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NASDAQ STOCKHOLM'S

DECISION

11 November 2024

DISCIPLINARY COMMITTEE

2024:05

Nasdaq Stockholm

Citigroup Global Markets Europe AG

DECISION

The Disciplinary Committee orders Citigroup Global Markets Europe AG to pay a fine of SEK 6 million to Nasdaq Stockholm.

Motion

Citigroup Global Markets Europe AG ("Citi") is a member of Nasdaq Stockholm AB (the "Exchange") and is obliged to comply with the Nasdaq Nordic Member Rules (the "Rule Book").

The Exchange has argued that Citi failed to have adequate pre-trade controls, that Citi submitted non-genuine orders, that Citi failed to adequately monitor its trading activity, that Citi failed to update the Exchange with valid contact information, and that Citi failed to contact the Exchange as soon as possible after violations of the Rule Book. Consequently, the Exchange concludes that Citi has violated sections 3.7.4, 4.2.5, 4.5.2, 4.5.3, 4.6.1, 4.6.2, and 4.11.2 of the Rule Book. With reference to Rule 4.13.3 of the Rule Book, the Exchange has thus requested the Disciplinary Committee to issue a decision regarding disciplinary measures against Citi.

Citi has disputed the majority of the violations of the Rule Book.

The matter has been decided following a written procedure. The Disciplinary Committee has reviewed the documents in the matter. The Financial Supervisory Authority has stated that it has nothing to add to the matter.

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Reasons for the decision

The Rule Book

Section 3.7.4 of the Rule Book states: "The Member shall immediately notify Nasdaq Nordic with regard to any material deviation from the provisions set forth in the Nasdaq Nordic Member Rules that apply to the Member."

Section 4.2.5 of the Rule Book states: "The Member shall at all times appoint a person as Member Administrator to the Nasdaq Member Portal. The Exchange may require that any information or data to be submitted or certifications to be made by the Member under these Rules shall be submitted or made, as the case may be, through the Nasdaq Member Portal. The Member shall ensure that all information provided in the Member Portal is kept up to date at all times."

Section 4.5.2 of the Rule Book states: "Members shall have in place pre-trade controls on price, volume and value of orders and post-trade controls on their trading activities, as well as technical and administrative arrangements in place enabling it to cancel immediately, as an emergency measure, any or all of its unexecuted Orders submitted to the Exchange (Members kill functionality) as required by MiFID." This hereby includes *inter alia*, an obligation to comply with Commission Delegated Regulation (EU) 2017/589.

Section 4.5.3 of the Rule Book states: "Members shall during the hours they are sending orders to Nasdaq Nordic monitor all trading activity as required by MiFID."

Section 4.6.1 of the Rule Book states: "Orders placed in the Order Book, Automatically Matched Trades and Manual Trades must reflect the current market value of the Instrument in question and constitute genuine Orders and Trades."

Section 4.6.2 of the Rule Book states: "The Member may not place Orders, enter into Trades or enter into any other behaviour which, individually or together [...] give or are likely to give false or misleading signals to the supply, demand or price of relevant instruments" and that "The above general rule means, for example, that it is prohibited to [...] place Orders or enter into Trades which has or is likely to have the effect of misleading others acting on the basis of the prices displayed, including the opening or closing prices."

Section 4.11.2 of the Rule Book states: "The Member shall establish procedures for Algorithmic Trading which ensure that the risks associated with such Order placements are reasonable in relation to the limits which apply to the Member's activities and to its limits for delivery, settlement and, where relevant, clearing. Such procedures shall contain at least the following:

- A description of the Member's procedures for monitoring of Algorithmic Trading;
- A description of the verification procedure to which an Order is subject before the Order is placed to the Trading System in order to ensure that the adequate pre-trade order validations are in place."

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Considerations

At 9:56 a.m. on 2 May 2022, a trader at Citi's Delta One Desk placed sell orders with a combined value of USD 444 billion due to an incorrectly entered value of 58 million units instead of EUR 58 million. Some of these orders, with a value of USD 255 billion, were stopped by Citi's trade control system, and orders with a value of USD 189 billion were sent onwards to be executed through algorithmic trading. The fact that the order could be registered and transmitted to different marketplaces was due, *inter alia*, to the fact that the trader in question ignored certain "soft warnings" automatically generated by Citi's trade control system. In total, sell orders with a combined value of USD 1.4 billion were executed before the trader withdrew remaining, pending orders at 10:10 a.m. Immediately after these orders were placed, the Exchange became aware of a significant drop in the prices of a number of financial instruments and indices, including shares, futures, and exchange-traded products traded on markets operated by Nasdaq Nordic (the "Market Event"). The price drop lasted for about seven minutes before market prices corrected to approximately the same levels as before the Market Event. During the drop in prices, indices in Denmark, Finland, and Sweden fell by approximately 6.5 per cent, 7 per cent, and 8 per cent, respectively. Other shares traded in the rest of Europe were also affected, as were other indices. Nasdaq's analysis indicated that Citi was the largest seller in the market and, thus, the party that triggered the Market Event.

