Information on management of client margin requirements and derivatives clearing via Nasdaq

Background

According to EU Regulation No 648/2012 OTC derivatives, central counterparties and trade repositories ("EMIR"), Handelsbanken, in its capacity as a clearing member of Nasdaq Clearing AB ("Nasdaq Clearing"), shall, among other things, provide information regarding Nasdaq Clearing's margin model and Handelsbanken's collateral management. The Bank shall also provide information on the option to choose between an omnibus accounts and individual client segregation[1]. In addition, the Bank shall provide information on the two aforementioned clearing models, including their various risks, characteristics, protection levels, and prices. The Bank shall also inform its clearing clients of the extent to which Nasdaq Clearing's default[2] and recovery plans affect them[3] and what costs/losses this may entail for a clearing client.

Section A describes how Handelsbanken manages margin requirements linked to clients' clearing of derivative contracts, as well as the situations that may require additional collateral to be posted. Section B provides general information on clearing and how the Bank handles the clearing of derivative contracts on behalf of clients at Nasdaq Clearing. Section B also contains information regarding the risks of clearing and the default of various parties. Section C provides information on the Bank's clearing fees or links to current information. Pricing information can also be found under Section B.

A. Management of clients' margin requirements for derivatives handled via Nasdaq Clearing

Posting of Collateral

Handelsbanken applies the same individual margin requirements to its clearing clients as Nasdaq Clearing's individual margin requirements for the clearing of client transactions. Handelsbanken also typically applies the haircut rates for the valuation of posted collateral recommended by the Swedish Bankers' Association and the Swedish Securities Markets Association. Posted collateral, except for funds in accounts denominated in Swedish Kronor, is subject to a risk value deduction, a so-called haircut, to account for potential price movements. Handelsbanken may, however, deviate from the aforementioned recommendations for collateral valuation. This may occur, for example, due to the market situation or an assessment of a clearing client's repayment capacity or creditworthiness.

Collateral is posted to ensure (in advance) that the party with a payment or delivery obligation under its derivative contract fulfills its commitment in accordance with the derivative contract. Requirements for posting collateral apply both initially and continuously throughout the term of the derivative contract. Derivative contracts are valued continuously and daily according to various parameters that account for a derivative contract's potential value and price development. Posted collateral must be sufficient to fulfill the contract's obligations even during sharp price movements. If the clearing client's posted collateral, less the haircut, does not meet the margin requirement,

[1] Handelsbanken offers omnibus accounts with Nasdaq Clearing in the form of Nasdaq Clearing's "End Client Omnibus Account (ECO NET)" and for individual client segregation "Individual Segregated Client Account (ICA)".
[2] A clearing member does not have to be insolvent to be in default under Nasdaq Clearing's rules. The term default or insolvency is used herein. A clearing member may, for example, default when, in Nasdaq Clearing's assessment, there is a significant risk that the member will breach the rules.
[3] According to the EU Regulation on the Recovery and Resolution of CCPs, (EU) 2021/23. The recovery plan is activated if Nasdaq Clearing should encounter problems in fulfilling its obligations in its ordinary activities.

Handelsbanken will request additional collateral. If collateral is not posted, the Bank may close out the clearing client's contracts to eliminate the collateral deficiency.

What is a margin requirement?

When trading derivatives, a margin requirement arises to ensure that commitments can be fulfilled. The margin requirement is based on the market value and the risk level of the clients' positions and may change over time.

When can margin requirements increase?

The margin requirement can increase, leading to a so-called margin call. A margin call is a warning message from the Bank to the client indicating that the equity in a margin account (trading with margin or leverage) has fallen below the permitted limit. This means that the client must provide more collateral or close positions to cover the risk. The margin requirement may increase in situations such as:

- **Market movements** that negatively affect the value of your positions
- **Increased market volatility**
- **Changes in risk parameters** by clearing organizations
- **Changes in the composition of your portfolio**
- **Corporate actions** affecting the underlying instruments

The Bank's daily controls

The Bank monitors clients' margin requirements in relation to approved limits on a daily basis. This is carried out through:

- Daily review of reports on margin requirements and limit utilization
- Continuous simulation of current risk levels and exposure
- Identification of accounts where margin requirements are approaching or exceeding the allocated limit

Actions in the event of exceeded margin requirements

If a client's margin requirement exceeds the approved limit, actions must be taken on the same day. The Bank will then contact the client via telephone or other appropriate medium. This may involve:

- The client **providing additional collateral**
- The client's **limit being adjusted following a credit assessment**
- **Positions being reduced or closed**, in whole or in part

If the Bank does not receive sufficient instructions from the client, the Bank may, in order to mitigate risk, close out positions. This is primarily done by reducing the positions that generate the highest margin requirements.

When a client's limit is close to being fully utilized

If a client's margin utilization reaches a high level (e.g., 75% or more of the approved limit), the Bank may contact the client via telephone or other appropriate medium for a dialogue regarding the client's exposure. The Bank also recommends that the client monitors the development closely.

