the past does not necessarily reflect the future. We've seen examples of that. And so in many respects , you can say the technology that is unleashed with some form of human attributes associated with the dataset that's being analysed or the, you know, the coders' prejudices could potentially be an even bigger problem in human beings because the scale of these things and they can run on, you know, that I get tired. So, they will consistently do what they've been told to do. But if they've been told to do the wrong thing, they're doing on an epic scale. So, I think you're right to the extent of it will exacerbate existing problems, particularly if we haven't considered what biases we're programming in and what data sets we're using for them. And we don't keep an eye on what they're up to. Plenty of examples of these things being loosened in the wild with the best intentions. And, you know, you get sort of digital Jurassic Park outcomes if you're not careful. I think they, so you'll get that exacerbation. The risk is also that they as you say

that they create new things. Because one of the things that's interesting when you look at human risk or the conduct risk is a subset of that, is that we are very inconsistent sometimes about what we find acceptable. So, there are things in one context that are entirely acceptable that will not be acceptable in another. I often speak facetiously about it's okay for me to walk around at home in my pants. If I were to go to Sainsbury's and do the same thing, I'm going to get some funny looks and possibly be arrested and add context matters hugely to us as human beings. And when we look at conduct and what's acceptable, it's going to be really, really hard for machines to work that out for themselves. They just do what they're told to do. It's a good example. I think in a different context is if you look at uber surge pricing mechanism, which is the thing that basically manages price according to the supply and demand that works, it doesn't. Whether you like it or not, that's exactly what it's supposed to do. It tracks those two things and just flexes accordingly. And that's really doing stuff a human being could never, ever do. The challenge with it is that when it does it in a context that we don't think would be acceptable, it's very hard to program that in. So, if you get these surge pricing mechanism kicks in because of a terrorist incident, you're getting the right economic answer. But you're getting the very much a wrong conduct answer, which is it looks like Uber is profiteering from terrorism. And of course, they don't like that. So, they've had to build in brakes on that to make sure that human beings have the ability and in fact, are tasked with jumping in as soon as it recognises the machines are making a mistake. Now, that's an example of a mistake that is obvious. There's plenty of stuff that we can't see and plenty of unintended consequences. And so, I think if we translate that into financial services, there will be tons of things going on that we might not have clocked, issues we may never have seen that we have potentially unleashed. And how you think about managing that is going to be quite challenging. And in many cases, we may just have to have people monitoring it and dealing with it after it happens, but being alive to it because we can't necessarily predict where that would be. So, I see the downside. There are some upsides of the downsides. The technology is both a repeat performance, but in an amplified scale of stuff that's happened before or a whole new category of stuff that we've never seen before and would never happen with humans because we, you know, even the worst human being wouldn't think to do that, whatever that is.

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| SPEAKER1 | 21:01 | Are you familiar with a book called Homo Deus by Noah Harari?   |
| SPEAKER2 | 21:07 | Yes. Read some time ago. So, I won't remember if you are asking me on what it says on specific pages, listing my knowledge. Well, guess what? But I understand the concept.   |
| SPEAKER1 | 21:15 | Yeah. So, I mean, I found the book quite interesting, certainly from what I was doing when I work, because he very much paints a picture of a future where humans are effectively going to be dis intermediated. We're almost creating Frankenstein is sort of the way he's going, and we human beings are sort of in |

many contexts are going to be on the sidelines. And this concept of human liability and human blame may actually become outdated. And maybe we are where we're used to putting ourselves at the top of the food chain, if you like. And now we're creating intelligence which actually could surpass us and is surpassing us in some areas. With that in, you know, with that sort of thing in mind, do you think Semco initiatives like SMCR may already be out of date? Because they're sort of very much if you look at certification, they're very much still putting responsibility on the designer and the deployer those people got involved in the chain of approving the release of an algorithm or something. But it is in the same vein. I mean, the European Union has been talking about even granting some degree of legal personality to autonomous agents. And so, you know, where does that get us in terms of trying to anticipate, you know, poor conduct and things in the future and ultimately with reasonable steps in mind? Who is responsible for that?

