

Interview with a senior manager specialising in FX trading

- SPEAKER1 00:09 Right. So, there we go we're live. So what sector is your investment firm involved in?
- SPEAKER2 00:25 Its multi-asset programs. It covers a wide range of products. Through such precious metals ethics and soft commodities, the main the mining areas.
- SPEAKER1 00:47 And specifically, what is your role in the firm?
- SPEAKER2 00:51 I am global head of foreign exchange.
- SPEAKER1 00:55 And how would you describe the investment firms' goals?
- SPEAKER2 01:04 So our ethos is around servicing a number of clients from multiple different sectors from physical producers through to trading firms who trade speculatively.
- SPEAKER1 01:32 And those firms, are they which for your particular area and FX, what kind of firms are you servicing?
- SPEAKER2 01:41 The full spectrum, everything from small payment firms that have a necessity to exchange foreign currency through to very sophisticated trading firms that fall short of what I would call high frequency, but, nevertheless, our technology is algorithmically driven.
- SPEAKER1 02:07 And what type of algorithms are deployed even by your firm or the clients which trade through your firm if any?
- SPEAKER2 02:19 It is difficult to get a full insight into algorithms to deployed to us by our clients, because the spectrum is so wide, typically it would be very, very simple. Back-to-back trading and so their clients would execute them and execute with us in a back to back fashion right through to the more sophisticated guys that are offsetting their risk and well, and using [REDACTED], as an execution venue. In terms of what we do, we don't deploy our trading algorithms as such and not certainly the way I would categorize them. Our business is really centered around riskless, principal model, so back to back hedging.
- SPEAKER1 03:23 And given the back-to-back nature of what you do, do you perceive that to be any particular risks posed to you by those clients who send orders to you and in their use of algorithms and how that could impact you sort of upstream?
- SPEAKER2 03:46 Absolutely. So, there's certainly a risk that they are hedging models. Initiate very, very large trades or very frequent trades with us and the rest of us would be both operationally and also from a credit perspective.

SPEAKER1 04:18 The sort of strategies that they would employ, would they be you, because it's a principal model, would it be fair to say that it's nearly all hedging or do you have any firms which are sort of prop trading with you?

SPEAKER2 04:35 It's certainly both. I would say, on balance, the majority of our clients are hedging. There are certainly some clients that fall into the category with that because they're market makers or because they're individually speculating on the markets. It's actually both.

SPEAKER1 05:02 And to your knowledge, do you know if any of your clients are deploying any anything that you would consider to be a sort of machine learning or artificial intelligence type algorithm? Because FCA have made a distinction in their papers between more sort of an execution enhancement tool, which you might find in a traditional sort of point and click type system where, you know, the broker might leave a sort of

SPEAKER1 05:33 auto

SPEAKER1 05:34 spread on or something like that or stock or something like this. And then the more proprietary tools, which are a bit more sophisticated and are actually designed to actually make the investment decisions themselves. Are you aware of any clients sort of using that kind of technology or do you think it's more sort of still human calibrated type algorithmic flow?

SPEAKER2 06:02 So, I'm not aware that anyone is using AI in in in terms of their execution strategies. I think there's one that I can think of that may use AI to formulate their strategy, which tells them which wish to put on or take off....

SPEAKER1 06:28 But for that and do you have any involvement in the design and deployment and possible re collaboration of the trading platforms that your customers might use, or is it all sort of API based, and they put their own platform on?

SPEAKER2 06:51 So, in terms of the way we distribute our product, that would be typically via an API, so we don't have any input into what happens once they receive that price and liquidity. What we have control of is, is our systems and the configuration within those systems to deploy that liquidity. So, there's a very simple example. Whether you send a one million types of books, multiple millions of a book or multiple levels of type book are something that we would decide in consultation with the client.

SPEAKER1 07:36 In terms of

SPEAKER1 07:39 the risk management of

SPEAKER1 07:43 the types of the liquidity that you offer. What type of risks do you typically consider during that risk management sort of collaboration? So, for example, you got counterparty risk credit cards, party store credit risk or

SPEAKER1 08:04 liquidity risk

SPEAKER1 08:05 or, you know, and so on and so on, what type of stuff would you typically consider the most?

