



Citigroup Global Markets Inc.

INSTITUTIONAL FUTURES AND SWAP CLEARING ACCOUNT DISCLOSURE DOCUMENTS

**PLEASE READ ALL OF THE DOCUMENTS CAREFULLY BEFORE SIGNING THE
INSTITUTIONAL FUTURES AND SWAP CLEARING ACCOUNT AGREEMENT**

This booklet contains the following:

- Combined Risk Disclosure Statement for Futures and Options
- Disclosure For Cleared Swaps Customers
- Disclosure of Futures Commission Merchant Material Conflicts of Interest
- Cross Trade Consent
- Notice Regarding Average Price System (“APS”)
- Electronic Trading and Order Routing Systems Disclosure Statement
- Uniform Notification Regarding Access to Market Data
- Disclosure Statement on Futures Exchange Ownership Interests and Incentive Programs
- CME Disclosure on Payment for Order Flow
- Direct Order Transmittal Client Disclosure Statement
- Foreign Trader Disclosure Statement
- Notice to Clients Exchange for Related Positions
- ICE Clear Credit Subordination of Claims (for Credit Default Swaps)
- Negative Contract Prices Risk Disclosure
- Security Futures Risk Disclosure Statement
- Notice to Ontario, Quebec, and Manitoba Clients Pursuant to the Exemptions from Derivatives Dealer Registration Granted to Citigroup Global Markets Inc. by Ontario Securities Commission, Autorite Des Marches Financiers, and Manitoba Securities Commission
- Position Limit and Large Open Position Reporting Requirements for Options and Futures Traded on Hong Kong Exchanges
- CME Disclosure to Disclosed Singapore Market Participants
- A Guide to the Structure and Market Terminology and Order Execution of the London Metal Exchange
- European Markets Infrastructure Regulation (EMIR) Article 7c(1) Information Statement
- EMIR Article 38(8) Disclosure Statement
- EMIR Article 38(9) and E.U. Central Counterparty Recovery and Resolution Regulation (CCPR) Disclosure Statement
- Disclosure Pursuant to Article 39(7) EMIR with Respect to the FCM Clearing Conditions of Eurex Clearing AG
- Direct Client Disclosure Statement Indirect Clearing RTS
- EMIR FCM Clearing Member Disclosure Statement

COMBINED RISK DISCLOSURE STATEMENT FOR FUTURES AND OPTIONS

The risk of loss in trading commodity futures contracts can be substantial. You should, therefore, carefully consider whether such trading is suitable for you in light of your circumstances and financial resources. You should be aware of the following points:

FUTURES

(1) You may sustain a total loss of the funds that you deposit with your broker to establish or maintain a position in the commodity futures market, and you may incur losses beyond these amounts. If the market moves against your position, you may be called upon by your broker to deposit a substantial amount of additional margin funds, on short notice, in order to maintain your position. If you do not provide the required funds within the time required by your broker, your position may be liquidated at a loss, and you will be liable for any resulting deficit in your account.

(2) The funds you deposit with a futures commission merchant for trading futures positions are not protected by insurance in the event of the bankruptcy or insolvency of the futures commission merchant, or in the event your funds are misappropriated.

(3) The funds you deposit with a futures commission merchant for trading futures positions are not protected by the Securities Investor Protection Corporation even if the futures commission merchant is registered with the Securities and Exchange Commission as a broker or dealer.

(4) The funds you deposit with a futures commission merchant are generally not guaranteed or insured by a derivatives clearing organization in the event of the bankruptcy or insolvency of the futures commission merchant, or if the futures commission merchant is otherwise unable to refund your funds. Certain derivatives clearing organizations, however, may have programs that provide limited insurance to customers. You should inquire of your futures commission merchant whether your funds will be insured by a derivatives clearing organization and you should understand the benefits and limitations of such insurance programs.

(5) The funds you deposit with a futures commission merchant are not held by the futures commission merchant in a separate account for your individual benefit. Futures commission merchants commingle the funds received from customers in one or more accounts and you may be exposed to losses incurred by other customers if the futures commission merchant does not have sufficient capital to cover such other customers' trading losses.

(6) The funds you deposit with a futures commission merchant may be invested by the futures commission merchant in certain types of financial instruments that have been approved by the Commodity Futures Trading Commission (the "Commission") for the purpose of such investments. Permitted investments are listed in Commission Regulation 1.25 and include: U.S. government securities; municipal securities; certain money market funds; certain foreign sovereign debt; and U.S. Treasury exchange-traded funds. The futures commission merchant may retain the interest and other earnings realized from its investment of customer funds. You should be familiar with the types of financial instruments that a futures commission merchant may invest customer funds in.

(7) Futures commission merchants are permitted to deposit customer funds with affiliated entities, such as affiliated banks, securities brokers or dealers, or foreign brokers. You should inquire as to whether your futures commission merchant deposits funds with affiliates and assess whether such deposits by the futures commission merchant with its affiliates increases the risks to your funds.

(8) You should consult your futures commission merchant concerning the nature of the protections available to safeguard funds or property deposited for your account.

(9) Under certain market conditions, you may find it difficult or impossible to liquidate a position. This can occur, for example, when the market reaches a daily price fluctuation limit ("limit move").

(10) All futures positions involve risk, and a "spread" position may not be less risky than an outright "long" or "short" position.

(11) The high degree of leverage (gearing) that is often obtainable in futures trading because the small margin requirements can work against you as well as for you. Leverage (gearing) can lead to large losses as well as gains.

(12) In addition to the risks noted in the paragraphs enumerated above, you should be familiar with the futures commission merchant you select to entrust your funds for trading futures positions. The Commodity Futures Trading Commission requires each futures commission merchant to make publicly available on its Web site firm specific disclosures and financial information to assist you with your assessment and selection of a futures commission merchant. Information regarding this futures commission merchant may be obtained by visiting our Web site, [Regulatory Disclosures | Citi ICG](#)

OPTIONS

Variable degree of risk

(13) Transactions in options carry a high degree of risk. Purchasers and sellers of options should familiarize themselves with the type of option (i.e., put or call) which they contemplate trading and the associated risks. You should calculate the extent to which the value of the options must increase for your position to become profitable, taking into account the premium and all transaction costs.

(14) The purchaser of options may offset or exercise the options or allow the options to expire. The exercise of an option results either in a cash settlement or in the purchaser acquiring or delivering the underlying interest. If the option is on a future, the purchaser will acquire a futures position with associated liabilities for margin (see the section on Futures above). If the purchased options expire worthless, you will suffer a total loss of your investment which will consist of the option premium plus transaction costs. If you are contemplating purchasing deep-out-of-the-money options, you should be aware that the chance of such options becoming profitable is ordinarily remote.

(15) Selling ('writing' or 'granting') an option generally entails considerably greater risk than purchasing options. Although the premium received by the seller is fixed, the seller may sustain a loss well in excess of that amount. The seller will be liable for additional margin to maintain the position if the market moves unfavorably. The seller will also be exposed to the risk of the purchaser exercising the option and the seller will be obligated to either settle the option in cash or to acquire or deliver the underlying interest. If the option is on a future, the seller will acquire a position in a future with associated liabilities for margin (see the section on Futures above). If the position is 'covered' by the seller holding a corresponding position in the underlying interest or a future or another option, the risk may be reduced. If the option is not covered, the risk of loss can be unlimited.

(16) Certain exchanges in some jurisdictions permit deferred payment of the option premium, exposing the purchaser to liability for margin payments not exceeding the amount of the premium. The purchaser is still subject to the risk of losing the premium and transaction costs. When the option is exercised or expires, the purchaser is responsible for any unpaid premium outstanding at that time.

ADDITIONAL RISKS COMMON TO FUTURES AND OPTIONS

Terms and conditions of contracts

(17) You should ask the firm with which you deal about the terms and conditions of the specific futures or options which you are trading and associated obligations (e.g., the circumstances under which you may become obligated to make or take delivery of the underlying interest of a futures contract and, in respect of options, expiration dates and restrictions on the time for exercise). Under certain circumstances the specifications of outstanding contracts (including the exercise price of an option) may be modified by the exchange or clearing house to reflect changes in the underlying interest.

Suspension or restriction of trading and pricing relationships

(18) Market conditions (e.g., illiquidity) and/or the operation of the rules of certain markets (e.g., the suspension of trading in any contract or contract month because of price limits or 'circuit breakers') may increase the risk of loss by making it difficult or impossible to effect transactions or liquidate/offset positions. If you have sold options, this may increase the risk of loss.

(19) Further, normal pricing relationships between the underlying interest and the future, and the underlying interest and the option may not exist. This can occur when, for example, the futures contract underlying the option is subject to price limits while the option is not. The absence of an underlying reference price may make it difficult to judge 'fair' value.

Deposited cash and property

(20) You should familiarize yourself with the protections accorded money or other property you deposit for domestic and foreign transactions, particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specified legislation or local rules. In some jurisdictions, property which has been specifically identifiable as your own will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall.

Commission and other charges

(21) Before you begin to trade, you should obtain a clear explanation of all commission, fees and other charges for which you will be liable. These charges will affect your net profit (if any) or increase your loss.

Currency risks

(22) The profit or loss in transactions in foreign currency-denominated contracts (whether they are traded in your own or another jurisdiction) will be affected by fluctuations in currency rates where there is a need to convert from the currency denomination of the contract to another currency.

Trading facilities

(23) Most open-outcry and electronic trading facilities are supported by computer-based component systems for the order-routing, execution, matching, registration or clearing of trades. As with all facilities and systems, they are vulnerable to temporary disruption or failure. Your ability to recover certain losses may be subject to limits on liability imposed by the system provider, the market, the clearing house and/or member firms. Such limits may vary; you should ask the firm with which you deal for details in this respect.

Electronic trading

(24) Trading on an electronic trading system may differ not only from trading in an open-outcry market but also from trading on other electronic trading systems. If you undertake transactions on an electronic trading system, you will be exposed to risk associated with the system including the failure of hardware and software. The result of any system failure may be that your order is either not executed according to your instructions or is not executed at all.

Off-exchange transactions

(25) In some jurisdictions, and only then in restricted circumstances, firms are permitted to effect off-exchange transactions. The firm with which you deal may be acting as your counterparty to the transaction. It may be difficult or impossible to liquidate an existing position, to assess the value, to determine a fair price or to assess the exposure to risk. For these reasons, these transactions may involve increased risks. Off-exchange transactions may be less regulated or subject to a separate regulatory regime. Before you undertake such transactions, you should familiarize yourself with applicable rules and attendant risks.

ALL OF THE POINTS NOTED ABOVE APPLY TO ALL FUTURES TRADING WHETHER FOREIGN OR DOMESTIC. IN ADDITION, IF YOU ARE CONTEMPLATING TRADING FOREIGN FUTURES OR OPTIONS CONTRACTS, YOU SHOULD BE AWARE OF THE FOLLOWING ADDITIONAL RISKS:

(26) Foreign futures transactions involve executing and clearing trades on a foreign exchange. This is the case even if the foreign exchange is formally “linked” to a domestic exchange, whereby a trade executed on one exchange liquidates or establishes a position on the other exchange. No domestic organization regulates the activities of a foreign exchange, including the execution, delivery, and clearing of transactions on such an exchange, and no domestic regulator has the power to compel enforcement of the rules of the foreign exchange or the laws of the foreign country. Moreover, such laws or regulations will vary depending on the foreign country in which the transaction occurs. For these reasons, customers who trade on foreign exchanges may not be afforded certain of the protections which apply to domestic transactions, including the right to use domestic alternative dispute resolution procedures. In particular, funds received from customers to margin foreign futures transactions may not be provided the same protections as funds received to margin futures transactions on domestic exchanges. Before you trade, you should familiarize yourself with the foreign rules which will apply to your particular transaction.

(27) Finally, you should be aware that the price of any foreign futures or option contract and, therefore, the potential profit and loss resulting therefrom may be affected by any fluctuation in the foreign exchange rate between the time the order is placed and the foreign futures contract is liquidated or the foreign option contract is liquidated or exercised.

THIS BRIEF STATEMENT CANNOT, OF COURSE, DISCLOSE ALL THE RISKS AND OTHER ASPECTS OF THE COMMODITY MARKETS. SHOULD YOU REQUIRE ADDITIONAL INFORMATION OR HAVE ANY QUESTIONS CONCERNING THE ABOVE, PLEASE CONTACT YOUR CITI REPRESENTATIVE.