Specific situations

In certain cases, such as with so-called covered call strategies, the reported margin requirement may need to be analyzed in more depth. In these instances, the Bank uses advanced calculation tools to ensure an accurate risk assessment.

Indicative simulation of margin requirements

Upon request, the client has the opportunity, by contacting the Bank, to obtain an indicative simulation of margin requirements based partly on the latest end-of-day margin requirement, as well as three hypothetical and two historical stress scenarios.

Expiration of limit

Approved limits have a validity period. If a client's limit expires and there is still a margin requirement linked to the client's holdings, this must be handled immediately through an extension or a reduction of positions.

Important points to consider

- The client is responsible for always holding sufficient collateral for their positions
- A lack of coverage may lead to the Bank reducing the client's positions without delay
- Rapid market movements may cause margin requirements to change during the day

Information about Nasdaq Clearing's margin methodology can be found here:

https://www.nasdaq.com/solutions/nasdaq-clearing-margining-methodology

B. Clearing of derivative contracts on behalf of clients at Nasdaq Clearing

The following is a general description of how Handelsbanken handles the clearing of derivative contracts on behalf of clients at Nasdaq Clearing, and the various risks involved, including the risks of default by different parties.

Handelsbanken's clearing

Handelsbanken is a member of the trading venue Nasdaq Nordic, formerly the Stockholm Stock Exchange (Stockholmsbörsen), and offers its clients clearing of derivative contracts traded there. The Bank also offers clearing of certain so-called OTC derivative contracts. The Bank clears these types of derivative contracts on behalf of its clients at Nasdaq Clearing. Handelsbanken offers both separation in the form of a omnibus account for several customers and individual client segregation as described below. The omnibus account may also be referred to as a joint collective account or collective account herein.

In both of these models, the structure is that the customer has an agreement with Handelsbanken as a clearing member and Handelsbanken has an agreement in its capacity as a clearing member with Nasdaq Clearing. In both models, the customer provides collateral to Handelsbanken, which in turn provides collateral to Nasdaq Clearing.

Separation regarding clients joint collective account

For customers who choose a joint collective account, all of Handelsbanken's client-related transactions will be registered in a joint account with Nasdaq Clearing. The collateral that Handelsbanken provides to Nasdaq Clearing is collective collateral that relates to all clients transactions that are registered in the joint collective account. These transactions are offset against

each other, netted, and the Bank thus provides collateral for the net position. The collateral and transactions are separated from Handelsbanken's own collateral and transactions for the benefit of the Bank's customers.

Further information on the level of protection for collective accounts is provided below in the section *Specific risks to customers regarding clearing*.

Prices for joint collective accounts can be found on Handelsbanken's website: https://www.handelsbanken.se/sv/privat/prislista-for-privatpersoner/prislista-spara/prislista-ovriga-finansiella-tjanster.

Individual client segregation

For a customer who chooses an account with individual client segregation, that customer's transactions will be registered in a separate account with Nasdaq Clearing. The collateral provided by Handelsbanken to Nasdaq Clearing is individual collateral that is segregated for that customer.

Further information on the level of protection for individual customer segregation is provided below in the section *Specific to customer risks regarding clearing*.

Pricing model for individual client segregation

Handelsbanken's standard fees for clearing, individual client segregation.

Account Opening Fee	20 000 SEK
Nasdaq Fees (Per lot & premium fees)	Payable to Nasdaq without margin to SHB
Risk Fee	1% Margin
Monthly account Fee	10 000 SEK

Specific to customer risks regarding clearing

Handelsbanken's default

A specific risk for the customer is that Handelsbanken could become insolvent or default under Nasdaq Clearing Rules[4] and be unable to fulfill its obligations under the clearing agreement with the customer. If this were to happen, Nasdaq Clearing would first attempt, on its own initiative or at the customer's request, to transfer all contracts and collateral that Handelsbanken has provided to Nasdaq Clearing for the current customer contracts to another clearing member, so-called porting. For customers with a collective account, however, this assumes that all customers have entered into a clearing agreement with the other clearing member, so it is less likely that it can be implemented. In cases where porting is carried out, the customer is obliged under Nasdaq Clearing Rules to reimburse Nasdaq Clearing and Handelsbanken for reasonable costs. If a transfer is not possible, Nasdaq Clearing will close all derivative contracts on the collective account and, if necessary, realize the collateral to cover payment or delivery obligations relating to the customer contracts with Nasdaq Clearing. Each client will then be credited with the value of their contracts (or be required to fulfill any payment obligations under the contracts). Nasdaq Clearing will transfer any positive value of closed contracts and realized collateral to Handelsbanken on behalf of its clients (or Handelsbanken's bankruptcy estate if the Bank is bankrupt). In the event of any shortfall, the deficit will be distributed among the clients.

[4] See footnote 2.

For a customer with individual client segregation, it is not required that other customers consent for Nasdaq Clearing to be able to carry out porting. It is sufficient that the customer concerned has or obtains a new clearing member that can receive his derivative positions and the collateral that has been segregated on behalf of the customer. If such a transfer is not possible, Nasdaq Clearing will close all derivative contracts on the account and then transfer any profits and collateral to the customer concerned.