SPEAKER2 08:10 Whereas credit risk is the is certainly one of the primary ones. Execution risk, execution risk being the link between our client ticket and our equity hedge ticket , operational risk in terms of the number of tickets that we produce as well as the full STP input into our back office provides us with a risk and liquidity risk, so making sure that the credit with our clients in aggregate is no greater than the liquidity that we liquidity and credit that we take from our from our providers.

SPEAKER1 09:02 And would you consider conduct risk at all? So, the conduct that your clients or their clients for indirectly, you know, which, well, your indirect client that your direct client has directly contracted to them, do you consider the risks?

SPEAKER2 09:29 Absolutely. So, whether that given access to individuals at our clients, making sure that we have a process for that right through to looking at the quality of their trading, things like market abuse or market impact. And we have a piece of technology that allows us to look at our clients trading in aggregate and then drill down to trade level.

SPEAKER1 10:04 So, what would your sort of understanding of the meaning of conduct risk be, what do you think that means

SPEAKER1 10:11 in the context of

SPEAKER1 10:12 your specific business?

SPEAKER2 10:16 Everything from individuals that we employ, the culture of training that they need to adhere to and the alignment of our culture and our ethics with our regulator. And right through to the conduct of our clients and the way they behave without the use of liquidity.

SPEAKER1 10:54 Does the firm have a defined conduct risk framework? Yes. And does that framework, have you sort of considered what the main you know, if you were to say here are the top three conduct risks associated with this particular activity that could be driven by flow, which is some algorithmic deployment? Have you considered that

specifically and sort of listed the mountain or how he should have approached it?

SPEAKER2 11:38 So, conduct risk. I mean, it's such a broad subject and we've done lots of soul searching over the last couple of years of what that means to us, particularly with the roll out of SMCR. So, conduct restarts for us at a recruitment level. So right through to training and oversight from. And managers, but in terms of our clients, we specifically want to answer it, won't we, to answer how we bring those two things together? Then for me personally, it suits it kind of falls on the market abuse. Which is a form of conduct we're still against, but what we've done recently put things in place, we've put some training in for everyone, so I ran the global code to make sure that our staff are aware of

SPEAKER2 12:51 the risks

SPEAKER2 12:51 associated with training folks and on our clients and making sure that. The climate. Is always first, so we treat our clients. With the utmost consideration. And then we have the tools to look at their trading behaviours both in the office and within compliance to ensure that our clients are behaving correctly,

SPEAKER1 13:40 the overseer be familiar from recently they are the big sort of conduct risk initiative that the FCA has brought in. I spent many years sort of trying to develop as a sort of final elements of that came into force at the end of March. The SMCR is obviously very focused on human beings and the conduct of people and how they how they go about their business and deal with their clients, but obviously, markets have changed, right, and that human beings were a much bigger factor in markets than maybe what we're where the world is going. What is your perception of the likely levels of self-calibration in the sector and the sort of near sort of medium and long

SPEAKER1 14:33 term and how that

SPEAKER1 14:35 could have an impact on an initiative like SMCR, which has always been focused on maybe that a point and click trader or somebody who's, you know, phone broker or whatever and how they behave and maybe the actual design or the algorithm, if it's an algorithm involved. But what happens in your view is there you know , if you take those human beings out of the process and you get the algos are more sort of almost thinking for themselves because they're doing reinforcement learning and stuff , do you think there's going to be a trend and long term to more of that kind of self-calibration self-

organization ? If so, how do you think that has an impact? Do you think that could have taken that risk and things like say so?

SPEAKER2 15:25 One of the key things that I think seeks to address is responsibility and making sure that individuals are accountable for their actions, for their conduct. So, if you take that thing and apply that to AI, there's always someone responsible for the deployment. I mean, I think that's where the two link-up. Identification of the people that are responsible and the ownership of their responsibilities needs to be addressed and there will always be a human behind that held responsible for that. So that's clearly how they link. It's fully aligned at the moment. And everyone that deploys very sophisticated algorithms understands all of the risk associated with them, and how did that fit up into the people responsible for the firm? I think it's probably knowledge gaps.

SPEAKER1 16:54 And on those knowledge gaps, how would you react, how would you rate your own firm's understanding of conduct risk, how it may apply to sort of more automated or algorithmic forms of trading, you know, from front office to the sort of support and senior management?