DISCLOSURE FOR CLEARED SWAPS CUSTOMERS

Default of a Non-Clearing Futures Commission Merchant

Citigroup Global Markets Inc. (“Citi”) may not be a clearing member of the derivatives clearing organization that you have selected to clear the Cleared Swaps that you may enter into. In such circumstances, Citi will enter into an agreement with a clearing member of such derivatives clearing organization that is registered with the CFTC as a futures commission merchant (“Clearing Broker”), pursuant to which Citi will maintain an omnibus account of behalf of all of its Cleared Swaps Customers (“Omnibus Account”).

In compliance with CFTC Rule 22.16, we are advising you that, in the event of Citi’s default, the agreement between the Clearing Broker and Citi provides that Clearing Broker, in its sole discretion, may terminate, liquidate and/or accelerate any and all Cleared Swaps, close out the Omnibus Account or any open positions of Citi in whole or in part, cancel any or all pending orders, and/or terminate Citi’s right to trade in the Omnibus Account. Further, the Clearing Broker may, but is not required to, transfer all non-defaulting customer positions to another futures commission merchant. Any such action that Clearing Broker may take will be in accordance with Applicable Law, including but not limited to the CFTC’s rules governing the protection of Cleared Swaps Customer Collateral. Therefore, in the event Citi’s default is caused by the default of one or more customers that are part of the Omnibus Account, Clearing Broker may not use the funds of non-defaulting customers to satisfy the obligations of the defaulting customers.

Default of a Clearing Futures Commission Merchant

Each derivatives clearing organization is required to have rules that govern the use of Cleared Swaps Customer Collateral, and the transfer, neutralization of risks, and liquidation of Cleared Swaps in the event of a default by a clearing futures commission merchant relating to a Cleared Swaps Customer Account.

In further compliance with CFTC Rule 22.16 (17 CFR 22.16), we are providing you with the URL links to the rules of the relevant derivatives clearing organizations. Please note that such rules and the URL links are susceptible to change. If you encounter difficulty accessing these rules, please contact your Citi Representative for an updated URL link.

<http://www.cmegroup.com/rulebook/CME/index.html>

<https://www.eurex.com/ec-en/rules-regs/rules-and-regulations>

https://www.theice.com/publicdocs/clear_credit/ICE_Clear_Credit_Rules.pdf

<https://www.lch.com/resources/rules-and-regulations>

THE INCLUSION OF A DERIVATIVES CLEARING ORGANIZATION ON THIS LIST DOES NOT MEAN THAT YOUR ACCOUNT IS ELIGIBLE TO CLEAR ANY OR ALL PRODUCTS ON THAT DERIVATIVES CLEARING ORGANIZATION. SHOULD YOU REQUIRE ADDITIONAL INFORMATION OR HAVE ANY QUESTIONS CONCERNING THE ABOVE, PLEASE CONTACT YOUR CITI REPRESENTATIVE.

**DISCLOSURE OF
FUTURES COMMISSION MERCHANT
MATERIAL CONFLICTS OF INTEREST**

The purpose of this document is to provide you with information about some of the material conflicts of interest that may arise between you and Citigroup Global Markets Inc. (“Citi”) in connection with Citi performing services for you with respect to futures, options on futures, swaps (as defined in the Commodity Exchange Act), forwards or other commodity derivatives (“Contracts”). Conflicts of interests can arise in particular when Citi has an economic or other incentive to act, or persuade you to act, in a way that favors Citi or its affiliates.

Under applicable law, including regulations of the Commodity Futures Trading Commission (“CFTC”), not all swaps are required to be executed on an exchange or swap execution facility (each, a “Trading Facility”), even if a Trading Facility lists the swap for trading. In such circumstances, it may be financially advantageous for Citi or its affiliate to execute a swap with you bilaterally in the over-the-counter market rather than on a Trading Facility and, to the extent permitted by applicable law, we may have an incentive to persuade you to execute your swap bilaterally.

Applicable law may permit you to choose the CFTC-registered derivatives clearing organization (“Clearing House”) to which you submit a swap for clearing. You should be aware that Citi may not be a member of, or may not otherwise be able to submit your swap to, the Clearing House of your choice. Citi consequently has an incentive to persuade you to use a Clearing House of which Citi or its affiliate is a member.

You also should be aware that Citi or its affiliate may own stock in, or have some other form of ownership interest in, one or more U.S. or foreign Trading Facilities or Clearing Houses where your transactions in Contracts may be executed and/or cleared. As a result, Citi or its affiliate may receive financial or other benefits related to its ownership interest when Contracts are executed on a given Trading Facility or cleared through a given Clearing House, and Citi would, in such circumstances, have an incentive to cause Contracts to be executed on that Trading Facility or cleared by that Clearing House. In addition, employees and officers of Citi or its affiliate may also serve on the board of directors or on one or more committees of a Trading Facility or Clearing House.

In addition, Trading Facilities and Clearing Houses may from time to time have in place other arrangements that provide their members or participants with volume, market-making or other discounts or credits, may call for members or participants to pre-pay fees based on volume thresholds, or may provide other incentive or arrangements that are intended to encourage market participants to trade on or direct trades to that Trading Facility or Clearing House. Citi or its affiliate may participate in and obtain financial benefits from such incentive programs.

When we provide execution services to you (either in conjunction with clearing services or in an execution-only capacity), we may direct orders to affiliated or unaffiliated market-makers, other executing firms, individual brokers or brokerage groups for execution. When such affiliated or unaffiliated parties are used, they may, where

permitted, agree to price concessions, volume discounts or refunds, rebates or similar payments in return for receiving such business. Likewise, where permitted by law and the rules of the applicable Trading Facility, we may solicit a counterparty to trade opposite your order or enter into transactions for its own account or the account of other counterparties that may, at times, be adverse to your interests in a Contract. In such circumstances, that counterparty may make payments and/or pay a commission to Citi in connection with that transaction. The results of your transactions may differ significantly from the results achieved by us for our own account, our affiliates, or for other customers.

In addition, where permitted by applicable law (including, where applicable, the rules of the applicable Trading Facility), Citi, its directors, officers, employees and affiliates may act on the other side of your order or transaction by the purchase or sale for an account, or the execution of a transaction with a counterparty, in which Citi or a person affiliated with Citi has a direct or indirect interest, or may effect any such order with a counterparty that provides Citi or its affiliates with discounts related to fees for Contracts or other products. In cases where we have offered you a discounted commission or clearing fee for Contracts executed through Citi as agent or with Citi or its affiliate acting as counterparty, Citi or its affiliate may be doing so because of the enhanced profit potential resulting from acting as executing broker or counterparty.

Citi or its affiliate may act as, among other things, an investor, research provider, placement agent, underwriter, distributor, remarketing agent, structurer, securitizer, lender, investment manager, investment adviser, commodity trading advisor, municipal advisor, market maker, trader, prime broker or clearing broker. In those and other capacities, Citi, its directors, officers, employees and affiliates may take or hold positions in, or advise other customers and counterparties concerning, or publish research or express a view with respect to, a Contract or a related financial instrument that may be the subject of advice from us to you. Any such positions and other advice may not be consistent with, or may be contrary to, your interests or to positions which are the subject of advice previously provided by Citi or its affiliate to you, and unless otherwise disclosed in writing, we are not necessarily acting in your best interest and are not assessing the suitability for you of any Contract or related financial instrument. Acting in one or more of the capacities noted above may give Citi or its affiliate access to information relating to markets, investments and products. As a result, Citi or its affiliate may be in possession of information which, if known to you, might cause you to seek to dispose of, retain or increase your position in one or more Contracts or other financial instruments. Citi and its affiliate will be under no duty to make any such information available to you, except to the extent we have agreed in writing or as may be required under applicable law.

CROSS TRADE CONSENT

Citigroup Global Markets Inc. ("Citi"), its officers, directors employees or affiliates or other customers of Citi or of the servicing floor broker may be from time to time on the opposite side of orders for physicals or for purchase or sale of futures contracts and option contracts placed for your Account in conformity with regulations of the Commodity Futures Trading Commission and the by-laws, rules and regulations of the applicable market (and its clearing organization, if any) on which such order is executed.

NOTICE REGARDING AVERAGE PRICE SYSTEM ("APS")

You should be aware that certain US and non-US exchanges, including the CME Group and ICE, may now, or in the future, allow Citi to confirm trades executed on such exchanges to some or all of their customers on an average price basis, regardless of whether the exchanges have average price systems of their own. Average prices that are not calculated by an exchange system will be calculated by us. In either case, trades that are confirmed to you at average prices will be designated as such on your confirmation and monthly statements.

APS enables a clearing firm to confirm to customers an average price when multiple execution prices are received on an order or series of orders for the same accounts executed during the same trading day. For example, if an order transmitted by an account manager on behalf of several customers is executed at more than one price, those prices may be averaged and the average may be confirmed to each customer. Customers may choose whether to use APS, and may request that APS be used for discretionary or non-discretionary accounts. If you choose to use APS, you must request Citi to set up an APS account.

Each order subject to APS must be for the same product. An APS order may be used for futures, options or combination transactions. An APS order for futures must be for the same product and expiration month, and for options, it must be for the same product, expiration month, put/call and strike price.

An APS indicator will appear on the confirmation and monthly statement for a customer whose positions have been confirmed at an average price. This indicator will notify the customer that the confirmed price represents an average price.

The average price is not the actual execution price. APS will calculate the same price for all customers that participate in the order.

APS may be used when a series of orders are entered for a group of accounts. For example, a bunched APS order (an order that represents more than one customer account) executed at 10:00 a.m. could be averaged with a bunched APS order executed at 12:00 p.m. provided that each of the bunched orders is for the same accounts. In addition, market orders and limit orders may be averaged, as may limit orders at different prices, provided that each order is for the same accounts.

The following scenario exemplifies what occurs if an APS order is only partially executed. At 10:00 a.m. an APS order to buy 100 Dec S&P 500 futures contracts is transmitted at a limit price of 376.00; 50 are executed

at 376.00, and the balance is not filled. At 12:00 p.m. an APS order to buy 100 Dec S&P 500 futures contracts is transmitted at a limit price of 375.00; 50 are executed at 375.00, and the balance is not filled. Both orders are part of a series for the same group of accounts. In this example, the two prices will be averaged. If the order was placed for more than one account, the account controller must rely on preexisting allocation procedures to determine the proportions in which each account will share in the partial fill.

Upon receipt of an execution or match at multiple prices for an APS order, the weighted mathematical average will be computed by multiplying the number of contracts purchased or sold at each execution price by that price, adding the results together and dividing by the total number of contracts. An average price for a series of orders will be computed based on the average prices of each order in that series. The actual average price or the average price rounded to the next price increment may be confirmed to customers. If a clearing member confirms the rounded average price, the clearing member must round the average price up to the next price increment for a buy order and down to the next price increment for a sell order. The rounding process will create a cash residual of the difference between the actual average price and the rounded average price that must be paid to the customer.

APS may produce prices that do not conform to whole cent increments. In such cases, any amounts less than one cent may be retained by the clearing member. For example, if the total residual to be paid to a customer on a rounded average price for 10 contracts is \$83.333333, the clearing member may pay \$83.33 to the customer.

If you would like more information on APS orders, please contact your Agent or the Citi Representative.

ELECTRONIC TRADING AND ORDER ROUTING SYSTEMS DISCLOSURE STATEMENT¹

Electronic trading and order routing systems differ from traditional open outcry pit trading and manual order routing methods. Transactions using an electronic system are subject to the rules and regulations of the exchange(s) offering the system and/or listing the contract. Before you engage in transactions using an electronic system, you should carefully review the rules and regulations of the exchange(s) offering the system and/or listing contracts you intend to trade.

Differences among Electronic Trading Systems

Trading or routing orders through electronic systems vary widely among the different electronic systems. You should consult the rules and regulations of the exchange offering the electronic system and/or listing the contract traded or order routed to understand, among other things, in the case of trading systems, the system's order matching procedure, opening and closing procedures and prices, error trade policies, and trading limitations or requirements; and in the case of all systems, qualifications for access and grounds for termination and limitations on the types of orders that may be entered into the system. Each of these matters may present different risk factors with respect to trading on or using a particular system. Each system may also present risks related to system access, varying response times, and security. In the case of internet-based systems, there may be additional types of risks related to system access, varying response times and security, as well as risks related to service providers and the receipt and monitoring of electronic mail.

