Q4 Working Group: Meeting Minutes

Algo Trading Controls and Governance

Working Group Q4: Monday, 28th November 2022

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Objective

To discuss aspects of the two previous sessions that were not fully covered and to look forward into 2023 and beyond.

Topics included:

1. Perceived Problems in the 3LoD Model
2. Process Controls and Systematic Controls Complexity
3. Attracting and Retaining the Right Skills
4. Value of Risk Controls

Attendees:

BANK OF AMERICA

BMO Financial Group

CIBC

citi

CREDIT SUISSE

Deutsche Bank

HSBC

ICBC

ING

NATIXIS

NatWest Markets

RBC Capital Markets

Scotiabank

SOCIETE GENERALE

standard chartered

STATE STREET

TD Securities

UBS

WELLS FARGO

Westpac

Perceived Problems in the 3LoD Model

Industry Context:

- The industry has adopted the model and has made its best attempt to segregate activities in line with the model.
- Regulation very clearly states banks need to have a first line, second line and third line of defence in place, and the regulation is prescriptive about the involvement of both Risk and Compliance.
- There have been efforts to improve communication lines and share assets between the lines of defence.
- Algo trading has implemented the 3LoD model more robustly than other businesses because of MiFID II and RTS 6 requirements.

Challenges:

- There is a perception that the rigidity of the 3LoD model has created some challenges when it is implemented by an organisation.
- There is some redundancy between the first and second line because the second line has a requirement to oversee and monitor the first line's activities.
- A lot of time is being taken developing and increasing the level of confidence that the second line has in the first line.
- Executives are fatigued with multiple reports sent out from the various lines.

Best Practices and Suggested Actions:

- The emergence of the 1.5 line of defence may be a more practical approach to the lines of defence.
- More could be done to clarify the roles and responsibilities of the different risk teams and how they can interact more effectively.
- Algo trading can lead to quite large operational losses, so to mitigate all the risks (model, technology, market and credit risk) and to comply with stringent regulation, there must be a heavy second and third line of defence.
- There are two different categories of risk in algo trading:
  1. operational, market and modal risk that can be mitigated through kill switches; and
  2. conduct risk of the algo itself, which must be mitigated by robust design reviews of the model.
- Transparency must be incorporated into the design and evolution of models.
- Management information should be displayed on a dashboard, where everything that the first line is monitoring can be made available to second line.

A collaborative approach taken by one bank:

- The bank embedded an algo risk expert in the build to look at the data definitions, data requirements and different deficiencies and to build remediation plans quickly. Inventory attestation, annual certification and recertification have been implemented and the surveillance group is monitoring the actual trading activity. The second line provides challenging oversight and does much of the regulatory reporting. While there is no dedicated algo trading risk function in the second line, the team has undergone training to bring them up to speed.

Process Controls and Systematic Controls Complexity

Challenges:

- It is difficult to understand the risk associated with each of the controls, and to confidently prioritize each so that the right level of resource and due diligence can be applied.

Best Practices and Suggested Actions:

- A second line algo risk team that has more knowledge across various risk areas can improve speed to market and keep the bank within its risk appetite limits.
- A focus on governance and controls and the roles and responsibilities is needed to support the business better and to help inform the second line better.
- An algo trading development team that supports multiple asset classes is not yet a reality, but the industry is moving in that direction.
- Creating standardisation around how development and testing is undertaken as well as how individuals are trained is key – whether they are users of algos or managers of the risk of the algos. The second line should work to enhance its expertise in algo trading risk.

Attracting and Retaining the Right Skills

Industry Context:

- FINRA issued guidance in 2015 that notes that there is an expectation that compliance be upskilled to understand how algorithms work and how they comply with the various rules that exist, including the market access rule in the US.
- The guidance requires that the bank has individuals that, while not necessarily able to read code, can provide guidance to those who are developing, both in technology and the business, as to what is permissible and what is not.

Challenges:

- Compliance is sometimes concerned that it cannot fulfil its regulatory obligation as it does not have sufficient understanding of the technical aspect of algo trading.
- Attracting the right talent within the first line is challenging, specifically, people who understand risk.

Best Practices and Suggested Actions:

- Skills and knowledge expected of the compliance person should be clarified as well as what skills and knowledge they should not be expected to have.
- Possible solution is to create an environment where all three lines of defence are clear on their respective expertise and rely on each other.

One bank's approach to retaining talent:

  - People with the deepest algo development and risk experience were consistently being asked questions by the second and third lines, as well as being required to complete questionnaires and participate in committees, which has fatigued them. The bank brought in an individual to be a central point of contact and representative on multiple governance groups. This allowed the algo developers time to build. This approach helped build a better relationship with the technical team.

- The first and second line must, as surveillance teams do, understand technology, rules and market data.
- Hiring people who are ex-traders can be successful as they understand compliance and their firm's data.
- Quantitative researchers or analysts who have designed trading algos can enjoy the intersection of technology and rules and markets.
- It is hard to find suitable people, so when someone is found for the role they must be paid well to retain them.

Value of Risk Controls

Industry Context:

- Previously, banks viewed control work as a tick box exercise to please the regulator. There was no real value in managing controls. However, when controls started to allow teams to identify risks that the business had not seen, the value of controls was clarified for the business.
- There is a common understanding that in banking, they cannot operate without an established control framework, whether that be in algo trading or otherwise.
- The business has learned that being more agile and adopting more transparency is key as well as ensuring more rigour in change.
- Controls are now becoming embedded in the day-to-day procedures of the firm, and this has been achieved through everyday conversations as well as the leadership of the business.

Challenges:

- Ensuring a robust controls framework is driven by fear of scrutiny by regulators, but also by the fear of operational losses.
- Controls are very complex and challenging to implement, and algo trading is heavily scrutinised as it is seen as risky.
- Banks have had to constantly reinforce the value of controls in the front office so now there is across-the-board a high level of recognition that the control framework is a good thing.
- One bank noted that they did not undertake benchmarking but relied on the experience that staff brought from their previous roles.
- However, there is a bivalent response to controls in firms depending on which firm you're in and whether you have the dedicated resources to respond.

Best Practices and Suggested Actions:

- Building a good relationship with the second and third line, makes reviews and testing easier.
- Achieving this relies on the strength of the COO. They can help the business find a balance where the controls in place are not there just for the sake of it but allow banks to run a successful business.
- The COO function needs to have that good relationship with the second and third lines to ensure that that balance is maintained.
- The increasing scrutiny by regulators can lead banks to overdo the governance, so it is important for the COO to push back. This reassures the first line of defence, both market-facing people and those building algorithms, that they have support from the COO community.
- The more a firm gets audited, whether internally or externally, the more they see that controls are inevitable.
- Education has been undertaken in terms of, formal modules on e-trading and the rules and regulations, especially relating to MiFID.
- Discussions are ongoing about what the objectives are for the next year for the business, both commercially and otherwise, and include discussion around how to construct a suitable controls environment to support the business direction.
- It is important to foster a culture of feedback where people can speak up and push back if something does not make sense.

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