SPEAKER2 17:14 I think it's a journey and I think we have come a long way in the last couple of years in terms of employing people with those skills. So, people with those skills in senior positions as well as in key risk functions, for example, market risk. We're not a super sophisticated firm in it by comparison with HFT types. So, I think we are on the right path for the business as it currently stands. But as markets become more sophisticated, as trading becomes more sophisticated. We will need to continue to update upscale.

SPEAKER1 18:13 And do you think that that upskilling I mean, do you think that the firms because you mentioned about the HFT firm, I mean, does that interaction with that those other types of firms? And even if they're not your direct client, if they're in the same universe, do you think that that's leading to a knock-on effect where maybe firms are perhaps less sophisticated in their understanding of some of these things? Are they responding to that and trying to give themselves up to,

SPEAKER1 18:48 you know, a future

SPEAKER1 18:49 where might you have more sort of artificial intelligence type algorithms and tools? Or is it being it very much sort of sort of like we just wait and see what happens? And, you know, if it's something that

SPEAKER1 19:06 directly impacts

SPEAKER1 19:07 us, we'll do something. Otherwise, we you know, we won't really engage with it.

SPEAKER2 19:12 I think the awareness is there that this is the way the markets are evolving and that you. Can't ignore it, but I don't think that the investment is there yet. So, I think if you're going to invest in people and people with those skills, whether it be operations or market risk or oversight, it comes at a cost. And I think the awareness hasn't quite filtered through to budget yet.

SPEAKER1 19:55 You mentioned also about the fact that, you know, you might have somebody design ultimately, they responsible for an algorithm, that they design it, but it may end up doing something that

SPEAKER1 20:08 was not originally

SPEAKER1 20:09 intended. How do you think those people that are involved in designing an algorithm or supervise it, how do they how can actually stay on top of the sort of developments of what they've built or maybe what's happened elsewhere in the market, which they might want to learn from? Because, of course, as you know, in this world, it's quite in some quarters it can be quite sort of secretive. Right. So how do you learn from our mistakes? You don't end up having another night capital or, you know, you have some sort of incident where you end up being asymmetrically on the wrong side of an asymmetric price incident where, you know, you're facing your back. You know what? You're facing a bank and they've withdrawn your liquidity. And actually, you're standing facing the other. But they still spewing out all these orders that,

SPEAKER1 21:08 you know, because there's

SPEAKER1 21:09 been a malfunctioning algorithm or something.

SPEAKER2 21:14 I mean, there's just so many events in the last couple of years that are almost certainly driven by algorithm trading, big gaps in the market. Sterling was suffered one of those gaps a couple of years ago. I think we'll stay on top of that. I think it has to be to some extent. Organized by a third party, for example, the Bank of England. Needs to organize round roundtable discussions to try to bring these people together to discuss the risks. And I think you're absolutely spot on. It does come with a lot of secrecy. I've certainly worked with people that have worked at very sophisticated firms that are allowed to speak to the person sitting next to them about what they're working on and the deployment of what they're working on. So, it needs to be. And then for this to be a forum for people to discuss this and. Naturally, without giving away their intellectual property, certainly to my

consideration for the risks involved, because have a properly functioning market doesn't have big risk events with only 30 percent, for example. Exactly. And I think we should be invested in making sure those things don't happen.

SPEAKER1 23:05 Because talking about the Bank of England, I think there's the British Bankers Association they have this scheme where it's a form of sort of operational risk reporting. Where certain operational risk incidents, they are reported to this centralized portal, which the BBA maintains, and it sort of gives a sort of root cause analysis, date time. You know, these were the problem. This is what this is what happened. This is why it happened. This was he was involved. These are the clients affected. All online names basis more so than other people who subscribe to that engine can learn from on a sort of anonymous basis, maybe some of the other sort of risk incidents that happen. Are you aware of anything like that in the sort of sector...

SPEAKER2 24:00 Yeah, certainly internally we have got. It's none of us, but we have that reporting requirement. So, if we under the operational risk framework, we are all reminded and obliged to report anything that could affect the company, clients, etc., but do I think that would be a useful format? Absolutely, yeah, but I'm not aware of. And then there's a Bank of England roundtable discussion with many of the banks.