Risk Associated with System Failure

Trading through an electronic trading or order routing system exposes you to risks associated with system or component failure. In the event of system or component failure, it is possible that, for a certain time period, you may not be able to enter new orders, execute existing orders, or modify or cancel orders that were previously entered. System or component failure may also result in loss of orders or order priority.

Simultaneous Open Outcry Pit and Electronic Trading

Some contracts offered on an electronic trading system may be traded electronically and through open outcry during the same trading hours. You should review the rules and regulations of the exchange offering the system and/or listing the contract to determine how orders that do not designate a particular process will be executed.

Limitation of Liability

Exchanges offering an electronic trading or order routing system and/or listing the contract may have adopted rules to limit their liability, the liability of Futures Commission Merchants, and software and communication system vendors and the amount of damages you may collect for system failure and delays. These limitations of liability provisions vary among the exchanges. You should consult the rules and regulations of the relevant exchange(s) in order to understand these liability limitations.¹

¹ Each exchange's relevant rules are available upon request from the industry professional with whom you have an account. Some exchanges' relevant rules also are available from the exchange's internet home page.

UNIFORM NOTIFICATION REGARDING ACCESS TO MARKET DATA

As a market user you may obtain access to Market Data available through an electronic trading system, software or device that is provided or made available to you by a broker or an affiliate of such. Market Data may include, with respect to products of an exchange (“Exchange”) or the products of third party participating exchanges that are traded on or through the Exchange’s electronic trading platform (“Participating Exchange”), but is not limited to, “real time” or delayed market prices, opening and closing prices and ranges, high-low prices, settlement prices, estimated and actual volume information, bids or offers and the applicable sizes and numbers of such bids or offers.

You are hereby notified that Market Data constitutes valuable confidential information that is the exclusive proprietary property of Citi and/or the applicable exchange, and is not within the public domain. Such Market Data may only be used for your internal use in connection with trading on the Exchange or Participating Exchange. You may not, without the written authorization of the applicable Exchange or Participating Exchange, redistribute, sell, license, retransmit or otherwise provide Market Data, internally or externally and in any format by electronic or other means, including, but not limited to the Internet. Further, you may not, without the written authorization of Citi and the applicable exchange, use Market Data for purposes of determining any price, including any settlement price, for any futures product, options on futures product, or other derivatives instrument traded on any exchange other than an Exchange or a Participating Exchange; or in constructing or calculating the value of any index or indexed product. Additionally, you agree you will not, and will not permit any other individual or entity to, (i) use Market Data in any way so as to compete with an Exchange or to assist or allow a third party to compete with an Exchange; or (ii) use that portion of Market Data which relates to any product of a Participating Exchange in any way so as to compete with that Participating Exchange or to assist or allow a third party to compete with such Participating Exchange.

You must provide upon our request, or upon request of the applicable Exchange or Participating Exchange, information demonstrating your use of the Market Data in accordance with this Notification. Citi and each applicable Exchange or Participating Exchange reserves the right to terminate a market user’s access to Market Data for any reason. You also agree that you will cooperate with an Exchange or Participating Exchange and permit an Exchange or Participating Exchange reasonable access to your premises should an Exchange or Participating Exchange wish to conduct an audit or review connected to the distribution of Market Data, and shall comply with all of such Exchange’s most current policies.

NEITHER CITI NOR ANY EXCHANGE, PARTICIPATING EXCHANGE, NOR THE BROKER, NOR THEIR RESPECTIVE MEMBERS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, GUARANTEE THE TIMELINESS, SEQUENCE, ACCURACY OR COMPLETENESS OF THE DESIGNATED MARKET DATA, MARKET INFORMATION OR OTHER INFORMATION FURNISHED NOR THAT THE MARKET DATA OR SUCH INFORMATION HAVE BEEN VERIFIED. YOU AGREE THAT THE MARKET DATA AND OTHER INFORMATION PROVIDED IS FOR INFORMATION PURPOSES ONLY AND IS NOT INTENDED AS AN OFFER OR SOLICITATION WITH RESPECT TO THE PURCHASE OR SALE OF ANY SECURITY OR COMMODITY.

NEITHER CITI NOR AN EXCHANGE, ANY PARTICIPATING EXCHANGE, NOR THE BROKER NOR THEIR RESPECTIVE MEMBERS, SHAREHOLDERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, SHALL BE LIABLE TO YOU OR TO ANY OTHER PERSON, FIRM OR CORPORATION WHATSOEVER FOR ANY LOSSES, DAMAGES, CLAIMS, PENALTIES, COSTS OR EXPENSES (INCLUDING LOST PROFITS) ARISING OUT OF OR RELATING TO THE MARKET DATA IN ANY WAY, INCLUDING BUT NOT LIMITED TO ANY DELAY, INACCURACIES, ERRORS OR OMISSIONS IN THE MARKET DATA OR IN THE TRANSMISSION THEREOF OR FOR NONPERFORMANCE, DISCONTINUANCE, TERMINATION OR INTERRUPTION OF SERVICE OR FOR ANY DAMAGES ARISING THEREFROM OR OCCASIONED THEREBY, DUE TO ANY CAUSE WHATSOEVER, WHETHER OR NOT RESULTING FROM NEGLIGENCE ON THEIR PART. IF THE FOREGOING DISCLAIMER AND WAIVER OF LIABILITY SHOULD BE DEEMED INVALID OR INEFFECTIVE, NEITHER CITI NOR AN EXCHANGE, NOR ANY PARTICIPATING EXCHANGE, NOR THE BROKER, NOR THEIR RESPECTIVE SHAREHOLDERS, MEMBERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS SHALL BE LIABLE IN ANY EVENT, INCLUDING THEIR OWN NEGLIGENCE, BEYOND THE ACTUAL AMOUNT OF LOSS OR DAMAGE, OR THE AMOUNT OF THE MONTHLY FEE PAID BY YOU TO BROKER, WHICHEVER IS LESS. YOU AGREE THAT NEITHER CITI NOR AN EXCHANGE, NOR ANY PARTICIPATING EXCHANGE, NOR THE BROKER NOR THEIR RESPECTIVE SHAREHOLDERS, MEMBERS, DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS, SHALL BE LIABLE TO YOU OR TO ANY OTHER PERSON, FIRM OR CORPORATION WHATSOEVER FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST PROFITS, COSTS OF DELAY, OR COSTS OF LOST OR DAMAGED DATA.

DISCLOSURE STATEMENT ON FUTURES EXCHANGE OWNERSHIP INTERESTS AND INCENTIVE PROGRAMS

You should be aware that we or one or more of our affiliates may own stock of, or have some other form of ownership interest in, one or more U.S. or foreign exchanges and clearing houses that you may trade on, or that may clear your trades. As a result, you should be aware that we or our affiliate might receive financial benefits related to our ownership interest when trades are executed on such an exchange or cleared at such a clearing house.

In addition, futures exchanges from time to time have in place other arrangements that may provide members with volume or market making discounts or credits, may call for participating members to prepay fees based on volume thresholds or may provide other incentive or arrangements that are intended to encourage market participants to trade on or direct trades to that exchange. We or one or more of our affiliates may participate in and obtain financial benefits from such an incentive program.

You should contact us directly if you would like to know whether we have an ownership interest in a particular exchange or clearing house, or whether we participate in any incentive program on a particular exchange or clearing house. You may also contact any particular futures exchange directly to ask if it has any such incentive program for member firms.

CME DISCLOSURE ON PAYMENT FOR ORDER FLOW

When firms provide execution services to customers, either in conjunction with clearing services or in an execution only capacity, they may, in some circumstances, direct orders to unaffiliated market makers, other executing firms, individual floor brokers or floor brokerage groups for execution. When such unaffiliated parties are used, they may, where permitted, agree to price concessions, volume discounts or refunds, rebates or similar payments in return for receiving such business. Likewise, on occasion, in connection with exchanges that permit pre-execution discussions and “off-floor” transactions such as block trading, exchanges of physicals, swaps or options for futures or equivalent transactions, a counterparty solicited to trade opposite customers of an executing firm may make payments described above and/or pay a commission to the executing firm in connection with that transaction. This could be viewed as an apparent conflict of interest. In order to determine whether transactions executed for your account are subject to the above circumstances, please contact your executing firm account representative.

DIRECT ORDER TRANSMITTAL CLIENT DISCLOSURE STATEMENT

This statement applies to the ability of authorized customers of Citi to place orders for foreign futures and options transactions directly with non-US entities (each, an “Executing Firm”) that execute transactions on behalf of Citi’s customer omnibus accounts.

Please be aware of the following should you be permitted to place the type of orders specified above:

- The orders you place with an Executing Firm are for Citi’s customer omnibus account maintained with a foreign clearing firm. Consequently, Citi may limit or otherwise condition the orders you place with the Executing Firm.
- You should be aware of the relationship of the Executing Firm and Citi. Citi may not be responsible for the acts, omissions, or errors of the Executing Firm, or its representatives, with which you place your orders. In addition, the Executing Firm may not be affiliated with Citi. If you choose to place orders directly with an Executing Firm, you may be doing so at your own risk.
- It is your responsibility to inquire about the applicable laws and regulations that govern the foreign exchanges on which transactions will be executed on your behalf. Any orders placed by you for execution on that exchange will be subject to such rules and regulations, its customs and usages, as well as any local laws that may govern transactions on that exchange. These laws, rules, regulations, customs and usages may offer different or diminished protection from those that govern transactions on US exchanges. In particular, funds received from customers to margin foreign futures transactions may not be provided the same protections as funds received to margin futures transactions on domestic exchanges. Before you trade, you should familiarize yourself with the foreign rules which will apply to your particular transaction. United States regulatory authorities may be unable to compel the enforcement of the rules of regulatory authorities or markets in non-US jurisdictions where transactions may be effected.
- It is your responsibility to determine whether the Executing Firm has consented to the jurisdiction of the courts in the United States. In general, neither the Executing Firm nor any individuals associated with the Executing Firm will be registered in any capacity with the Commodity Futures Trading Commission. Similarly, your contacts with the Executing Firm may not be sufficient to subject the Executing Firm to the jurisdiction of courts in the United States in the absence of the Executing Firm’s consent. Accordingly, neither the courts of the United States nor the Commission’s reparations program will be available as a forum for resolution of any disagreements you may have with the Executing Firm, and your recourse may be limited to actions outside the United States.

Unless you object within five (5) days by giving notice as provided in your customer agreement after receipt of this disclosure, Citi will assume your consent to the aforementioned conditions. ²

² This disclosure statement is relevant only if Citi has granted the direct order transmittal authorization described above to you. Pursuant to CFTC Regulation 30.12, you are eligible to receive such authorization only if (1) you are an eligible swap participant, as defined in former CFTC Regulation 35.1(b)(2), or (2) your decisions to invest in foreign futures or foreign options transactions are made by a commodity trading advisor (“CTA”) that is subject to regulation under the Commodity Exchange Act or by a foreign person performing a similar role or function subject as such to foreign regulation, and certain other conditions are met.

FOREIGN TRADER DISCLOSURE STATEMENT

In accordance with Rules 15.05 and 21.03 of the Commodity Futures Trading Commission ("CFTC"), 17 C.F.R. §§15.05 and 21.03, we are considered to be your agent for purposes of accepting delivery and service of communications from or on behalf of the CFTC regarding any commodity futures contracts or commodity option contracts which are or have been maintained in your account(s) with us. In the event that you are acting as agent or broker for any other person(s), we are also considered to be their agent, and the agent of any person(s) for whom they may be acting as agent or broker, for purposes of accepting delivery and service of such communications. Service or delivery to us of any communication issued by or on behalf of the CFTC (including any summons, complaint, order, subpoena, special call, request for information, notice, correspondence or other written document) will be considered valid and effective service or delivery upon you or any person for whom you may be acting, directly or indirectly, as agent or broker.

