Banc Ceannais na hÉireann
Central Bank of Ireland
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Conduct Risk Assessment of Pre-Trade Controls

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Conduct Risk Assessment of Pre-Trade Controls

Introduction

The Central Bank of Ireland (the Central Bank) has undertaken a Conduct Risk Assessment of Pre-Trade Controls in selected investment firms and credit institutions engaged in wholesale market activity (the Assessment). The Assessment examined the overall pre-trade control framework within selected entities and was underpinned by the requirements set out in Markets in Financial Instruments Directive (MiFID II)[1]. The findings of the Assessment form part of the Central Bank's submission to the European Securities and Markets Authority (ESMA) Common Supervisory Action (CSA) focused on pre-trade controls[2].

The Central Bank's Regulatory and Supervisory Outlook Report 2024 highlighted the importance of trading controls, noting the expectation that:

"Firms have clear governance frameworks around algorithmic trading in order to prevent the use of poorly controlled algorithms, which increase the risk of manipulation or disorderly market conditions".[3]

Previous market events have shone a light on the market impact of ineffective pre-trade controls for both manual and algorithmic trading activity. For example, on 2 May 2022, a significant trading error combined with failures in trading systems and controls in a European investment firm led to over a billion euro of erroneous trades being executed on European exchanges.

Such incidents serve as a stark reminder that trading errors or "fat finger errors" which are not identified and effectively mitigated by a firm's trading control framework, may result in market disruption, market instability, or monetary and reputational damage for firms. Such failings on behalf of market participants could also damage investor outcomes and ultimately undermine investor trust and confidence in the fairness of capital markets.

The purpose of this Industry Communication is to outline the key findings from the Assessment and to set out the Central Bank's expectations in this area. While the Assessment focused on the pre-trade control frameworks in investment firms and credit institutions, market participants should consider the findings more broadly given that they relate to deficiencies in overall risk control frameworks.

[1] Directive 2014/65/EU.
[2] https://www.esma.europa.eu/press-news/esma-news/esma-and-ncas-coordinate-supervisory-activities-mifid-ii-pre-trade-controls
[3] https://www.centralbank.ie/docs/default-source/publications/regulatory-and-supervisory-outlook-reports/regulatory-supervisory-outlook-report-2024.pdf

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It is essential that firms engaged in wholesale market activity have effective systems and controls in place to mitigate and manage the risks arising from their trading activity. These systems and controls should be in place throughout the lifecycle of a trade to mitigate against conduct risks arising and ultimately market dislocation events, which could result in detrimental impacts to wholesale market participants and ultimately retail investors.

Pre-trade controls should be applied to orders before being submitted to a trading venue. Firms should also have a framework in place to monitor their trading activity and implement arrangements to enable effective oversight, respond to issues, and where necessary, initiate remedial action in a timely manner. This may include real-time alerts that identify signs of disorderly trading, trading errors, or a breach of the firm's pre-trade controls. While the focus of the Assessment was on pre-trade controls, firms should also ensure that appropriate post-trade controls are in place so that the entire lifecycle of a trade is considered under applicable control frameworks.

In examining firms' overall pre-trade control frameworks, both manual and algorithmic trading were considered in the Assessment. The Assessment focused on five core areas, namely:

1. Control design and calibration
2. Testing, monitoring and investigation
3. Governance and oversight
4. Staff awareness and training
5. Policies and procedures

The Central Bank expects all firms engaged in the provision of relevant MiFID investment services to fully consider the findings and expectations set out in this Industry Communication and evaluate their frameworks for pre-trade controls.

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Summary of Findings

While the Assessment identified some positive aspects, particularly in relation to the knowledge and experience of market-facing staff in the cohort of firms assessed, a number of deficiencies and areas for improvement were identified in firms' pre-trade control frameworks. These findings are not exhaustive and firms should continually evaluate the effectiveness of their own control frameworks and associated governance.