SPEAKER1 24:50 are you aware of any sort of plans within your own firm or more generally in the sector, too, or I mean, are you or are you seeing a trends of reductions in overhead,

SPEAKER1 25:06 you

SPEAKER1 25:06 know, human being staff on account of increased automation and perhaps algorithmic activity?

SPEAKER2 25:18 Yes, certainly in the sector, there is a push to automate the risk management of derivatives, so spot has been auto managed for a long time across all the major banks and major institutions. But there's certainly a push to do that in NDFs and FX options as well, and NDFs is happening right now. So, in the last year, a couple of banks have been able to alter price and there's at least one or two banks that now willing to risk that used to be managed by traders.

SPEAKER1 26:01 So, there's going to be, you know, to the point, it seems they are again focusing on trying to conduct, there's going to be, again, fewer of those people. Yes, essentially. OK.

SPEAKER2 26:14 Absolutely. Yeah, absolutely. I mean, going back many, many years was part of FX, spotting a very large bank that had over 20 spot

traders. Now, I think you'll struggle to find a bank that has more than about five. And so, if you extrapolate from there into the derivatives world, then that will almost certainly happen.

SPEAKER1 26:40 Is it just that on the trading floor that you'd see that change? Or do you think there could also be change in support functions and stuff as well?

SPEAKER2 26:49 Not particularly close with, but yes, I can foresee that for sure. Even if you take very simple things like reconciliation. Reconciliation was an arduous task handled by many, many people, and now it's almost fully automated.

SPEAKER1 27:11 Do you think we're heading toward sort of environment where we could have sort of machine-to-machine conduct regulation. So now it's sort of being very much, you know, it's still being very much human oriented. As I say, they are, again, demonstrates.

SPEAKER1 27:30 But do you see any

SPEAKER1 27:31 sort of

SPEAKER1 27:33 future in that

SPEAKER1 27:34 or is that something which is just too fantastical and seemed a bit too far in the future for me to consider?

SPEAKER2 27:38 However, the ability to merge data is from multiple systems. So, if you've got a market with system of compliance, monitoring system, front office, execution system, operations, reconciliation system, the ability to manage the data from all of those systems to create. And I think is more than capable.

SPEAKER1 28:20 Are you aware of any initiatives

SPEAKER1 28:24 maybe to

SPEAKER1 28:27 embed ethical or standards of good conduct in the actual code that may be deployed for training purposes anywhere in the in your sector? So, if you have, for example, I mean, a lot of algorithms. I mean the mathematical sort of choice, there's a choice that this program, if this do this, there's been several ethical scenarios which have been done in other sectors, non-financial sectors primarily. So, if you take a driverless car, which is effectively run off an algorithm itself, albeit a learning algorithm, there is a possibility it may have to make an ethical decision, i.e. the actual goal is to get from A to B. But when in between going to A to B,

SPEAKER1 29:25 it may

SPEAKER1 29:25 well, be that somebody is crossing a road as a mother and a child, and it may receive this data quite late. It's got to make a decision and then what? The only decision it can make is to swerve and hit the old man who's on the pavement to avoid hitting the mother and the child. And so, you know, those people that programming those cars with these algorithms that they're building, they're having to think about those kinds of ethical dilemmas and decide whether they need to program. Well, actually, this is the least bad outcome in this situation. And it's not just about going from A to B. So, if you had a trading scenario, you know, traditionally, I think maybe 20 years ago, it's made as much money as possible before we came into the world of all this. So, lots of new regulation, everything. But now maybe it's made money, but make it in this way and, you know, make sure you don't commit market abuse at the same time you're doing it. Do you see any sort of real thinking in those terms, or is it still sort of...well, it's just we program and just hope for the best kind of thing, you know, it's a significant outcome.

SPEAKER2 30:47 No, I think the world has changed significantly. There's been a country where a number of investigations within the sector that have highlighted poor practicing in last look that ultimately drove the need for a global code. And now it's not regulation itself, but a lot of people, most participants, most people just want certainly signed up and committed to it. And there is absolutely a change in the industry to act in the best interests of the clients within that code. So, there are certain nonbank market markets, for example, that have no last look, period, I say. And that's a conscious decision to act in the best interest of their clients.