You should be aware that Rule 15.05 also provides that you may designate an agent other than Citigroup Global Markets Inc. Any such alternative designation of agency must be evidenced by a written agency agreement which you must furnish to us and which we, in turn, must forward to the CFTC. If you wish to designate an agent other than us, please contact us in writing. You should consult 17 C.F.R. § 15.05 for a more complete explanation of the foregoing.

Upon a determination by the CFTC that information concerning your account(s) with us may be relevant in enabling the CFTC to determine whether the threat of a market manipulation, corner, squeeze, or other market disorder exists, the CFTC may issue a call for specific information from us or from you. In the event that the CFTC directs a call for information to us, we must provide the information requested within the time specified by the CFTC. If the CFTC directs a call for information to you through us as your agent, we must promptly transmit the call to you, and you must provide the information requested within the time specified by the CFTC. If any call by the CFTC for information regarding your account(s) with us is not met, the CFTC has authority to restrict such account(s) to trading for liquidation only. You have the right to a hearing before the CFTC to contest any call for information concerning your account(s) with us, but your request for a hearing will not suspend the CFTC's call for information unless the CFTC modifies or withdraws the call. Please consult 17 C.F.R. §21.03 for a more complete description of the foregoing (including the type of information you may be required to provide).

Certain additional regulations may affect you. Part 17 of the CFTC Regulations, 17 C.F.R. Part 17, requires each futures commission merchant and foreign broker to submit a report to the CFTC with respect to each account carried by such futures commission merchant or foreign broker which contains a reportable futures position. (Specific reportable position levels for all futures contracts traded on U.S. exchanges are established in Rule 15.03.) In addition, Part 18 of the CFTC Regulations, 17 C.F.R. Part 18, requires all traders (including foreign traders) who own or control a reportable futures or options position and who have received a special call from the CFTC to file a Large Trader Reporting Form (Form 103) with the CFTC within one day after the special call upon such trader by the CFTC. Please consult 17 C.F.R. Parts 17 and 18 for more complete information with respect to the foregoing.

NOTICE TO CLIENTS EXCHANGE FOR RELATED POSITIONS ³

Certain futures exchanges permit eligible customers to enter into privately-negotiated off-exchange futures or option on futures transactions (collectively, “**futures**”) known as exchange for related positions (“**EFRP**”). An EFRP involves the simultaneous execution of a futures transaction and an equivalent related position. A “related position” is defined to mean the cash commodity underlying the exchange contract or a by-product, a related product or an over-the-counter (“**OTC**”) derivative instrument of such commodity that has a reasonable degree of price correlation to the commodity underlying the exchange contract.

Types of EFRPs include:

- Exchange of Futures for Physical (“**EFP**”) or Against Actual (“**AA**”) – the simultaneous execution of a futures contract and a corresponding physical transaction or a forward contract on a physical transaction.
- Exchange of Futures for Risk (“**EFR**”) or Exchange of Futures for Swap (“**EFS**”) – the simultaneous execution of a futures contract and a corresponding OTC swap or other OTC derivative transaction.
- Exchange of Option for Option (“**EOO**”) – the simultaneous execution of an option contract and a corresponding transaction in an OTC option or other OTC instrument with similar characteristics.

EFRP transactions are subject to Applicable Law, as defined in the agreement between a futures commission merchant (“**FCM**”) and its customers. Customers that engage in EFRP transactions are responsible for reviewing, understanding and complying with the provisions of Applicable Law governing EFRP transactions, including, but not limited to, Rule 538 of the CME Group (CME, CBOT and NYMEX) and Rule 4.06 of ICE Futures US, and the frequently asked questions and other guidance that each exchange has issued with respect thereto.⁴

Customers are subject to the jurisdiction of the exchange through which the EFRP transaction is entered into and, therefore, may be required to produce records and otherwise cooperate in any inquiry that the exchange may undertake with respect to the EFRP transaction. Moreover, customers may be sanctioned by the exchange if an EFRP transaction does not comply with the requirements of applicable exchange rules and guidance. For this reason, customers are encouraged to review these requirements with any employees that may engage in EFRP transactions on their behalf.

Certain common requirements of the rules and guidance issued by CME Group and ICE Futures US are summarized below. However, this summary is not a substitute for the customer’s obligation to review and understand such rules and related guidance in their entirety.

- The futures contract and the related position must be effected for the account of the same beneficial owner. If the customer is the seller of (or the holder of the short market exposure associated with) the related position, the customer must be the buyer of the futures contract(s) being exchanged in the EFRP; conversely, if the customer is the buyer of (or the holder of the long market exposure associated with) the related position, the customer must be the seller of the futures contract(s) being exchanged in the EFRP.
- The opposing accounts to an EFRP transaction must be: (a) independently controlled accounts with different beneficial ownership; (b) independently controlled accounts of separate legal entities with common beneficial ownership; or (c) independently controlled accounts of the same legal entity, *provided* the account controllers operate in separate business units. For EFRP transactions between accounts with common beneficial ownership,

³ This notice is provided for informational purposes only. Although care has been taken to assure that the content is accurate as of the date of publication, this Notice is not intended to constitute legal or regulatory advice. Citi specifically disclaims any legal responsibility for any errors or omissions and disclaims any liability for losses or damages incurred through the use of the information herein. Citi undertakes no obligations to update this Notice following the date of publication.

⁴ The CME Group’s most recent guidance with respect to EFRP transactions may be found at <http://www.cmegroup.com/rulebook/rulebook-harmonization.html>; ICE Futures US’ most recent guidance with respect to EFRPs may be found at <https://www.theice.com/futures-us/market-resources>. This guidance may be revised from time-to-time. Customers should confirm that they are reviewing the most current guidance.

the parties to the trade must be able to demonstrate the independent control of the accounts and that the transaction had economic substance for each party to the trade.

- Generally, there may be only two parties to an EFRP transaction. However, a third party, acting as principal, may facilitate the related position component of an EFRP on behalf of a customer, *provided* the third party is able to demonstrate that the related position was passed through to the customer that received the exchange contract as part of the EFRP.
- Each EFRP requires a *bona fide* transfer of ownership of the cash commodity between the parties or a *bona fide*, legally binding contract between the parties consistent with relevant market conventions for the particular related position transaction.
- Each side of an EFRP transaction must be independent. For example, confirmation of the related position may not be contingent on the acceptance of the futures transaction for clearing.
- Contingent EFRP transactions are prohibited. EFRP transactions may not be contingent upon the execution of another EFRP or related transaction that results in the offset of the related position without the incurrence of market risk that is material in the context of the related position transactions.
- Foreign currency EFPs, with immediate offset of the cash component of the transaction, are permitted, *provided* the parties to the transaction have acknowledged that, in the event the futures component of the transaction fails to clear, their responsibility for any resultant profit or loss associated with an offset of the cash component of the transaction.
- A party providing inventory financing for a storable agricultural, energy or metals commodity may, through the execution of an EFP, purchase the commodity and sell the equivalent quantity of futures contracts to a counterparty, and grant to the counterparty the non-transferable right, but not the obligation, to execute a second EFP during a specified time period in the future which will have the effect of reversing the original EFP.
- An EFRP may incorporate multiple exchange components with different market bias, *provided* the related components incur material market risk. An EFRP may incorporate multiple related position components, *provided* the net exposure of the related position components is approximately equivalent to the quantity of futures exchanged or, in the case of an EOO, the net delta-adjusted quantity of the OTC option components is approximately equivalent to the delta-adjusted quantity of the exchange-listed option.
- EFRP transactions may be executed at any commercially reasonable price agreed by the parties, *provided* the price of the exchange component of the EFRP transaction conforms to the minimum tick increment of the futures contract under exchange rules. Parties may be asked to demonstrate that EFRPs executed at prices away from the prevailing market price were executed at such prices for legitimate commercial purposes.
- The customer must maintain all records relevant to the futures transaction and the related cash, swap or derivative transaction in accordance with applicable exchange rules. Upon request, the customer must provide its FCM with documentation sufficient to verify its purchase or sale of the related position.
- EFR and EOO participants must comply with applicable Commodity Futures Trading Commission requirements governing eligibility to transact the related position component of an EFR or EOO. Generally, EFR and EOO participants must be “eligible contract participants,” as defined in section 1a(18) of the Commodity Exchange Act.
- A swap that is traded on or subject to the rules of an exchange or a swap execution facility (“SEF”) is ineligible to be the related position component of an EFR or EOO transaction. OTC swaps that are bilaterally negotiated and submitted for clearing-only to a DCO qualify as a related position, *provided* such swaps have a reasonable degree of correlation to the underlying exchange product. Such swaps should be governed by the terms and conditions of an ISDA agreement negotiated between the parties.

ICE CLEAR CREDIT SUBORDINATION OF CLAIMS (FOR CREDIT DEFAULT SWAPS)

This statement applies to the ability of authorized customers of Citi to place orders for credit default swaps (“CDS”) cleared at ICE Clear Credit.

You should be aware that you may request Citi to open and maintain one or more accounts (“Account(s)”) for and in your name to clear certain CDS, including (i) certain index credit default swaps, and (ii) certain credit default swaps on single-name and narrow-based indices (“security-based CDS”), through a clearing agency registered pursuant to Section 17A of the Securities Exchange Act of 1934 (“Exchange Act”) and registered as a derivatives clearing organization pursuant to Section 5b of the Commodity Exchange Act (“CEA”) (a “clearing agency/DCO”) under a program to commingle and portfolio margin CDS (“CDS Portfolio Margin Program”) offered by ICE Clear Credit. In so requesting such Account(s), you should also be aware that you will be requested to enter into an ICE Clear Credit Subordination Agreement that will provide the following:

- You represent and warrant that you reasonably believe that you will clear, and thereby place in the Account(s), both CDS and security-based CDS from time to time and on an on-going basis;
- You further acknowledge and agree:
 1. In accordance with the terms and conditions of that certain exemption granted by the Securities and Exchange Commission by order dated November 1, 2021 (the “Order”), all money securities or property deposited with Citi by you to margin, guarantee or secure security-based CDS cleared through a clearing agency/DCO will be held in a Cleared Swaps Customer Account established and maintained in accordance with section 4d(f) of the CEA and the rules of the Commodity Futures Trading Commission thereunder for the purpose of clearing such Customer CDS positions under a CDS Portfolio Margin Program;
 2. Such money, securities or property held in a Cleared Swaps Customer Account will not receive customer treatment under the Exchange Act or the Securities Investor Protection Act of 1970 (“SIPA”) or be treated as “customer property” as defined in 11 USC 741 in a liquidation of Citi; such money, securities or property will be subject to applicable protections under Subchapter IV of Chapter 7 of Title 11 of the United States Code and rules and regulations thereunder; and
 3. Any and all claims that you may have for such money, securities or property held in a Cleared Swaps Customer Account maintained by you with Citi are hereby subordinated to the claims of other securities customers and security-based swap customers of Citi whose money, securities or property are not held under a CDS Portfolio Margin Program pursuant to the Order. You understand that such subordination constitutes a waiver of the protection provided under SIPA, as amended, for the Account(s) and the money, securities or property in the Account(s).

Negative Contract Prices Risk Disclosure

When trading in the futures markets, there are risks if the market moves against your futures positions. These risks may be particularly acute in those instances in which a futures contract settles at a negative price. The circumstances that lead a futures contract to settle at a negative price may vary. One example of when a futures contract with a physical commodity as the underlying asset may settle at a negative price is when the supply of the commodity faces physical constraints in distribution or storage to such an extent that some suppliers are prepared to pay others to physically take away the commodity. Futures contracts across other asset classes may also settle at negative prices for any number of reasons. Regardless of whether prices are positive or negative, you should keep in mind that if the market moves against your futures positions:

- You may sustain a total loss of the funds that you have deposited to establish or maintain your positions and may incur additional losses beyond these amounts;
- You may be called upon to deposit additional margin funds, on short notice;
- If you do not provide the additional funds within the time we require, your positions may be liquidated at a loss; and
- You will be liable for any resulting deficit in your account.

PLEASE CONTACT YOUR CITI REPRESENTATIVE IF YOU HAVE QUESTIONS OR WANT ADDITIONAL INFORMATION.

Security Futures Risk Disclosure Statement

Updated 2020

FINRA[®]

NFA NATIONAL
FUTURES
ASSOCIATION[®]

FINRA and the National Futures Association (NFA), require members to deliver this Security Futures Risk Disclosure Statement to customers at or prior to the time a customer's account is approved for trading security futures. Customers also may receive revisions from time to time.