SPEAKER2      22:46      Well, so I think regulatory logic, which is what gets you to SMCR says somebody needs to be held accountable for this. Right. So, we don't give banking licenses to companies without somebody being responsible for that. We and so the ultimate sociologic is the way we get a handle on this is we have someone in the frame, and they need to keep an eye on everything that's going on. And we can't catch every single thing by being prescriptive. So, we're going to have someone there who needs to take responsibility for it so that some logic applied to technology would say, yeah, totally. Of course, you can keep an eye on every single step that your algorithms are taking because it's out there doing that stuff. And that would if you could, then there'd be no point having the technology and you have a human being doing it. But ultimately, you're going to own this. And the way that I'm going to make sure there are no unintended consequences and the way, frankly, I can get a head on a stick if I need to, which is something that didn't happen in the last crisis to the extent that people were expecting or wanted. You know, the way I get people to go to jail is, is I put you in the frame. And so, the logic is a little bit based around that, which is the thing that didn't happen last time around. So just to cite one name, Fred Goodwin, would be a good example of someone where people would go, why were there no real consequences for him? He lost his job, but he doesn't seem to have suffered in any way, shape or form, in any material way from the company that was supposedly in his control was doing. And so, I think that logic would continue. So I think regulators will have short shrift, at least with the UK logic on it, around something that says "wasn't me was the algorithm", because we've seen lots of other examples of where people have tried to blame something else, whether that's outsourcing, you know, it's not us that did this is this company we got to do on our behalf. It wasn't anything to do with us. And regulators have quite rightly looked through that and go "that is nonsense, you are still responsible even if you outsource it, because you've chosen to outsource it. And therefore, if it's an activity that's going on under your proverbial roof, you need to take responsibility for it." And I think that logic will prevail, not least



because the court of public opinion will not understand if it doesn't prevail. They are very concerned to make sure that the industry has, quote unquote, "learned lessons". And of course, they'll look and say, "how much money are these people paid?" And if you're paid a ton of cash at the top of a company, you ought to be responsive. What's going on? You can't just have the upside. You also need to face the downside of what you're doing. And so, the pressure will be exercised on people. And I think the regulatory logic will be quite simple, which will be "I kind of don't care how you solve the problem, you're in that position responsibility. You own that. You wear the risk of that thing doing it. And so, you better just find ways of solving that problem. And if you're not comfortable that you can control the thing and keep an eye on it, then perhaps you shouldn't be unleashing those particular bits of technology in your industry." And I think there is a compelling logic to that sort of thinking, which is ultimately a human being needs to be responsible. Now, is that a realistic aim to actually say, well, can people really ever do that? Is this being more than the sham regimes? A good question. But I think until we've tested that out, that that sort of logic behind the regime will be here to stay.

SPEAKER1      26:06      Can you see maybe the emergence of something, you know, almost like a dual regime? So, when I was taking my law degree, one of the first pieces of legislation that I was taught was about the Dangerous Dogs Act and in the moral panic in the early 90s around dangerous dogs. And it was always cited by my lecturers as being an example of really poorly drafted legislation for various different reasons. But the bottom line of it, the bottom premise of it was that there was a degree of agency given to the dog because the dog could be put down if it was found to be a dangerous breed and all the rest of it will somebody. But equally, there was liability for the owner potentially, if they'd reared it poorly or not controlled it or whatever. Yeah. Can you see a circumstance where, you know, there's a more interventionist approach from regulators where they say, OK, well, we can see this is an algorithm. And they've got all the short code now, they've got all the stuff from if it too, is an example where they could, you know, in theory they could identify a misbehaving algorithm, that they actually say, OK, well, we're going to find the firm or we're going to find the individual who designed to control this. But we're also going to order the destruction of this algorithm, which effectively is a form of punishment, I suppose, for the for the algorithm, too.