The key supervisory findings arising from the Assessment are detailed in the following section. In summary, they are:

- Technological controls[4] at order entry were not consistently calibrated appropriately based on firms' risk profile and the instruments traded.
- In some cases, firms did not take a proactive approach to reviewing the effectiveness of their pre-trade control frameworks following recent highly publicised market events.
- The assessment identified a lack of oversight from Risk and Compliance functions of pre-trade controls.
- The Assessment identified positive practices to enable effective real-time monitoring, including the use of a decision matrix and alert protocols to help ensure the timely actioning of alert triggers and risk events.
- Ineffective pre-trade control arrangements to ensure clients using Direct Electronic Access (DEA)[5] services are prevented from exceeding appropriate trading thresholds.
- An overreliance on Group entities to perform certain key control functions such as testing, monitoring, and investigation of control alerts.
- The assessment has identified reoccurring deficiencies in firms' control frameworks including:
    - Poor practices around governance and oversight of outsourced activities;
    - Gaps and deficiencies in policies and procedures;

[4] The Assessment examined both hard blocks and soft blocks. Hard blocks prevent orders from being executed. Soft blocks act as a warning and may be overridden by a trader.
[5] An arrangement where a member or participant or client of a trading venue permits a person to use its trading code so the person can electronically transmit orders relating to a financial instrument directly to the trading venue and includes arrangements which involve the use by a person of the infrastructure of the member or participant or client, or any connecting system provided by the member or participant or client, to transmit the orders (direct market access) and arrangements where such an infrastructure is not used by a person (sponsored access).

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    - Inadequate Management Information and reporting to senior management and the Board; and
    - Lack of formalised and specific technical training.
- The use of manual processes which may lead to a heightened possibility of conduct risks emerging was also identified.

It is important that firms have a documented control environment in place with pre-trade controls calibrated for the type of financial instruments to which they are applied and the firm's own risk profile and market activities. A robust governance framework, clear roles and responsibilities, and procedural documentation will support an effective risk management and control environment.

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Key Findings

Controls Design and Calibration

While all of the firms included in the Assessment had some form of pre-trade controls on order entry in place, a number of risk issues have been identified in the design and calibration of the controls.

For manually input orders, pre-trade control parameters were found in a number of cases to be static, not differentiated by instrument or market conditions, and without any documented rationale or quantitative basis.

A number of firms relied heavily on "off-the-shelf" control parameters in the third-party order entry systems being utilised. Other firms relied on controls established by trading venues. In both scenarios, the Central Bank did not identify adequate tailoring of pre-trade control parameters or thresholds to firms' market activities, business models, or risk appetites.

The Assessment also identified a number of manual processes across the cohort of firms, which serves to heighten the risk of errors.

A further control failure was identified whereby employees from other Group entities had the ability to override or release orders blocked by pre-trade controls.

With regard to good practices, there was evidence of the tailoring of pre-trade controls by instrument type and a documented rationale and quantitative basis to support the parameters that were set.

Expectation

The Central Bank expects firms to have in place system-based pre-trade controls on order entry including hard and soft blocks that are suitably calibrated to ensure they are reflective of the individual firm's market activities and business model.

Testing, Monitoring and Investigation

The Central Bank observed a lack of formalised control testing across the cohort of firms selected for the Assessment. In some firms, control testing was evidenced as either ad hoc in nature or not taking place at all. In certain firms where control testing was in place, this was performed by Group functions on an outsourced basis with inadequate levels of local entity reporting or oversight evidenced.

With regard to the monitoring of pre-trade controls, the Central Bank observed that this was predominately undertaken by the market-facing staff (first line of defence) with limited independent monitoring or oversight conducted by the Risk and Compliance functions

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(second line of defence). In some cases, the monitoring was conducted by a function in a separate Group entity specifically established for the provision of real-time monitoring. While the Central Bank acknowledges the potential benefits of such outsourcing there should be effective reporting to the local entity in place.

In certain cases, the firm's Risk and Compliance functions were not systematically informed of alerts related to the overriding of pre-trade controls. In another case, the Compliance function appeared to have no involvement in pre-trade control monitoring, testing or investigation.

In terms of good practice, the Assessment observed improvements in one firm's real-time monitoring arrangements following the occurrence of a previous risk incident. A decision matrix and alert protocols are now in place. These measures will help to ensure the firm is in a position to appropriately detect and manage disorderly trading events without delay.

Expectation

Pre-trade controls should be supported by an effective testing process to ensure they remain fit for purpose and are adequately overseen by the firms' control functions.