This Security Futures Risk Disclosure Statement has been prepared by FINRA and NFA with significant assistance from other futures and securities self-regulatory organizations.

Additional copies of this document may be obtained by contacting FINRA MediaSource at (240) 386-4200, or the NFA Information Center at (312) 781-1410, or from FINRA's website at www.finra.org, or NFA's website at www.nfa.futures.org.

Risk Disclosure Statement For Security Futures Contracts

This disclosure statement discusses the characteristics and risks of standardized security futures contracts traded on regulated U.S. exchanges. At present, regulated exchanges are authorized to list futures contracts on individual equity securities registered under the Securities Exchange Act of 1934 (including common stock and certain exchange-traded funds and American Depositary Receipts), futures on certain debt instruments as well as narrow-based security indices. Futures on other types of securities and options on security futures contracts may be authorized in the future. The glossary of terms appears at the end of the document.

Customers should be aware that the examples in this document are exclusive of fees and commissions that may decrease their net gains or increase their net losses. The examples also do not include tax consequences, which may differ for each customer.

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1.1. Risks of Security Futures Transactions

Trading security futures contracts may not be suitable for all investors. You may lose a substantial amount of money in a very short period of time. The amount you may lose is potentially unlimited and can exceed the amount you originally deposit with your broker. This is because futures trading is highly leveraged, with a relatively small amount of money used to establish a position in assets having a much greater value. If you are uncomfortable with this level of risk, you should not trade security futures contracts.

for security futures contracts or the underlying

1.2. General Risks

- **Trading security futures contracts involves risk and may result in potentially unlimited losses that are greater than the amount you deposited with your broker.**

As with any high risk financial product, you should not risk any funds that you cannot afford to lose, such as your retirement savings, medical and other emergency funds, funds set aside for purposes such as education or home ownership, proceeds from student loans or mortgages, or funds required to meet your living expenses.

- **Be cautious of claims that you can make large profits from trading security futures contracts.** Although the high degree of leverage in security futures contracts can result in large and immediate gains, it can also result in large and immediate losses. As with any financial product, there is no such thing as a “sure winner.”

- **Because of the leverage involved and the nature of security futures contract transactions, you may feel the effects of your losses immediately.**

Gains and losses in security futures contracts are credited or debited to your account, at a minimum, on a daily basis. If movements in the markets

security decrease the value of your positions in security futures contracts, you may be required to have or make additional funds available to your carrying firm as margin. If your account is under the minimum margin requirements set by the exchange or the brokerage firm, your position may be liquidated at a loss, and you will be liable for the deficit, if any, in your account. Margin requirements are addressed in Section 4.

contract or the underlying security or due to recent news events involving the issuer of the underlying security.

- **Under certain market conditions, it may be difficult or impossible to liquidate a position.** Generally, you must enter into an offsetting transaction in order to liquidate a position in a security futures contract. If you cannot liquidate your position in security futures contracts, you may not be able to realize a gain in the value of your position or prevent losses from mounting. This inability to liquidate could occur, for example, if trading is halted due to unusual trading activity in either the security futures contract or the underlying security; if trading is halted due to recent news events involving the issuer of the underlying security; if systems failures occur on an exchange or at the firm carrying your position; or if the position is on an illiquid market. Even if you can liquidate your position, you may be forced to do so at a price that involves a large loss.
- **Under certain market conditions, it may also be difficult or impossible to manage your risk from open security futures positions by entering into an equivalent but opposite position in another contract month, on another market, or in the underlying security.** This inability to take positions to limit your risk could occur, for example, if trading is halted across markets due to unusual trading activity in the security futures

- **Under certain market conditions, the prices of security futures contracts may not maintain their customary or anticipated relationships to the prices of the underlying security or index.** These pricing disparities could occur, for example, when the market for the security futures contract is illiquid, when the primary market for the underlying security is closed, or when the reporting of transactions in the underlying security has been delayed. For index products, it could also occur when trading is delayed or halted in some or all of the securities that make up the index.
- **You may be required to settle certain security futures contracts with physical delivery of the underlying security.** If you hold your position in a physically settled security futures contract until the end of the last trading day prior to expiration, you will be obligated to make or take delivery of the underlying securities, which could involve additional costs. The actual settlement terms may vary from contract to contract and exchange to exchange. You should carefully review the settlement and delivery conditions before entering into a security futures contract. Settlement and delivery are discussed in Section 5.
- **You may experience losses due to systems failures.** As with any financial transaction, you may experience losses if your orders for security futures contracts cannot be executed normally due to systems failures on a regulated exchange or at the brokerage firm carrying your position. Your losses may be greater if the brokerage firm carrying your position does not have adequate back-up systems or procedures.
- **All security futures contracts involve risk, and there is no trading strategy that can eliminate it.** Strategies using combinations of positions, such as spreads, may be as risky as outright long or short positions. Trading in security futures contracts requires knowledge of both the securities and the futures markets.
- **Day trading strategies involving security futures contracts and other products pose special risks.** As with any financial product, persons who seek to purchase and sell the same security future in the course of a day to profit from intra-day price movements (“day traders”) face a number of special risks, including substantial commissions, exposure to leverage, and competition with professional traders. You should thoroughly understand these risks and have appropriate experience before engaging in day trading. The special risks for day traders are discussed more fully in Section 7.
- **Placing contingent orders, if permitted, such as “stop-loss” or “stop-limit” orders, will not necessarily limit your losses to the intended amount.** Some regulated exchanges may permit you to enter into stop-loss or stop-limit orders for security futures contracts, which are intended to limit your exposure to losses due to market fluctuations. However, market conditions may make it impossible to execute the order or to get the stop price.
- **You should thoroughly read and understand the customer account agreement with your brokerage firm before entering into any transactions in security futures contracts.**
- **You should thoroughly understand the regulatory protections available to your funds and positions in the event of the failure of your brokerage firm.** The regulatory protections available to your funds and positions in the event of the failure of your brokerage firm may vary depending on, among other factors, the contract you are trading and whether you are trading through a securities account or a futures account. Firms that allow customers to trade security futures in either securities accounts or futures accounts, or both, are required to disclose to customers the differences in regulatory protections between such accounts, and, where appropriate, how customers may elect to trade in either type of account.

2.1. What Is a Security Futures Contract?

A security futures contract is a legally binding agreement between two parties to purchase or sell in the future a specific quantity of shares of a security or of the component securities of a narrow-based security index, at a certain price. A person who buys a security futures contract enters into a contract to purchase an underlying security and is said to be “long” the contract. A person who sells a security futures contract enters into a contract to sell the underlying security and is said to be “short” the contract. The price at which the contract trades (the “contract price”) is determined by relative buying and selling interest on a regulated exchange.

In order to enter into a security futures contract, you must deposit funds with your brokerage firm equal to a specified percentage (usually at least 20 percent) of the current market value of the contract as a performance bond. Moreover, all security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller reflects the amount of any gain or loss on the security futures contract based on the contract price established at the end of the day for settlement purposes (the “daily settlement price”).

An open position, either a long or short position, is closed or liquidated by entering into an offsetting transaction (*i.e.*, an equal and opposite transaction to the one that opened the position) prior to the contract expiration. Traditionally, most futures contracts are liquidated prior to expiration through an offsetting transaction and, thus, holders do not incur a settlement obligation.

Examples:

Investor A is long one September XYZ Corp. futures contract. To liquidate the long position in the September XYZ Corp. futures contract, Investor A would sell an identical September XYZ Corp. contract.

Investor B is short one December XYZ Corp. futures contract. To liquidate the short position in the December XYZ Corp. futures contract, Investor B would buy an identical December XYZ

Security futures contracts that are not liquidated prior to expiration must be settled in accordance with the terms of the contract. Some security futures contracts are settled by physical delivery of the underlying security. At the expiration of a security futures contract that is settled through physical delivery, a person who is long the contract must pay the final settlement price set by the regulated exchange or the clearing organization and take delivery of the underlying shares. Conversely, a person who is short the contract must make delivery of the underlying shares in exchange for the final settlement price.

Other security futures contracts are settled through cash settlement. In this case, the underlying security is not delivered. Instead, any positions in such security futures contracts that are open at the end of the last trading day are settled through a final cash payment based on a final settlement price determined by the exchange or clearing organization. Once this payment is made, neither party has any further obligations on the contract.

Physical delivery and cash settlement are discussed more fully in Section 5.

2.2. Purposes of Security Futures

Security futures contracts can be used for speculation, hedging, and risk management. Security futures contracts do not provide capital growth or income.

Speculation

Speculators are individuals or firms who seek to profit from anticipated increases or decreases in futures prices. A speculator who expects the price of the underlying instrument to increase will buy the security futures contract. A speculator who expects the price of the underlying instrument to decrease will sell the security futures contract. Speculation involves substantial risk and can lead to large losses as well as profits.

The most common trading strategies involving security futures contracts are buying with the hope of profiting from an anticipated price increase and selling with the hope of profiting from an anticipated price decrease. For example, a person who expects the price of XYZ stock to increase by March can buy a March XYZ security futures contract, and a person who expects the price of XYZ stock to decrease by March can sell a March XYZ security futures contract. The following illustrates potential profits and losses if Customer A purchases the security futures contract at \$50 a share and Customer B sells the same contract at \$50 a share (assuming 100 shares per contract).

Price of XYZ at Liquidation	Customer A Profit/Loss	Customer B Profit/Loss
\$55	\$500	- \$500
\$50	\$0	\$0
\$45	- \$500	\$500

Speculators may also enter into spreads with the hope of profiting from an expected change in price relationships. Spreaders may purchase a contract expiring in one contract month and sell another contract on the same underlying security expiring in a different month (e.g., buy June and sell September XYZ single stock futures). This is commonly referred to as a “calendar spread.”

Spreaders may also purchase and sell the same contract month in two different but economically correlated security futures contracts. For example, if ABC and XYZ are both pharmaceutical companies and an individual believes that ABC will have stronger growth than XYZ between now and June, he could buy June ABC futures contracts and sell June XYZ futures contracts. Assuming that each contract is 100 shares, the following illustrates how this works.

Opening Position	Price at Liquidation	Gain or Loss	Price at Liquidation	Gain or Loss
Buy ABC at 50	\$53	\$300	\$53	\$300
Sell XYZ at 45	\$46	- \$100	\$50	- \$500
Net Gain or Loss		\$200		- \$200

Speculators can also engage in arbitrage, which is similar to a spread except that the long and short positions occur on two different markets. An arbitrage position can be established by taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

Hedging

Generally speaking, hedging involves the purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent). A hedger gives up the potential to profit from a favorable price change in the position being hedged in order to minimize the risk of loss from an adverse price change.

An investor who wants to lock in a price now for an anticipated sale of the underlying security at a later date can do so by hedging with security futures. For example, assume an investor owns 1,000 shares of ABC that have appreciated since he bought them. The investor would like to sell them at the current price of

\$50 per share, but there are tax or other reasons for holding them until September. The investor could sell ten 100-share ABC futures contracts and then buy back those contracts in September when he sells the stock. Assuming the stock price and the futures price change by the same amount, the gain or loss in the stock will be offset by the loss or gain in the futures contracts.

Price in September	Value of 1,000 Shares of ABC	Gain or Loss on Futures	Effective Selling Price
\$40	\$40,000	\$10,000	\$50,000
\$50	\$50,000	\$0	\$50,000
\$60	\$60,000	-\$10,000	\$50,000

Hedging can also be used to lock in a price now for an anticipated purchase of the stock at a later date. For example, assume that in May a mutual fund expects to buy stocks in a particular industry with the proceeds of bonds that will mature in August. The mutual fund can hedge its risk that the stocks will increase in value between May and August by purchasing security futures contracts on a narrow-based index of stocks from that industry. When the mutual fund buys the stocks in August, it also will liquidate the security futures position in the index. If the relationship between the security futures contract and the stocks in the index is constant, the profit or loss from the futures contract will offset the price change in the stocks, and the mutual fund will have locked in the price that the stocks were selling at in May.