SPEAKER1 31:49 So that's something that's programmed into the actual trading software.

SPEAKER2 31:54 Yes.

SPEAKER2 31:55 So, we don't ourselves. And a last look or impose a last look on our clients, but by the nature of our business principal model. I liquidity to do so, it's something that we are conscious of, and we are able to monitor, and we question our liquidity providers heavily on that. And I would say that overall, the last times have come down to very reasonable levels and a lot of the practices that were employed by the banks and the banks before have been cleaned up, so very simply moving from that might make as much money as possible and use that information of the clients trading to inform your last look has . It's been eradicated because who knows, but certainly been heavily reduced

SPEAKER1 33:06 in terms of ways of detecting possible poor conduct, so typically after the detector is always after the event, what sort of surveillance tools are you aware of being deployed in the space at the moment and in your firm?

SPEAKER2 33:27 So, I mean, from a front office perspective, we have the ability to look at and compare last look. For example, we have the ability to see if any of our liquidity providers are leading the market without causing much impact on...Equally, we have the ability to look at our clients' trading on an aggregate basis, long term basis to see all of the trades that they traded from their sides time through to market impact. I'm aware that we have trade surveillance tools that look at clients trading. Whether it be frequency, whether it be size, obviously, I'm not aware of the parameters that they adhere to, but we have an outsourced third-party system that is monitoring trading.

SPEAKER1 34:47 How would you rate the ability of human beings to spot potential? Sort of poor conduct incidents from the data?

SPEAKER2 35:04 Pretty highly I think, you know, having had some experience of trading in your previous life, may the ability to spot patterns within a large set of data. Yeah, I've got a pretty high confidence.

SPEAKER1 35:28 And regulators and how would you rate their ability?

SPEAKER2 35:34 Well, I think there's been some inroads to employ people with the right skills to do that. So, I think that ability is increasing. But I can't think of an instance where they were the first to discover bad behaviour, it tends to come from clients or from competitors or someone with a vested interest.

SPEAKER1 36:16 In terms of potential development of tools to help detect poor conduct in the future as things evolve. What kind of approach do you think firms are likely to take? Do you think they're likely to build tools and capability themselves, especially in your sort of subsector,

SPEAKER1 36:37 or do you think they're

SPEAKER1 36:38 more likely to partner or buy from somewhere else,

SPEAKER2 36:42 I think there's very few firms that have the ability to construct a sophisticated choice.

SPEAKER1 36:52 Do you think those vendors are capable of understanding the idiosyncrasies of this sort of conduct, events that might affect a particular firm or...?

SPEAKER2 37:15 Yeah, absolutely do the only job you really cast from it. But then that cost needs to be met because of the necessity to have that ability to the regulator.

SPEAKER1 37:33 At the moment. Conduct regulation is largely looked at the human as being the agents in the sense of. You know, use remuneration, for example, was a way of incentivizing human beings' good conduct or deter a human being from engaging on a particular path of poor conduct by making an example of another human being who has done something egregious or punishing that human being. So,

SPEAKER1 38:03 they don't

SPEAKER1 38:04 do something again when it comes to machines and especially in algorithmic, maybe the world might move into more sort of self-calibration or reinforcement learning. Do you see any possibilities of ways in which the algorithm could be incentivized to behave properly or that the algorithm could actually be punished separately from the from the human being? And I'll give you an example of something from a game from a different world, which sort of exemplifies what I'm getting at. In the early 90s, there was a big moral panic about dangerous dogs. I don't know if you remember this, but in the UK, there was a big moral panic. And a new Dangerous Dogs Act was brought in, I think, about 1991, something like this, and they're Dangerous Dogs Act obviously brought in penalties for the owner, if the owner was deemed to have been negligent or maybe reared the dog in a particular way or wasn't able to keep the dog under control or whatever, but also it made provision for putting the dog down, if

SPEAKER1 39:22 you know, the dog was

SPEAKER1 39:22 considered to be a danger to the public for whatever reason. So, you had this sort of split and recognition that the dog was also is an agent itself, a good thing for itself, albeit, you know, the human has a large degree of control over the dog's behaviour. Extrapolating from that and actually taking this into the algorithmic world. Can you see any ways which any you know; the actual observer may be viewed like that as well? Or do you think it's just always going to be back to the human being, even if the algorithm behaves in a way which is just not reasonably foreseeable at the time it was designed?