Handelsbanken's derivative contracts and the customers' derivative contracts are registered in different accounts and are segregated from each other, both at Nasdaq Clearing and in the Bank's own accounting. In none of the above cases will there be a settlement between Handelsbanken's customer accounts at Nasdaq Clearing and the Bank's own accounts at Nasdaq Clearing.

Nasdaq Clearing may also increase collateral (margin) requirements and request additional collateral (especially in the event of default when the Bank is not insolvent or already bankrupt), which may have an impact on the customer.

Other clearing members default[5].

It is Handelsbanken's assessment that no special risks or costs arise for the customer during Nasdaq Clearing's regular process for handling the defaults of other clearing members. However, Handelsbanken has, according to its clearing agreement with the customer, the right to charge, among other things, costs that arise in the clearing. Should such costs arise, Handelsbanken may charge the customer for these costs.

Regarding risks and costs in the event of Nasdaq Clearing's default or recovery, see below under the section *Nasdaq Clearing's Default*.

Nasdaq Clearing's Default.

The main risk for a customer if Nasdaq Clearing defaults is that Nasdaq Clearing cannot fulfill its obligations under the customer contracts that Handelsbanken clears with Nasdaq Clearing. Handelsbanken's clearing agreement with the customer stipulates that Handelsbanken does not have to fulfill its obligations to the customer to a greater extent than Nasdaq Clearing fulfills its obligations to Handelsbanken. If Nasdaq Clearing does not pay or deliver underlying to Handelsbanken, Handelsbanken will therefore not pay or deliver to the customer.

In addition to the above-mentioned general risk, the main risk for a customer under Nasdaq Clearing's recovery plan, according to the Bank's assessment, is that Nasdaq Clearing carries out a so-called partial tear-up. This means that Nasdaq Clearing has the right to close derivative contracts in whole or in part early. If this were to happen, Nasdaq Clearing will pay out any surplus from realized contracts and collateral to Handelsbanken, which will distribute this to the affected customers. This may entail additional costs for a clearing customer who wants to open new contracts and Nasdaq Clearing's valuation may also differ from the valuation that an individual clearing customer has for their derivative contracts. This also means that a clearing customer may realize a loss early.

An early closure of certain derivative contracts is made so that Nasdaq Clearing can obtain a balanced, neutral risk exposure regarding the derivative contracts cleared by Nasdaq Clearing.

If the measures that Nasdaq Clearing takes or intends to take are not sufficient, the resolution authority may take over responsibility for the operations. The resolution authority has a

[5] This refers to clearing members other than Handelsbanken.

comprehensive mandate to restructure the operations in order for a clearing house and central counterparty like Nasdaq Clearing to survive and, among other things, reduce the repercussions for clearing members and their customers - and society at large.

The measures that pose the greatest risks for a clearing customer are, according to Handelsbanken's assessment, the following. In addition to the resolution authority having the right to close individual derivative contracts early in whole or in part, the authority can also change the terms of a derivative contract. If a contract is closed, any excess and collateral pledged will be handled as above. The authority can also reduce, in whole or in part, the repayment of excess margin collateral (for collateral already pledged) and request additional collateral. Payments or deliveries (of underlying) can also be postponed in relation to derivative contracts. The authority can also postpone the possibility of closing contracts (in accordance with the terms of the contract or due to default). It is also entitled to increase the risk value deduction on pledged collateral, increased haircut. This may mean that additional collateral must be pledged or that a previous excess collateral is not paid out.

Applicable law

In the event of Nasdaq Clearing's bankruptcy, Nasdaq Clearing's bankruptcy will likely be handled under Swedish law. Under Swedish law, collateral provided to Nasdaq Clearing in the form of securities is protected and does not form part of Nasdaq Clearing's bankruptcy estate. If collateral has been provided in the form of cash, this is included in Nasdaq Clearing's bankruptcy estate and the collateral provider (e.g. Handelsbanken and by extension the Bank's clearing customers) will only have an unsecured claim.

Additional information

For further information on Nasdaq Clearing's handling of a member's default, see: https://www.nasdaq.com/solutions/nasdaq-clearing-default-management och https://www.nasdaq.com/solutions/nasdaq-clearing-default-management#center.

For further information on Nasdaq Clearing's handling of its own recovery process, see: https://www.nasdaq.com/docs/2024/10/10/Recovery%20Plan%20Summary%202024.pdf.

C. Costs and Charges

Information regarding costs and charges when trading derivative instruments via Nasdaq can be found via the link below.

https://www.handelsbanken.se/sv/om-oss/juridiska-dokument/prislistor-privat/prislista-spara/prislista-ovriga-finansiella-tjanster

D. Limitation of liability

This document has been compiled for information purposes in light of the requirements of EMIR and the Central Counterparty Recovery and Resolution Regulation in accordance with Handelsbanken's understanding of the relevant legislation, Nasdaq Clearing's rules and regulations and the information available regarding Nasdaq Clearing's recovery plan. The document is not binding under civil or bankruptcy law and is compiled on a "reasonable effort basis".