Although hedging mitigates risk, it does not eliminate all risk. For example, the relationship between the price of the security futures contract and the price of the underlying security traditionally tends to remain constant over time, but it can and does vary somewhat. Furthermore, the expiration or liquidation of the security futures contract may not coincide with the exact time the hedger buys or sells the underlying stock. Therefore, hedging may not be a perfect protection against price risk.

Risk Management

Some institutions also use futures contracts to manage portfolio risks without necessarily intending to change the composition of their portfolio by buying or selling the underlying securities. The institution does so by taking a security futures position that is opposite to some or all of its position in the underlying securities. This strategy involves more risk than a traditional hedge because it is not meant to be a substitute for an anticipated purchase or sale.

2.3. Where Security Futures Trade

By law, security futures contracts must trade on a regulated U.S. exchange. Each regulated U.S. exchange that trades security futures contracts is subject to joint regulation by the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC).

A person holding a position in a security futures contract who seeks to liquidate the position must do so either on the regulated exchange where the original trade took place or on another regulated exchange, if any, where a fungible security futures contract trades. (A person may also seek to manage the risk in that position by taking an opposite position in a comparable contract traded on another regulated exchange.)

Security futures contracts traded on one regulated exchange might not be fungible with security futures contracts traded on another regulated exchange for a variety of reasons. Security futures traded on different regulated exchanges may be non-fungible because they have different contract terms (*e.g.*, size, settlement method), or because they are cleared through different clearing organizations. Moreover, a regulated exchange might not permit its security futures contracts to be offset or liquidated by an identical contract traded on another regulated exchange, even though they have the same contract terms and are cleared through the same clearing organization. You should consult your broker about the fungibility of the contract you are considering purchasing or selling, including which exchange(s), if any, on which it may be offset.

Regulated exchanges that trade security futures contracts are required by law to establish certain listing standards. Changes in the underlying security of a security futures contract may, in some cases, cause such contract to no longer meet the regulated exchange's listing standards. Each regulated exchange will have rules governing the continued trading of security futures contracts that no longer meet the exchange's listing standards. These rules may, for example, permit only liquidating trades in security futures contracts that no longer satisfy the listing standards.

2.4. How Security Futures Differ from the Underlying Security

Shares of common stock represent a fractional ownership interest in the issuer of that security. Ownership of securities confers various rights that are not present with positions in security futures contracts. For example, persons owning a share of common stock may be entitled to vote in matters affecting corporate governance. They also may be entitled to receive dividends and corporate disclosure, such as annual and quarterly reports.

The purchaser of a security futures contract, by contrast, has only a contract for future delivery of the underlying security. The purchaser of the security futures contract is not entitled to exercise any voting rights over the underlying security and is not entitled to any dividends that may be paid by the issuer.

Moreover, the purchaser of a security futures contract does not receive the corporate disclosures that are received by shareholders of the underlying security, although such corporate disclosures must be made publicly available through the SEC's EDGAR system, which can be accessed at www.sec.gov. You should review such disclosures before entering into a security futures contract. See Section 8.1 for further discussion of the impact of corporate events on a security futures contract.

All security futures contracts are marked-to-market at least daily, usually after the close of trading, as described in Section 3 of this document. At that time, the account of each buyer and seller is credited with the amount of any gain, or debited by the amount of any loss, on the security futures contract, based on the contract price established at the end of the day for settlement purposes (the "daily settlement price"). By contrast, the purchaser or seller of the underlying instrument does not have the profit and loss from his or her investment credited or debited until the position in that instrument is closed out.

Naturally, as with any financial product, the value of the security futures contract and of the underlying security may fluctuate. However, owning the underlying security does not require an investor to settle his or her profits and losses daily. By contrast, as a result of the mark-to-market requirements discussed above, a person who is long a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract decreases. Similarly, a person who is short a security futures contract often will be required to deposit additional funds into his or her account as the price of the security futures contract increases.

Another significant difference is that security futures contracts expire on a specific date. Unlike an owner of the underlying security, a person cannot hold a long position in a security futures contract for an extended period of time in the hope that the price will go up.

If you do not liquidate your security futures contract, you will be required to settle the contract when

it expires, either through physical delivery or cash settlement. For cash-settled contracts in particular, upon expiration, an individual will no longer have an economic interest in the securities underlying the security futures contract.

2.5. Comparison to Options

Although security futures contracts share some characteristics with options on securities (options contracts), these products are also different in a number of ways. Below are some of the important distinctions between equity options contracts and security futures contracts.

If you purchase an options contract, you have the right, but not the obligation, to buy or sell a security prior to the expiration date. If you sell an options contract, you have the obligation to buy or sell a security prior to the expiration date. By contrast, if you have a position in a security futures contract (either long or short), you have both the right and the obligation to buy or sell a security at a future date. The only way that you can avoid the obligation incurred by the security futures contract is to liquidate the position with an offsetting contract.

A person purchasing an options contract runs the risk of losing the purchase price (premium) for the option contract. Because it is a wasting asset, the purchaser of an options contract who neither liquidates the options contract in the secondary market nor exercises it at or prior to expiration will necessarily lose his or her entire investment in the options contract. However, a purchaser of an options contract cannot lose more than the amount of the premium. Conversely, the seller of an options contract receives

the premium and assumes the risk that he or she will be required to buy or sell the underlying security on or prior to the expiration date, in which event his or her losses may exceed the amount of the premium received. Although the seller of an options contract

is required to deposit margin to reflect the risk of its obligation, he or she may lose many times his or her initial margin deposit.

By contrast, the purchaser and seller of a security futures contract each enter into an agreement to buy or sell a specific quantity of shares in the underlying security. Based upon the movement in prices of the underlying security, a person who holds a position in a security futures contract can gain or lose many times his or her initial margin deposit. In this respect, the benefits of a security futures contract are similar to the benefits of *purchasing* an option, while the risks of entering into a security futures contract are similar to the risks of *selling* an option.

Both the purchaser and the seller of a security futures contract have daily margin obligations. At least once each day, security futures contracts are marked-to-market and the increase or decrease in the value of the contract is credited or debited to the buyer and the seller. As a result, any person who has an open position in a security futures contract may be called upon to meet additional margin requirements or may receive a credit of available funds.

Example:

Assume that Customers A and B each anticipate an increase in the market price of XYZ stock, which is currently \$50 a share. Customer A purchases an XYZ 50 call (covering 100 shares of XYZ at a premium of \$5 per share). The option premium is \$500 (\$5 per share X 100 shares). Customer B purchases an XYZ security futures contract (covering 100 shares of XYZ). The total value of the contract is \$5000 (\$50 share value X 100 shares). The required margin is \$1000 (or 20% of the contract value).

Price of XYZ at Expiration	Customer A Profit/Loss	Customer B Profit/Loss
65	\$1000	\$1500
60	\$500	\$1000
55	\$0	\$500
50	-\$500	\$0
45	-\$500	-\$500
40	-\$500	-\$1000
35	-\$500	-\$1500

The most that Customer A can lose is \$500, the option premium. Customer A breaks even at \$55 per share, and makes money at higher prices. Customer B may lose more than his initial margin deposit. Unlike the options premium, the margin on a futures contract is not a cost but a performance bond. The losses for Customer B are not limited by this performance bond. Rather, the losses or gains are determined by the settlement price of the contract, as provided in the example above. Note that if the price of XYZ falls to \$35 per share, Customer A loses only \$500, whereas Customer B loses \$1500.

2.6. Components of a Security Futures Contract

Each regulated exchange can choose the terms of the security futures contracts it lists, and those terms may differ from exchange to exchange or contract to contract. Some of those contract terms are discussed below. However, you should ask your broker for a copy of the contract specifications before trading a particular contract.

2.6.1. Each security futures contract has a set size. The size of a security futures contract is determined by the regulated exchange on which the contract trades. For example, a security futures contract for a single stock may be based on 100 shares of that stock. If prices are

reported per share, the value of the contract would be the price times 100. For narrow-based security indices, the value of the contract is the price of the component securities times the multiplier set by the exchange as part of the contract terms.

2.6.2. Security futures contracts expire at set times determined by the listing exchange. For example, a particular contract may expire on a particular day, *e.g.*, the third Friday of the expiration month. Up until expiration, you may liquidate an open position by offsetting your contract with a fungible opposite contract that expires in the same month. If you do not liquidate an open position before it expires, you will be required to make or take delivery of the underlying security or to settle the contract in cash after expiration.

2.6.3. Although security futures contracts on a particular security or a narrow-based security index may be listed and traded on more than one regulated exchange, the contract specifications may not be the same. Also, prices for contracts on the same security or index may vary on different regulated exchanges because of different contract specifications.

2.6.4. Prices of security futures contracts are usually quoted the same way prices are quoted in the underlying instrument. For example, a contract for an individual security would be quoted in dollars and cents per share. Contracts for indices would be quoted by an index number, usually stated to two decimal places.

2.6.5. Each security futures contract has a minimum price fluctuation (called a tick), which may differ from product to product or exchange to exchange. For example, if a particular security futures contract has a tick size of 1¢, you can buy the contract at \$23.21 or \$23.22 but not at \$23.215.

2.7. Trading Halts

The value of your positions in security futures contracts could be affected if trading is halted in either the security futures contract or the underlying security. In certain circumstances, regulated exchanges are required by law to halt trading in security futures contracts. For example, trading on a particular security futures contract must be halted if trading is halted on the listed market for the underlying security as a result of pending news, regulatory concerns, or market volatility. Similarly, trading of a security futures contract on a narrow-based security index must be halted under such circumstances if trading is halted on securities accounting for at least 50 percent of the market capitalization of the index. In addition, regulated exchanges are required to halt trading in all security futures contracts for a specified period of time when the S&P 500 Index experiences one-day declines of seven-, 13- and 20-percent. The regulated exchanges may also have discretion under their rules to halt trading in other circumstances— such as when the exchange determines that the halt would be advisable in maintaining a fair and orderly market.

A trading halt, either by a regulated exchange that trades security futures or an exchange trading the underlying security or instrument, could prevent you from liquidating a position in security futures contracts in a timely manner, which could prevent you from liquidating a position in security futures contracts at that time.

2.8. Trading Hours

Each regulated exchange trading a security futures contract may open and close for trading at different times than other regulated exchanges trading security futures contracts or markets trading the underlying security or securities. Trading in security futures contracts prior to the opening or after the close of the primary market for the underlying security may be less liquid than trading during regular market hours.

SECTION 3

Clearing Organizations And Mark-To-Market Requirements

Every regulated U.S. exchange that trades security futures contracts is required to have a relationship with a clearing organization that serves as the guarantor of each security futures contract traded on that exchange. A clearing organization performs the following functions: matching trades; effecting settlement and payments; guaranteeing performance; and facilitating deliveries.

Throughout each trading day, the clearing organization matches trade data submitted by clearing members on behalf of their customers or for the clearing member's proprietary accounts. If an account is with a brokerage firm that is not a member of the clearing organization, then the brokerage firm will carry the security futures position with another brokerage firm that is a member of the clearing organization. Trade records that do not match, either because of a discrepancy in the details or because one side of the transaction is missing, are returned to the submitting clearing members for resolution. The members are required to resolve such "out trades" before or on the open of trading the next morning.

When the required details of a reported transaction have been verified, the clearing organization assumes the legal and financial obligations of the parties to the transaction. One way to think of the role of the clearing organization is that it is the "buyer to every seller and the seller to every buyer." The insertion or substitution of the clearing organization as the counter-party to every transaction enables a customer to liquidate a security futures position without regard to what the other party to the original security futures contract decides to do.

The clearing organization also effects the settlement of gains and losses from security futures contracts between clearing members. At least once each day, clearing member brokerage firms must either pay to, or receive from, the clearing organization the difference between the current price and the trade price earlier in the day, or for a position carried over from the previous day, the difference between the current price and the previous day's settlement price. Whether a clearing organization effects settlement of gains and losses on a daily basis or more frequently will depend on the conventions of the clearing organization and market conditions. Because the clearing organization assumes the legal and financial obligations for each security futures contract, you should expect it to ensure that payments are made promptly to protect its obligations.

Gains and losses in security futures contracts are also reflected in each customer's account on at least a daily basis. Each day's gains and losses are determined based on a daily settlement price disseminated by the regulated exchange trading the security futures contract or its clearing organization. If the daily settlement price of a particular security futures contract rises, the buyer has a gain and the seller a loss. If the daily settlement price declines, the buyer has a loss and the seller a gain. This process is known as "marking-to-market" or daily settlement. As a result, individual customers normally will be called on to settle daily.