SPEAKER2      27:23      Yeah, I could see that logic. I don't think you're going to get the next stage, which is sort of because I wish to continue down your train of thought of regulators will approve algorithms. I think you will have it very much within say we are going to keep an eye on what you're doing and make sure you've got appropriate governance around the deployment of algorithms. I could see them drawing the conclusion saying you're never allowed to use this kind of thing again because it's now. But that'll be very reactive. That human component will always be there. And to continue your dog analogy, you know, one of the things that's interesting is that it is not compulsory to own a dog,

nor is it compulsory to unleash algorithms or compulsory to be active in a certain part of the market to trade a particular product. That is a commercial decision. And for as long as we sat in that space where there is an element of discretion on the part of the firm. So, if the regulator were to turn around and say in order to be for societal reasons, if the FCA would turn around, say you may only trade Fixed-Income if you also trade equity as an example, I could see scenarios where that might be appropriate for certain markets. We want to ensure that there is enough liquidity in a particular market. Maybe we do in a libel was interesting example of where sort of look at the success of that. A lot of people said, well, I'm not getting involved in that setting anymore. And everybody went, yes, you will. So, pressure was put to bear there. But assuming you're not in that sort of situation, I think it's ultimately good that they're going to they're going to sit neatly behind the logic that says this is discretion on your part. You are going to take responsibility for if you don't run the risk that don't get involved in that particular activity. And that's where that's where they'll pocket. And in part, that regulatory logic will be applied because that is what the court of public opinion for which read politicians will be looking at if a regulator deviates off that path. That is a really awkward one to explain away. So, the sort of putting the algorithm down argument would be that would be part of the remediation, but uppermost and it'll be part of the we never want this to happen again, whatever this is. But the uppermost bit will be we need to be seen to be, you know, putting people in front of a firing squad, hopefully not literally, rather than that being the primary course of action. It might be a second order thing that they do.

SPEAKER1      29:46      Being a former regulator. How would you rate the sort of ability of you know, maybe the regulators in the UK to offer challenge a real challenge to firms that are seriously invested in in this type of activity? And do you think they've got the right balance of skills and experience to do that? Or do you think that the firms have got an upper hand on them just because of the amount of money they're willing to offer the staff and all the rest of it?

SPEAKER2      30:15      So, yeah, it looks speaking as some on the left, the regulators went to one of them working one of the regulated firms. Yeah, it's like difficult conversation to have in some respects. And then let the lazy response to your question is to go. Firms will always be ahead of the regulator, and that's because they pay more money and they've got more you know; they can throw more at this. And so, it's a convenient sort of tabloid narrative that says regulators are screwed. They're always up against it. And to some extent, of course, there's some truth in that in that statement. But I do think that's why ACR starts to shift the game slightly, because you'd say, well, look, we can't possibly be on top of all these things. We don't know everything that's going on. So, the best way to do that is we will regulate almost by proxy and we'll just keep finding someone that who's going to take responsibility for all those things that go on. And we're going to scare the hell out of them. And it's not just one person. Obviously, each firm is a number of people will drive the behaviours