Inadequate oversight of outsourced services has been identified across a number of previous supervisory assessments. Where testing of pre-trade controls is outsourced either intra-group or to a third party, local entities must be able to evidence adequate oversight and challenge of the testing and its result.

Monitoring of pre-trade controls should be undertaken on a real-time basis. This is to ensure that any unexpected errors can be dealt with promptly to limit the risk of an error resulting in market instability.

The Central Bank expects the functions acting as the second line of defence to have awareness of the triggering of pre-trade controls and oversight of the investigation of such triggers. This will allow these functions to consider whether further risk mitigation controls are required and to consider the suitability of the controls in place.

Governance and Oversight

In the majority of firms assessed, management were unable to demonstrate adequate awareness or oversight of the firms' pre-trade control framework.

In some cases, a large component of the pre-trade control framework was outsourced to Group entities to perform elements such as testing and monitoring of pre-trade controls with local entities not adequately exercising responsibility or oversight for outsourced elements of the pre-trade control framework.

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Firms were unable to evidence sufficient formalised second line of defence oversight and challenge of the appropriateness of control limits set or awareness of the calibration or alteration of pre-trade control parameters. Traders in some firms were identified as having the ability to set their own pre-trade control parameters without adequate governance or second line oversight.

The majority of firms included in the Assessment do not provide formal and regular management information to relevant senior management on the pre-trade control environment or real-time monitoring and did not differentiate between manual and electronic, or algorithmic trading activities.

Expectation

While the Central Bank recognises the benefits of using Group expertise in what is a technical area, responsibility rests with the local entity and its senior management.

Senior management and the second line of defence should be aware of and provide effective oversight and challenge of the firms' pre-trade control framework.

The Central Bank expects that relevant management and governance fora are receiving consolidated management information and reporting in relation to firms' pre-trade control environment and real-time monitoring of its trading activities. Consolidated reporting will assist in ensuring adequate oversight over the firms' trading activities so that key risks are identified, reviewed, actioned, and escalated. Reporting should include aspects such as trend analysis of pre-trade controls triggered, the results of control testing, and breaches of trading mandates and risk limits.

Staff Awareness and Training

The Assessment identified an overreliance on the trader's trading experience as a control in itself to prevent disorderly trading. In certain cases, firms could not adequately demonstrate specific training for the mitigation of risks associated with disorderly trading, the handling and overriding of alerts, and the appropriate use of kill switches for firms engaged in algorithmic trading.

The Central Bank did observe a positive practice where relevant staff training addressed the handling and overriding of alerts, and set out the role and expectations for market-facing staff within the pre-trade control framework.

Expectation

The Central Bank expects firms to have documented procedures in place for the mitigation of risks associated with disorderly trading, including the effective use of kill switches. Training, policies, and procedures should provide market facing staff with the requisite knowledge and

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protocols for identifying and mitigating against potential incidents of disorderly trading. Such training should include the handling and overriding of alerts, and the appropriate use of kill switches.

Policies and Procedures

In the majority of firms assessed, the Central Bank observed that documentation provided in relation to pre-trade controls, did not:

- Clearly record the controls in place;
- Set out an inventory of pre-trade controls;
- Set out the calibrated parameters of the controls;
- Capture processes surrounding the lifecycle of the implementation of pre-trade controls, including but not limited to the testing, calibration, monitoring, and investigation of alerts;
- Set out the process for the timely escalation of pre-trade controls breaches or issues; or
- Outline the roles and responsibilities for elements of the pre-trade control framework across the three lines of defence.

In a number of firms, the Assessment identified a lack of formalised governance or procedures in place for the oversight, challenge, and sign off on threshold calibration methodology, control thresholds, or parameter changes. In addition, in some cases, pre-trade controls were not captured in firms' risk registers.

One firm however illustrated good practices in this area where it evidenced a centrally documented inventory of pre-trade controls with ownership and oversight by the second line of defence.

Expectation

The Central Bank is of the view that governance and documentation supporting the pre-trade control environment must be robust and aligned to the nature of firms' market activities.

Firms should have in place a documented inventory of pre-trade controls, thresholds and parameters as well as the rationale or quantitative basis for the limits used.

Firms should ensure that documentation is reviewed and updated regularly and at least on an annual basis.

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