The one-day gain or loss on a security futures contract is determined by calculating the difference between the current day's settlement price and the previous day's settlement price.

For example, assume a security futures contract is purchased at a price of \$120. If the daily settlement price is either \$125 (higher) or \$117 (lower), the effects would be as follows:

(1 contract representing 100 shares)

Daily Settlement Value	Buyer's Account	Seller's Account
\$125	\$500 gain (credit)	\$500 loss (debit)
\$117	\$300 loss (debit)	\$300 gain (credit)

The cumulative gain or loss on a customer's open security futures positions is generally referred to as "open trade equity" and is listed as a separate component of account equity on your customer account statement.

A discussion of the role of the clearing organization in effecting delivery is discussed in Section 5.

When a broker-dealer lends a customer part of the funds needed to purchase a security such as common stock, the term "margin" refers to the amount of cash, or down payment, the customer is required to deposit. By contrast, a security futures contract is an obligation and not an asset. A security futures contract has no value as collateral for a loan. Because of the potential for a loss as a result of the daily marked-to-market process, however, a margin deposit is required of each party to a security futures contract. This required margin deposit also is referred to as a "performance bond."

In the first instance, margin requirements for security futures contracts are set by the exchange on which the contract is traded, subject to certain minimums set by law. The basic margin requirement is 20% of the current value of the security futures contract, although some strategies may have lower margin requirements. Requests for additional margin are known as "margin calls." Both buyer and seller must individually deposit the required margin to their respective accounts.

It is important to understand that individual brokerage firms can, and in many cases do, require margin that is higher than the exchange requirements. Additionally, margin requirements may vary from brokerage firm to brokerage firm. Furthermore, a brokerage firm can increase its "house" margin requirements at any time without providing advance notice, and such increases could result in a margin call.

For example, some firms may require margin to be deposited the business day following the day of a deficiency, or some firms may even require deposit on the same day. Some firms may require margin to be on deposit in the account before they will accept an order for a security futures contract. Additionally,

brokerage firms may have special requirements as to how margin calls are to be met, such as requiring a wire transfer from a bank, or deposit of a certified or cashier's check. You should thoroughly read and understand the customer agreement with your brokerage firm before entering into any transactions in security futures contracts.

If through the daily cash settlement process, losses in the account of a security futures contract participant reduce the funds on deposit (or equity) below the maintenance margin level (or the firm's higher "house" requirement), the brokerage firm will require that additional funds be deposited.

If additional margin is not deposited in accordance with the firm's policies, the firm can liquidate your position in security futures contracts or sell assets in any of your accounts at the firm to cover the margin deficiency. You remain responsible for any shortfall in the account after such liquidations or sales. Unless provided otherwise in your customer agreement or by applicable law, you are not entitled to choose which futures contracts, other securities or other assets are liquidated or sold to meet a margin call or to obtain an extension of time to meet a margin call.

Brokerage firms generally reserve the right to liquidate a customer's security futures contract positions or sell customer assets to meet a margin call at any time without contacting the customer. Brokerage firms may also enter into equivalent but opposite positions for your account in order to manage the risk created by a margin call. Some customers mistakenly believe that a firm is required to contact them for a margin call to be valid, and that the firm is not allowed to liquidate securities or other assets in their accounts to meet a margin call unless the firm has contacted them first. This is not the case. While most firms notify their customers of margin calls and allow some time for deposit of additional margin, they are not required to do so. Even if a firm has notified a customer of a margin call and set a

specific due date for a margin deposit, the firm can still take action as necessary to protect its financial interests, including the immediate liquidation of positions without advance notification to the customer.

Here is an example of the margin requirements for a long security futures position.

A customer buys 3 July EJM security futures at 71.50. Assuming each contract represents 100 shares, the nominal value of the position is \$21,450 ($71.50 \times 3 \text{ contracts} \times 100 \text{ shares}$). If the initial margin rate is 20% of the nominal value, then the customer's initial margin requirement would be \$4,290. The customer deposits the initial margin, bringing the equity in the account to \$4,290.

First, assume that the next day the settlement price of EJM security futures falls to 69.25. The marked-to-market loss in the customer's equity is \$675 ($71.50 - 69.25 \times 3 \text{ contracts} \times 100 \text{ shares}$). The customer's equity decreases to \$3,615 ($\$4,290 - \675). The new nominal value of the contract is \$20,775 ($69.25 \times 3 \text{ contracts} \times 100 \text{ shares}$). If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be \$4,155. Because the customer's equity had decreased to \$3,615 (see above), the customer would be required to have an additional \$540 in margin ($\$4,155 - \$3,615$).

Alternatively, assume that the next day the settlement price of EJM security futures rises to 75.00. The mark-to-market gain in the customer's equity is \$1,050 ($75.00 - 71.50 \times 3 \text{ contracts} \times 100 \text{ shares}$). The customer's equity increases to \$5,340 ($\$4,290 + \$1,050$). The new nominal value of the contract is \$22,500 ($75.00 \times 3 \text{ contracts} \times 100 \text{ shares}$). If the maintenance margin rate is 20% of the nominal value, then the customer's maintenance margin requirement would be \$4,500. Because the customer's equity had increased to \$5,340 (see above), the customer's excess equity would be \$840.

The process is exactly the same for a short position, except that margin calls are generated as the settlement price rises rather than as it falls. This is because the customer's equity decreases as the settlement price rises and increases as the settlement price falls.

Because the margin deposit required to open a security futures position is a fraction of the nominal value of the contracts being purchased or sold, security futures contracts are said to be highly leveraged. The smaller the margin requirement in relation to the underlying value of the security futures contract, the greater the leverage. Leverage allows exposure to a given quantity of an underlying asset for a fraction of the investment needed to purchase that quantity outright. In sum, buying (or selling) a security futures contract provides the same dollar and cents profit and loss outcomes as owning (or shorting) the underlying security. However, as a percentage of the margin deposit, the potential immediate exposure to profit or loss is much higher with a security futures contract than with the underlying security.

For example, if a security futures contract is established at a price of \$50, the contract has a nominal value of \$5,000 (assuming the contract is for 100 shares of stock). The margin requirement may be as low as 20%. In the example just used, assume the contract price rises from \$50 to \$52 (a \$200 increase in the nominal value). This represents a \$200 profit to the buyer of the security futures contract, and a 20% return on the \$1,000 deposited as margin. The reverse would be true if the contract price decreased from \$50 to \$48. This represents a \$200 loss to the buyer, or 20% of the \$1,000 deposited as margin. Thus, leverage can either benefit or harm an investor.

Note that a 4% decrease in the value of the contract resulted in a loss of 20% of the

margin deposited. A 20% decrease would wipe out 100% of the margin deposited on the security futures contract.

If you do not liquidate your position prior to the end of trading on the last day before the expiration of the security futures contract, you are obligated to either 1) make or accept a cash payment (“cash settlement”) or 2) deliver or accept delivery of the underlying securities in exchange for final payment of the final settlement price (“physical delivery”). The terms of the contract dictate whether it is settled through cash settlement or by physical delivery.

The expiration of a security futures contract is established by the exchange on which the contract is listed. On the expiration day, security futures contracts cease to exist. Typically, the last trading day of a security futures contract will be the third Friday of the expiring contract month, and the expiration day will be the following Saturday. This follows the expiration conventions for stock options and broad-based stock indexes. Please keep in mind that the expiration day is set by the listing exchange and may deviate from these norms.

5.1. Cash Settlement

In the case of cash settlement, no actual securities are delivered at the expiration of the security futures contract. Instead, you must settle any open positions in security futures by making or receiving a cash payment based on the difference between the final settlement price and the previous day’s settlement price. Under normal circumstances, the final settlement price for a cash-settled contract will reflect the opening price for the underlying security.

Once this payment is made, neither the buyer nor the seller of the security futures contract has any further obligations on the contract.

5.2. Settlement by Physical Delivery

Settlement by physical delivery is carried out by clearing brokers or their agents with National Securities Clearing Corporation (NSCC), an SEC-regulated securities clearing agency. Such settlements are made in much the same way as they are for purchases and sales of the underlying security.

Promptly after the last day of trading, the regulated exchange's clearing organization will report a purchase and sale of the underlying stock at the previous day's settlement price (also referred to as the "invoice price") to NSCC. In general, if NSCC does not reject the transaction by a time specified in its rules, settlement is effected pursuant to the rules of the exchange and NSCC's Rules and Procedures within the normal clearance and settlement cycle for securities transactions, which currently is two business days.

However, settlement may be effected on a shorter timeframe based on the rules of the exchange and subject to NSCC's Rules and Procedures.

If you hold a short position in a physically settled security futures contract to expiration, you will be required to make delivery of the underlying securities. If you already own the securities, you may tender them to your brokerage firm. If you do not own the securities, you will be obligated to purchase them.

Some brokerage firms may not be able to purchase the securities for you. If your brokerage firm cannot purchase the underlying securities on your behalf to fulfill a settlement obligation, you will have to purchase the securities through a different firm.

Positions in security futures contracts may be held either in a securities account or in a futures account. Your brokerage firm may or may not permit you to choose the types of account in which your positions in security futures contracts will be held. The protections for funds deposited or earned by customers in connection with trading in security futures contracts differ depending on whether the positions are carried in a securities account or a futures account. If your positions are carried in a securities account, you will not receive the protections available for futures accounts. Similarly, if your positions are carried in a futures account, you will not receive the protections available for securities accounts. You should ask your broker which of these protections will apply to your funds.

You should be aware that the regulatory protections applicable to your account are not intended to insure you against losses you may incur as a result of a decline or increase in the price of a security futures contract. As with all financial products, you are solely responsible for any market losses in your account.

Your brokerage firm must tell you whether your security futures positions will be held in a securities account or a futures account. If your brokerage firm gives you a choice, it must tell you what you have to do to make the choice and which type of account will be used if you fail to do so. You should understand that certain regulatory protections for your account will depend on whether it is a securities account or a futures account.

6.1. Protections for Securities Accounts

If your positions in security futures contracts are carried in a securities account, they are covered by SEC rules governing the safeguarding of customer funds and securities. These rules prohibit a broker-dealer from using customer funds and securities to finance its business. As a result, the broker-dealer is required to set aside funds equal to the net of all its excess payables to customers over receivables from customers. The rules also require a broker-dealer to segregate all customer fully paid and excess margin securities carried by the broker-dealer for customers.

The Securities Investor Protection Corporation (SIPC) also covers positions held in securities accounts. SIPC was created in 1970 as a nonprofit, non-government, membership corporation, funded by member broker-dealers. Its primary role is to return funds and securities to customers if the broker-dealer holding these assets becomes insolvent. SIPC coverage applies to customers of current (and in some cases former) SIPC members. Most broker-dealers registered with the SEC are SIPC members; those few that are not must disclose this fact to their customers. SIPC members must display an official sign showing their membership. To check whether a firm is a SIPC member, go to www.sipc.org, call the SIPC Membership Department at (202) 371-8300, or write to SIPC Membership Department, Securities Investor Protection Corporation, 1667 K Street, NW, Suite 1000, Washington, DC 20006-1620.

SIPC coverage is limited to \$500,000 per customer, including up to \$250,000 for cash. For example, if a customer has 1,000 shares of XYZ stock valued at \$200,000 and \$10,000 cash in the account, both the security and the cash balance would be protected. However, if the customer has shares of stock valued at \$500,000 and \$250,000 in cash, only a total of \$500,000 of those assets will be protected.

For purposes of SIPC coverage, customers are persons who have securities or cash on deposit with a SIPC member for the purpose of, or as a result of, securities transactions. SIPC does not protect customer funds placed with a broker-dealer just to earn interest.

Insiders of the broker-dealer, such as its owners, officers, and partners, are not customers for purposes of SIPC coverage.

6.2. Protections for Futures Accounts

If your security futures positions are carried in a futures account, they must be segregated from the brokerage firm's own funds and cannot be borrowed or otherwise used for the firm's own purposes. If the funds are deposited with another entity (e.g., a bank, clearing broker, or clearing organization), that entity must acknowledge that the funds belong to customers and cannot be used to satisfy the firm's debts. Moreover, although a brokerage firm may carry funds belonging to different customers in the same bank or clearing account, it may not use the funds of one customer to margin or guarantee the transactions of another customer. As a result, the brokerage firm must add its own funds to its customers' segregated funds to cover customer debits and deficits. Brokerage firms must calculate their segregation requirements daily.