that we're looking for within the organization. So, part of the reason that we have the regulatory regime we do now is an admission that the firms will always be slightly further ahead, in part because they're the creators of the problem so regulators can predict where things might go. But of course, it's a commercial decision for a firm to operate in a certain market, to create certain products, to target certain client types, to develop financial services in the possible sense. And so, the regulator will have a say in that and interest in it, but it's going to be commercially driven. And so, for those reasons, the regulator shouldn't even try and get ahead of the curve in some respects but should just set a tone for what they're expecting and hope that that credible deterrent of ASIMCO helps. I think that's quite a smart way of looking at it. And rather than getting into a sort of arms race of saying we need more and more people, more and more budgets, you are always going to find that those people that are literally at the coalface as opposed to those that are supervising the coalface, are going to be ahead of the game. So, what can you do to manage that? Well, that's when you come back to SMCR. I'm pointing a finger at someone and saying you, in effect, will have to think about how we might react to it when we find out about it and that, you know, that could end the interesting thing. Some as people look at it as being slightly a bit of a cop out but there is an interesting dynamic. You can sometimes see where actually senior people in organisations will go way further than the regulator ever would because of that terrifying thing. If you presented stuff know, I've seen stuff in firms when I was a supervisor and somebody would say to me, well, we've done this and I would never say this to them, but I'm like, well, that's far more draconian than I would have been. I wouldn't go anywhere near that. But they're terrified by the regime, and it has a sort of breaking effect that you wouldn't have had. So, I think they will always be behind. But that's not necessarily a bad thing. And I don't think societally, by the way, we'd wear the costs of any alternative solution. So, I think they make the best of a bad bunch. And that's why coming up with psychological tools like WCR is a smart way of dealing with unforeseen circumstances. And let's face it, the environment that we're operating in now and some of the technological developments that we'll see will very much take us into that space. Who had foreseen crypto currencies? Well, conceptually, you could go there'll be some sort of digital money, but the exact manifestation of it wouldn't have been entirely predictable to everybody. And regulators know they can't bet against every single potential outcome. So, to a certain extent, you have to let the industry innovate and move where it wants to move and be slightly following in your nature. The question is how far back you follow. And that's why I think that slightly blunt instrument of SMCR is quite helpful.

SPEAKER1	33:49	To counterbalance to sort of the sort of old traditional liability approach and fines and disciplinary action. And that kind of stuff has been, you know, designing appropriate incentive structures to try and reward people, I suppose, for doing the right thing. Do you think as markets change and evolve more and more into sort of an electronic environment where you've got fewer
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desk traders and stuff, do you think that the power of all of that diminishes at all?

SPEAKER2 34:29 So, I think I struggle a little bit with this incentive, incentivizing people to do the right thing, and I struggle. I struggle for two reasons. The first one is that if you start to talk in those terms, it kind of suggests that that's not a standardized part of everybody's job. So, there's a lot of conversations around let's pay people bonuses for meeting environmental targets or let's pay people bonuses for meeting ethical targets, whatever that means. And I think that's really dangerous because that sort of suggests that that's something you do. In addition, if you can get there as opposed to that being the baseline. So, I struggle with the concept from that perspective. But even if I accept the concept, I struggle a little bit in terms of execution. I have no idea how you do that without creating perverse incentives and unintended consequences. So, you know, I've seen firms try and introduce things, which is sort of like the question of one of the metrics we use is how much business have you turned down? Now, it's really easy to game that metric because what you do is go and look at onboarding some complete and utter nonsense, and then you go, ah, I have recognized that this gentleman, whose background seems a bit shady, is a bit dodgy. So, we're not onboarding him. Let's put him down on the list and so on and so forth. So, I think it's for me is looking at the problem the wrong way, which is to say I don't think we should be incentivizing it, particularly I think we should be making our baseline incentives. If you look at things like bonuses are designed to drive people, not necessarily to where your 100 percent expect to go, but to push it further. So, if I carried that logic through to ethics, I don't know, because I struggle a little bit to say doing the right thing is in many cases binary and doesn't lend itself to a nice scale of being , you know , 10 out of 10 ethically or six out of 10 ethically is very , very difficult to associate . So, I think that's the wrong framing for doing the right thing. I think you need to find different levers. Now, I recognize entirely that's what people are trying to do. I think that's a flaw. I think it's a flawed piece of thinking. You're always going to get unintended consequences. I think there are better ways to manage that.

SPEAKER1 36:31 SMCR and those types of thing are very top-down approaches, and obviously they leave a large degree of discretion to the firms to sort of work out what the right structure is according to that business model. They've also been a number of bottom-up attempts to sort of do bottom-up style, sort of akin to self-regulation, I suppose, approach. I mean, one of them, one of the main ones, I think in this case that, you know, I've worked in is the FICC Market Standards Board. Yeah. And they've done a number of sort of papers about how to manage conduct risk. And you've probably got quite a few of them. And then they've also done some interesting stuff about algorithmic trading sort of environments. How confident would you be in those types of initiatives and the ability of sort of firms to work together on areas where there shouldn't be a competitive element? Or do you think really that a lot of

that stuff is sort of for show and to try and ward off tougher and more draconian regulation? What do you think to those types of initiatives?