Pre-trade controls

The Exchange has argued: The member is responsible for all trading activity within the parameters of its membership and is thus obliged to ensure that robust pre-trade controls are in place, which prevent erroneous orders from being placed in the market. Although Citi claims that only a relatively small number of the many orders initially submitted for execution went through and that a majority of the orders were blocked, it is clear that the Market Event was the result of shortcomings in Citi's trade control system. Citi thereby violated sections 4.5.2 and 4.11.2 of the Rule Book.

Citi has argued: Citi's trade control system was effective overall, as evidenced, *inter alia*, by the fact that the majority of erroneous orders were not executed. Citi would like to emphasize some important aspects of how Citi's control system worked in practice in the context of the incident in question:

- a) The trader in question was experienced and had worked in equity trading at Citi for seven years. He had adequate training and knowledge of Citi's trading procedures.
- b) The trader's first mistake occurred during his manual process of creating a "basket" in the *Program Trading Execution* system. During this process, the systems gave him the opportunity to identify the error. It is virtually impossible to design a control system that completely eliminates the risk of a trader making errors in the manual process, apart from giving the trader multiple opportunities for identification and review of errors.
- c) The trader's further mistake was that he incorrectly clicked through two pop-up warnings twice. The first of these showed 711 individual lines of warnings identifying the soft and hard controls his "basket" had violated. The second of these, a "final trade confirmation" screen, showed the remaining inaccuracies that he was about to forward.

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- d) Subsequent elements of the control system worked as intended. Nothing approaching the total nominal size of the erroneous "basket" forwarded by the trader was actually visible on the market. The system was not subjected to stress and no algorithm or control malfunctioned. These additional controls continued to void and suspend a significant part of the remaining orders before they were visible on the market.
- e) Finally, during the incident, Citi had three different forms of real-time monitoring: the trader, the *Electronic Execution Desk*, and an independent monitoring team. The first of these, the trader himself, identified the error after a short period of time and took corrective measures. Moreover, no part of the incident involved a faulty algorithm.

Thus, Citi disputes the violations of the Rule Book. Citi has also argued that the trader in question was not employed by Citi (Citigroup Global Markets Europe AG), but by its affiliated undertaking Citi Global Markets Limited, which is not a member of Nasdaq Stockholm AB, but should be considered a client of Citi for the purposes of the alleged violations.

The Disciplinary Committee observes that, in accordance with the Rule Book, Citi is obliged, *inter alia*, to maintain "pre-trade controls on price, volume and value of orders and post-trade controls on their trading activities" and "procedures for Algorithmic Trading which ensure that the risks associated with such Order placements are reasonable in relation to the limits which apply to the Member's activities and to its limits for delivery, settlement and, where relevant, clearing". It is clear from the facts of this matter that Citi's trade control system did not prevent an individual trader from executing orders with a combined value of USD 189 billion, and that the warnings received by the trader through the system could be easily dismissed. In the opinion of the Disciplinary Committee, it is clear that Citi did not have such trade control systems as required by the nature and scope of its operations. Citi thereby violated sections 4.5.2 and 4.11.2 of the Rule Book. The Market Event followed almost immediately after the incident in question at Citi and there is, in the opinion of the Disciplinary Committee, no reason to doubt that the Market Event was initiated and overwhelmingly caused by the actions of Citi's trader and the shortcomings in Citi's control system. Thus, the Disciplinary Committee takes a particularly serious view of these violations of the Rule Book.

With regard to Citi's argument that Citi Global Markets Limited is not a member of Nasdaq Stockholm AB but only an undertaking affiliated to Citi (Citigroup Global Markets Europe AG), the Disciplinary Committee notes that a member is responsible for how the member organizes the control system prescribed in the Rule Book. Thus, the member must be responsible for its affiliated operators acting within the scope of this control system and carrying out the controls prescribed in the Rule Book on the member's behalf.