SPEAKER2 40:11 I'm not technology, so not the easiest question from my perspective, but I think that a human has to deploy a code into a system and as much as a machine might take over. With its own decisions, cut the possibility for that code and what that algorithm does ultimately come down to human being, so that familiar is where the buck needs to stop. The people that are responsible for the business and the rest

of the business need to be held accountable. It can't be passed on to a machine.

SPEAKER1 41:11 Are you aware of any sort of sector, industry wide sort of initiatives or

SPEAKER1 41:17 collaboration to

SPEAKER1 41:20 maybe look at some of these issues and maybe how evolution in this space could impact the market in future?

SPEAKER2 41:31 Possibly not.

SPEAKER1 41:33 And what would you say is the merits of a sort of industry led approach to addressing some of these issues versus a legislative approach?

SPEAKER2 41:49 I think, as I said earlier, all participants should be invested in a fully functioning market. Because that was going to increase our volumes and participation within those markets and anything that will stretch or strain consumer confidence. It's a risk to us so I think it does need to be. Open where possible discussion amongst participants to look at, to combat the risks. And I'm all for kind of collaboration around table meetings.

SPEAKER1 42:49 On this subject, do you think the willingness is there in the area? I mean, obviously there's quite a lot of cooperation in things like listed derivatives.

SPEAKER2 43:00 Yeah, I do think there is a motivation for people to I think has been through the mill in recent years in terms of fines and investigations and I think. There would be motivation to do that. Absolutely. Yeah. Well, the participation from the major banks and non-banks accounts for such a large part of the market that actually, if you did distil it down to the people that should be talking about this stuff, it's not a big task.

SPEAKER1 43:50 The stock market is very unique, really, in comparison to a lot of the other asset classes and that sort of 24-hour market for most of the week, obviously, time zones permitting. And given that sort of unique characteristic, how do you sort of rate the UK's approach to maybe addressing some

SPEAKER1 44:20 of this type of

SPEAKER1 44:21 risk issues versus maybe those in the States

SPEAKER1 44:27 or, you know, elsewhere?

SPEAKER1 44:32 Because obviously, we've got a global code now and it's supposed to be global. Do you think it's really something which can be solved by

just the UK alone? Or do you think that, you know, the only way to do this is as a sort of global approach?

- SPEAKER2 44:53 Yeah, as the global approach and the FX market is so fragmented in terms of clients, in terms of data centres, technology to support foreign exchange market, that it has to be a global approach. But the UK has always been probably the largest component of most businesses done during London hours, the people that are responsible. Also, point of view, foreign exchange is a big concentration in the U.K., and we have the skills and expertise in this country to suit to labour, it has to be a global approach.
- SPEAKER1 45:47 Nearly at the end, are you aware of any incidents which are outside the sort of trading? Industry or broking industry, which may have come from sort of high levels of automation or algorithmic involvement, which you think
- SPEAKER1 46:06 the
- SPEAKER1 46:07 industry could learn from and adapt from?
- SPEAKER2 46:21 Sorry.
- SPEAKER1 46:23 And finally, what are your principal concerns for the future event risk?
- SPEAKER2 46:37 So, I mean, for me, when you talk about trading and you're talking about obviously, a brutal, volatile, period of time in 2020 where we saw things like the oil price negative of 38 dollars, there's a knock on effects to Norwegian kroner, for example, associated with that, those big moves, those big Brexit moves, those big SNB type one. What they usually want in a 30-year event seems to be happening more frequently, so the confidence in people to trade.
- SPEAKER2 47:34 Is one of the
- SPEAKER2 47:36 key risks. I see the future and the foreign exchange reserves and 24-hour market and liquidity is not equal across each time zone. So, depending on the currency time zone, there can be illiquid periods of time, we've seen it very recently, in recent weeks with Turkish lira and the kind of overnight short-term lending ability after a political event and the management of those situations and the ability to not foresee them necessarily because that's difficult but have the systems and experience to try to minimize them as much as possible is.
- SPEAKER1 48:33 Interesting. OK. That does conclude the interview, so thank you for your time. Just to close the recording now.