SPEAKER2

37:38 So, I know [REDACTED] personally from my I was at [REDACTED]. I worked closely with him there. I know him from when I was [REDACTED] and I was supervising them. So, I kind of I feel marginally conflicted, making a comment specific about that body. So, I want to stress that I'm talking more broadly around those that you might call self-regulation, the necessary. That one initiative is worth a go...it is worth looking at these things. They're all valuable and helpful. But I think that industry has demonstrated the idea of, oh, just trust us to get this right is clearly flawed. And I think for as long as you have the financial rewards in that industry at the scale that they're at, and they are wholly if you look at the value, add that banking brings the pay scales in that industry are wholly out of whack with any other form of value creation in other industries. And it's not just slightly it's by a massive order of magnitude. And that leads to a mindset. I think that is the sort of driving a lot of people to work in the industry that wouldn't work in it if it didn't pay the amounts that it does pay. And so, I think as long as that sort of dynamic is there and the history is there, and we've still got a ton of people on top of these organisations who I think are not very good at reading the room. And if you look at some of the noise around going back to the office and some of the sort of statements now, a lot of it's for show and then maybe a different audience that's intended. And, you know, of course, they're entitled to run the businesses the way they want to run them. But I just see lots of people in the senior positions in those organisations who I don't think are responding to society's ask. And so, I think it would be, well, whatever these initiatives that we've talked about would deliver in terms of practical realities, I don't think society can or indeed should have a huge amount of trust. I don't see there's been a massive amount of contrition or indeed paring back or restructuring of business since the 2008 crisis. I was expecting to see a lot more fundamental change in the way things are done, and I just haven't seen that happen. And I think until we get demonstrations of that, it's not just tinkering around the edges. I think as a society, we've be incredibly foolish to place our faith in people at the top of these organisations. Some of that is not their fault. And it's not all about criticising them. If you have grown up in that environment, imagine you are a sort of mid 60s, a white male who's grown up and done nothing but banking all your life. You are going to have grown up in an environment that's did not expose you to a whole load of things, which I think makes it very difficult for you to deal with some of the 21st century. Asked where that diversity, inclusion, whether some of the ESG topics, you know, they are a little bit fish out of water in that space. And I think until we get different leadership, and we get people with different experiences or at least different mindsets, it's necessarily having to be. I'm not asking for the photograph to be massively different. I just don't think there's a massive amount of cognitive diversity. I think there's a lot of pack behaviour within the industry, in part driven by regulators that I think makes it incredibly

vulnerable. You know, there's a lot of looking around, seeing what everybody else is up to. And, of course, that's sensible, feel sensible from a herd perspective, but it's dangerous if the whole herd is going galloping towards the edge of the cliff, which you've seen on a few occasions So, I'm very much in the camp of you know, I'm not tainting everybody in the industry with bad intent. I'm not saying they're all useless. I'm not saying they're all awful. I'm not saying sort of, you know, we should shut the whole thing down because clearly, we can't do that. But I do think this idea that the industry can be trusted to do its own thing is entirely wrong. Answer. Do I think regulators have got this right and the way they're looking at the problem that. Right. There's some clear some flaws there as well, but I tend to believe that. There at least regulators have attempted to shift, in many cases, the way they look at things, UK being a good example where that's been wholly effective. Don't know. I'm not sure firms necessarily have in the same way. They've changed their business model. They've cut costs. They've digitized a bit. Have they changed the underlying fundamentals about how they run their business? Have they increased challenge and cognitive diversity in the levels where you need needed to have some of these impacts? Absolutely not.