Non-genuine orders

The Exchange has argued: Pursuant to section 4.6.1 of the Rule Book, an order must reflect the current market value of the instrument in question and constitute a "genuine order". A genuine order is defined in the Rule Book as an "Order that is registered with the intention to result in execution on the conditions expressed by the terms of the Order". The majority of Citi's relevant sell orders on 2 May 2022 were not intended to be executed and therefore cannot be considered genuine orders. Citi thereby violated section 4.6.1 of the Rule Book.

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Citi has argued: Citi's relevant orders on 2 May 2022 were genuine in the sense that there was no intention to place any non-genuine orders. On the contrary, the trader's intention was to execute the orders, but in smaller quantities. The Exchange's interpretation of section 4.6.1 of the Rule Book means that orders placed by mistake are non-genuine and thus contrary to the relevant section of the Rule Book, and contrary to the intention to penalize illegitimate behaviour. Such an interpretation of the provision is also inconsistent with how the Rule Book allows for the voiding of orders that are the result of "an indisputable error or unfortunate mistake which is caused by a technical or manual error" (see section 5.7.3 (i) of the Rule Book).

In its decisions, *the Disciplinary Committee* has previously expressed its opinion on the meaning of the requirement in the Rule Book that an order must be genuine (see, based on older versions of the Rule Book, the Disciplinary Committee's decisions in 2005:8, 2006:4, and 2008:10). In its decisions, the Disciplinary Committee has stated, *inter alia*, that the purpose of the provision in question is to prevent illegitimate behaviour, primarily through illegitimate impact on share prices. In respect of the orders in question, there was no illegitimate purpose behind them. Therefore, the Disciplinary Committee does not consider that these orders should be considered to be non-genuine.

Internal monitoring and handling of erroneous orders

The Exchange has argued: Citi's internal control function investigated the warnings triggered by the incorrectly placed orders and contacted Citi's trading desk at 10:31 a.m. According to Citi, by that time the erroneous orders had already been voided by the trader so no further action was taken. However, it was not until later that afternoon that Citi submitted a request to the Exchange to cancel transactions executed during the Market Event.. Citi's internal control function should have acted immediately after the warnings were triggered when the orders were placed, which should have included, *inter alia*, contacting the Exchange. Citi thereby violated sections 3.7.4 and 4.5.3 of the Rule Book.

Citi has argued: Citi disputes the violations of the Rule Book. The erroneous orders triggered a number of internal warnings which Citi's internal control function immediately investigated, and Citi's trading desk was contacted at 10:31 a.m., by which time the orders had already been voided by the trader. No further measures were necessary at that time.

The Disciplinary Committee observes that Citi's internal control function reacted with a significant delay to the warnings triggered by the erroneous orders. The trading desk was only contacted twenty minutes after the orders were voided by the trader and, at that time, in the form of an email that was followed up much later. Even after this contact, there was a long delay before Citi contacted the Exchange to request cancellation of executed trades. In this context, there were significant time delays, compared with the requirements for efficiency and speed of real-time monitoring in connection with algorithmic trading as set out in Delegated Regulation 2017/589. Consequently, the Disciplinary Committee finds that Citi violated sections 3.7.4 and 4.5.3 of the Rule Book.

Contact information on Nasdaq's Member Portal

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The Exchange has argued: When the Exchange attempted to contact Citi on 2 May 2022 through the person specified as Head of Trading in Nasdaq's Member Portal, it was discovered that the person in question was no longer working as Head of Trading. Citi thereby violated section 4.2.5 of the Rule Book by failing to keep the information in the Member Portal up to date.

Citi has argued: Citi stipulates to the violation of the Rule Book. However, the violation was of no practical significance as the information regarding the other contact persons was correct.

The Disciplinary Committee finds that Citi violated section 4.2.5 of the Rule Book.

In summary, the Disciplinary Committee finds that Citi has violated five sections of the Rule Book. The Disciplinary Committee takes a particularly serious view of the shortcomings in Citi's internal controls and the effects that the erroneous orders of 2 May 2022 had on the market, as far as can be assessed from the documentation in the matter. The Disciplinary Committee sets the fine at SEK 6 million.

On behalf of the Disciplinary Committee,

A handwritten signature in blue ink, appearing to read 'Marianne Lundius', is shown within a light gray rectangular box.

Marianne Lundius

Former Justice Marianne Lundius, Justice Petter Asp, Justice Johan Danelius, former exchange manager Carl Johan Högbom, and company director Joakim Strid participated in the Committee's decision.

Secretary: Associate Professor Erik Lidman