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| SPEAKER1 | 42:00 | On that point about the UK's approach. How would you I mean, what's your perception in terms of the effectiveness of some of the initiatives like SMCR Versus maybe what our peers are doing in big jurisdictions like America and Europe and stuff.   |
| SPEAKER2 | 42:19 | Well, I think all of this stuff is, you know, all of it's an experiment and I deal with compliance and risk management within firms, but we often think about regulation the same way, which is kind of we set this thing up and it's all going to be fine. What we're actually running in all these cases is ongoing behavioural experiments where we don't fully know what's effective. And it bothers me hugely that we don't think about the psychology of what we're doing. We sort of implicitly do with things like SMCR. We recognize that having senior people held to account is a good idea because that seems to sort of feel like the right thing to do and delivers. But we're not doing really detailed thinking about what behaviours will this promote? And we're using very, very traditional techniques that rely on presumptions about the drivers of human decision making that are just flawed and that we wouldn't use in other contexts. And so, there's lots of examples of different kinds of regulation that we've seen in other industries and that we have seen in no industries. But people have written extensively about where you would say, look, there's a different way that we could do things. So, I think we're on it. We're on a journey here in some respects. I think what we have now is better in the UK than what we had before. I think the FSA is remit was quite extreme. And you had the challenge of when things were good. We focus on conduct. When things are bad, we focus on Prudential and of course, you know that that doesn't necessarily give you the right outcome. I think the setup in the UK was a bit messy. It's weird to me. The FCA has a prudential |

team now. That's politics between the Bank of England and the Treasury when they set up. But that's impure. I think with the way we approach some of these challenges is impure, but it's never going to be 100 percent perfect. But I would like to see much more behaviourally led regulation to really look to the underlying dynamics that are going on. I think it's more sophisticated. The U.S., the US is very, very judicial and legally led. I don't think the law is very good at preventing things. I think the law is very good at dealing with them when they have gone wrong. And so, I think for me, there's a massive overhaul required, which is a bigger picture macro for the micro, the idea with the micro idea, which is helping companies to get their employees to behave in the way that they want them to. There's a subtle one of saying, how do we get banks to deliver in the way that we want them to? And we've got some you know; we've confused things a bit as well. If you look at the PRA has a competition objective. Which isn't necessarily consistent with the Prudential one, and the FCA also has a competition mandate, so there's a ton of things that have been sort of thrown in the mix there. And I think, you know, there are questions about culture at the regulator as well. Have we got the right people in there? Are they thinking in the right way or are they just, you know, in same way that people sit within banking industry for life because they like us? Hang on for as long as we can because we'll get paid. There's the argument that career bureaucrats sitting in the regulators aren't necessarily healthy. So, I think there's a ton of I like the idea of what it's trying to do. I think there's a ton of practicalities on the ground. I mean, it's slightly flawed. Have we seen some great steps forward from where we were? Absolutely. Is there a ton more things that we could do? Yes. But I also recognise having been inside, it's really hard. And you are there's a whole load of pressures on you that are not necessarily obvious the outside world. So, I wouldn't want to criticise my former colleagues too much because they can only play with the cards they've been dealt. In many cases, those cards are insufficient. And of course, it's a moving target. Well, it's not sort of the industry isn't sort of if you were looking at something like utilities, that's a much more static industry. The pipes are generally fixed. It's much slower moving in terms of the dynamics changing. And so that's arguably a little bit easier. But I'd like to see us taking a leaf out of the airline industry in terms of the way they regulate planes and accidents, you know, ton of other places we could learn from. So, I think there's a heck of a long way to go.

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| SPEAKER1 | 46:26 | That's a really interesting point about instance in which the extraneous to the trading industry, because it seems to me that there's a bit of there, that there's a lot of things that the financial community could learn from other highly regulated industries.  |
| SPEAKER2 | 46:43 | And if you look at safety critical industries, generally speaking, the safety critical bit is done really well. Like the airline industry, planes don't fall out of the sky that often. They manage that brilliantly. They've got the culture piece right. People come forward when things have gone wrong because they're |

incentivized to do so. The regulators are very forgiving. If you come forward, that's terrible on the ground. I mean, if you look at what goes wrong in British Airways, for example, data breaches, they've got all sorts of other issues happening there. So, they struggle to take the thing that's going on in the sky and put it on the ground. But I do think banking could learn a heck of a lot from these things. And I think what's interesting is that on the one hand, safety, critical industries, it's a recognition that if we don't get this right, people get killed or seriously injured. Banking there. Isn't that that immediate I'm going to kill someone thing. But clearly it has massive societal impacts. And actually, you know, if you're funding climate destructive industries or you're doing something that's societal, there is a human cost at the end of it. That's not fully understood. And I'd like to see us. The rhetoric is the same about the societal impact it has and how important the regulators are. The way it goes about it doesn't necessarily reflect the way other people doing something that uses similar language, albeit with more obvious human life consequences. You know, the actions are not quite the same.

SPEAKER1      48:09      Are there any incidents that come to mind which involve sort of algorithms in trading, which have sort of occurred in the last few years, which you think, you know, industry and regulators could learn from and should and should have done something differently as a result?

SPEAKER2      48:29      Yeah, I mean, so on the ones that I can think of, I can't really talk about because the sort of things people has asked me to come and help them with. But I mean, there's been a ton of what I would term and unintended consequences of excessive position saying. So, let's pick an example. I can talk about, I think things like Greensill, you know, all the things that are taking Credit Suisse by quote unquote surprise are illustrations of a combination of bad human decision making, but also the systems not being fully up to speed on things. And it's always that human override means. Doesn't matter how smart your machines are, they can. But, you know, lots of examples. I think if people are getting a much larger exposures than they should have done for much longer. We've seen examples of asset management, tons of breaches of mandate. If you look at, say, the Neil Woodford story, I think there's an interesting example where, yes, are the primary cause was human when things went wrong there. But actually, there are lots of algorithms that are unleashed that do similar things which don't have the constraints around them. So, I wouldn't go beyond those naming those two things, the public things I can think of, and I recognise as a human component to it. There are tons and tons of stories of algorithms doing crazy stuff that some of which was predictable, some of which wasn't. I don't think every single firm is deploying algos. An AI in some way, shape or form is going to have been going to have a litany of stuff. In some cases, it may not have been discovered yet because we are I don't think we're very good at managing these things. We just see the positives and the cost cutting benefits and the blah, blah, blah, blah, blah, we haven't fully thought it through. So slightly fudged answer to



your question, because the only ones that come to mind are ones I can't talk about.

SPEAKER1 50:21 OK. And finally, what would your principal concerns for the future be in relation to this topic?

SPEAKER2 50:31 So, I think we have that. You know, what concerns me is that we are not I think as I look at the technology, technological risk, as I look at the behavioural risks that are there, as I look at the, you know, plenty of unforeseen things. So, you know, Rumsfeld's unknown unknowns, I'm not sure how much planning and thinking there is going into some of those things. And as we saw with covid, sure, pandemic was on everybody's list at some point. But it was you know; they would have misjudged it slightly. How much fudging around and fiddling around and lack of preparedness was there within firms. Now, nothing major happened. It seems payment systems kept going. But I just think that's a really good illustration that we're not ready for some of this stuff. And I think we are not being anywhere near as sophisticated as we could and should be in terms of how we think about behavioural science, in terms of how we think about data science, in terms of how we think about the psychology of these things. And so, I think we've got to really reflect on the governance structure. And I use that term deliberately to cover both regulation and what happens within firms fundamentally differently. I think the culture of banking is still and broad financial services, but particularly old school banking is still not readjusted. And you can tinker around with things. But if your soil is still toxic, it doesn't matter. If you change the plants in that soil, you're still going to produce the same outcome. We have to fundamentally look at that. And I just don't think that we have grappled with the impact in the power that the industry can have over all sorts of facets of society in our lives. And the implications of that, we're miles away from addressing that particular issue. So, I would like to see not necessarily aggressive regulation across the piece, but thoughtful regulation around managing that issue. And I don't think firms. I think I haven't seen enough change within firms to feel confident that there isn't going to be some other issue coming out of financial services.

SPEAKER1 52:35 Excellent. Well, that's the hour allotted up. And thanks very much for your time. I'll just switch off the recording now.