You may not be able to recover the full amount of any funds in your account if the brokerage firm becomes insolvent and has insufficient funds to cover its obligations to all of its customers. However, customers with funds in segregation receive priority in bankruptcy proceedings. Furthermore, all customers whose funds are required to be segregated have the same priority in bankruptcy, and there is no ceiling on the amount of funds that must be segregated for or can be recovered by a particular customer.

Your brokerage firm is also required to separately maintain funds invested in security futures contracts traded on a foreign exchange. However, these funds may not receive the same protections once they are transferred to a foreign entity (*e.g.*, a foreign broker, exchange or clearing organization) to satisfy margin requirements for those products. You should ask your broker about the bankruptcy protections available in the country where the foreign exchange (or other entity holding the funds) is located.

Certain traders who pursue a day trading strategy may seek to use security futures contracts as part of their trading activity. Whether day trading in security futures contracts or other securities, investors engaging in a day trading strategy face a number of risks.

- **Day trading in security futures contracts requires in-depth knowledge of the securities and futures markets and of trading techniques and strategies.** In attempting to profit through day trading, you will compete with professional traders who are knowledgeable and sophisticated in these markets. You should have appropriate experience before engaging in day trading.
- **Day trading in security futures contracts can result in substantial commission charges, even if the per trade cost is low.** The more trades you make, the higher your total commissions will be. The total commissions you pay will add to your losses and reduce your profits. For instance, assuming that a round-turn trade costs \$16 and you execute an average of 29 round-turn transactions per day each trading day, you would need to generate an annual profit of \$111,360 just to cover your commission expenses.
- **Day trading can be extremely risky.** Day trading generally is not appropriate for someone of limited resources and limited investment or trading experience and low risk tolerance. You should be prepared to lose all of the funds that you use for day trading. In particular, you should not fund day trading activities with funds that you cannot afford to lose.

SECTION 8

Other

8.1. Corporate Events

As noted in Section 2.4, an equity security represents a fractional ownership interest in the issuer of that security. By contrast, the purchaser of a security futures contract has only a contract for future delivery of the underlying security. Treatment of dividends and other corporate events affecting the underlying security may be reflected in the security futures contract depending on the applicable clearing organization rules. Consequently, individuals should consider how dividends and other developments affecting security futures in which they transact will be handled by the relevant exchange and clearing organization. The specific adjustments to the terms of a security futures contract are governed by the rules of the applicable clearing organization. Below

is a discussion of some of the more common types of adjustments that you may need to consider.

Corporate issuers occasionally announce stock splits. As a result of these splits, owners of the issuer's common stock may own more shares of the stock, or fewer shares in the case of a reverse stock split. The treatment of stock splits for persons owning a security futures contract may vary according to the terms of the security futures contract and the rules of the clearing organization. For example, the terms of the contract may provide for an adjustment in the number of contracts held by each party with a long or short position in a security future, or for an adjustment in the number of shares or units of the instrument underlying each contract, or both.

Corporate issuers also occasionally issue special dividends. A special dividend is an announced cash dividend payment outside the normal and customary practice of a corporation. The terms of a

security futures contract may be adjusted for special dividends. The adjustments, if any, will be based upon the rules of the exchange and clearing organization. In general, there will be no adjustments for ordinary dividends as they are recognized as a normal and customary practice of an issuer and are already accounted for in the pricing of security futures.

However, adjustments for ordinary dividends may be made for a specified class of security futures contracts based on the rules of the exchange and the clearing organization.

Corporate issuers occasionally may be involved in mergers and acquisitions. Such events may cause the underlying security of a security futures contract to change over the contract duration. The terms of security futures contracts may also be adjusted to reflect other corporate events affecting the underlying security.

8.2. Position Limits and Large Trader Reporting

All security futures contracts trading on regulated exchanges in the United States are subject to position limits or position accountability limits. Position limits restrict the number of security futures contracts that any one person or group of related persons may hold or control in a particular security futures contract.

In contrast, position accountability limits permit the accumulation of positions in excess of the limit

without a prior exemption. In general, position limits and position accountability limits are beyond the thresholds of most retail investors. Whether a security futures contract is subject to position limits, and the level for such limits, depends upon the trading activity and market capitalization of the underlying security of the security futures contract. Position limits are required for security futures contracts on a security. Position limits also apply only to an expiring security futures contract during its last three trading days. A regulated exchange must establish a default position limit on a security futures contract that is no greater than 25,000 100-share contracts (or the equivalent if the contract size is different than 100 shares), either net or on the same side of the market, unless the underlying security exceeds 20 million shares of estimated

deliverable supply, in which case the limit may be set at a level no greater than 12.5 percent of the estimated deliverable supply of the underlying security, either net or on the same side of the market.

For a security futures contract on a security with a six-month total trading volume of more than 2.5 billion shares and there are more than 40 million shares of estimated deliverable supply, a regulated exchange may adopt a position accountability rule in lieu of a position limit, either net or on the same side of the market. Under position accountability rules, a trader holding a position in a security futures contract that exceeds 25,000 100-share contracts (or the equivalent if the contract size is different than 100 shares) or such lower level specified under the rules of the exchange, must agree to provide information regarding the position and consent to halt increasing that position if requested by the exchange.

Brokerage firms must also report large open positions held by one person (or by several persons acting together) to the CFTC as well as to the exchange on which the positions are held. The CFTC's reporting requirements are 1,000 contracts for security futures positions on individual equity securities and 200 contracts for positions on a narrow-based index.

However, individual exchanges may require the reporting of large open positions at levels less than the levels required by the CFTC. In addition, brokerage firms must submit identifying information on the account holding the reportable position (on a form

referred to as either an "Identification of Special Accounts Form" or a "Form 102") to the CFTC and to the exchange on which the reportable position exists no later than the following business day when a reportable position is first established.

8.3. Transactions on Foreign Exchanges

U.S. customers may not trade security futures on foreign exchanges until authorized by U.S. regulatory authorities. U.S. regulatory authorities do not regulate the activities of foreign exchanges and may not, on their own, compel enforcement of the rules of a foreign exchange or the laws of a foreign country. While U.S. law governs transactions in security futures contracts that are effected in the U.S., regardless of the exchange on which the contracts are listed, the laws and rules governing transactions on foreign exchanges vary depending on the country in which the exchange is located.

8.4. Tax Consequences

For most taxpayers, security futures contracts are not treated like other futures contracts. Instead, the tax consequences of a security futures transaction depend on the status of the taxpayer and the type of position (*e.g.*, long or short, covered or uncovered).

Because of the importance of tax considerations to transactions in security futures, readers should consult their tax advisors as to the tax consequences of these transactions.

This glossary is intended to assist customers in understanding specialized terms used in the futures and securities industries. It is not inclusive and is not intended to state or suggest the legal significance or meaning of any word or term.

Arbitrage

Taking an economically opposite position in a security futures contract on another exchange, in an options contract, or in the underlying security.

Broad-based security index

A security index that does not fall within the statutory definition of a narrow-based security index (see Narrow-based security index). A future on a broad-based security index is not a security future. This risk disclosure statement applies solely to security futures and generally does not pertain to futures on a broad-based security index. Futures on a broad-based security index are under exclusive jurisdiction of the CFTC.

Cash settlement

A method of settling certain futures contracts by having the buyer (or long) pay the seller (or short) the cash value of the contract according to a procedure set by the exchange.

Clearing broker

A member of the clearing organization for the contract being traded. All trades, and the daily profits or losses from those trades, must go through a clearing broker.

Clearing organization

A regulated entity that is responsible for settling trades, collecting losses and distributing profits, and handling deliveries.

Contract

- (1) the unit of trading for a particular futures contract (*e.g.*, one contract may be 100 shares of the underlying security);
- (2) the type of future being traded (*e.g.*, futures on ABC stock).

Contract month

The last month in which delivery is made against the futures contract or the contract is cash-settled. Sometimes referred to as the delivery month.

Day trading strategy

An overall trading strategy characterized by the regular transmission by a customer of intra-day orders to effect both purchase and sale transactions in the same security or securities.

EDGAR

The SEC's Electronic Data Gathering, Analysis, and Retrieval system maintains electronic copies of corporate information filed with the agency. EDGAR submissions may be accessed through the SEC's website, www.sec.gov.

Futures contract

A futures contract is

- (1) an agreement to purchase or sell a commodity for delivery in the future;
- (2) at a price determined at initiation of the contract;
- (3) that obligates each party to the contract to fulfill it at the specified price;
- (4) that is used to assume or shift risk; and
- (5) that may be satisfied by delivery or offset.

Hedging

The purchase or sale of a security future to reduce or offset the risk of a position in the underlying security or group of securities (or a close economic equivalent).

Illiquid market

A market (or contract) with few buyers and/or sellers. Illiquid markets have little trading activity and those trades that do occur may be done at large price increments.

Liquidation

Entering into an offsetting transaction. Selling a contract that was previously purchased liquidates a futures position in exactly the same way that selling 100 shares of a particular stock liquidates an earlier purchase of the same stock. Similarly, a futures contract that was initially sold can be liquidated by an offsetting purchase.

Liquid market

A market (or contract) with numerous buyers and sellers trading at small price increments.

Long

- (1) the buying side of an open futures contract;
- (2) a person who has bought futures contracts that are still open.

Margin

The amount of money that must be deposited by both buyers and sellers to ensure performance of the person's obligations under a futures contract.

Margin on security futures contracts is a performance bond rather than a down payment for the underlying securities.

Mark-to-market

To debit or credit accounts daily to reflect that day's profits and losses.

Narrow-based security index

In general, and subject to certain exclusions, an index that has any one of the following four characteristics:

- (1) it has nine or fewer component securities;
- (2) any one of its component securities comprises more than 30% of its weighting;
- (3) the five highest weighted component securities together comprise more than 60% of its weighting; or
- (4) the lowest weighted component securities comprising, in the aggregate, 25% of the index's weighting have an aggregate dollar value of average daily trading volume of less than \$50 million (or in the case of an index with 15 or more component securities, \$30 million).

A security index that is not narrow-based is a "broad based security index." (See Broad-based security index).

Nominal value

The face value of the futures contract, obtained by multiplying the contract price by the number of shares or units per contract. If XYZ stock index futures are trading at \$50.25 and the contract is for 100 shares of XYZ stock, the nominal value of the futures contract would be \$5025.00.

Offsetting

Liquidating open positions by either selling fungible contracts in the same contract month as an open long position or buying fungible contracts in the same contract month as an open short position.

Open interest

The total number of open long (or short) contracts in a particular contract month.

Open position

A futures contract position that has neither been offset nor closed by cash settlement or physical delivery.

Performance bond

Another way to describe margin payments for futures contracts, which are good faith deposits to ensure performance of a person's obligations under a futures contract rather than down payments for the underlying securities.

Physical delivery

The tender and receipt of the actual security underlying the security futures contract in exchange for payment of the final settlement price.

Position

A person's net long or short open contracts.

Regulated exchange

A registered national securities exchange, a national securities association registered under Section 15A(a) of the Securities Exchange Act of 1934, a designated contract market, a registered derivatives transaction execution facility, or an alternative trading system registered as a broker or dealer.

Security futures contract

A legally binding agreement between two parties to purchase or sell in the future a specific quantity of shares of a security (such as common stock, an exchange-traded fund, or ADR) or a narrow-based security index, at a specified price.

Settlement price

- (1) the daily price that the clearing organization uses to mark open positions to market for determining profit and loss and margin calls,
 - (2) the price at which open cash settlement contracts are settled on the last trading day and open physical delivery contracts are invoiced for delivery.
-

Short

- (1) the selling side of an open futures contract,
 - (2) a person who has sold futures contracts that are still open.
-

Speculating

Buying and selling futures contracts with the hope of profiting from anticipated price movements.

Spread

- (1) holding a long position in one futures contract and a short position in a related futures contract or contract month in order to profit from an anticipated change in the price relationship between the two,
 - (2) the price difference between two contracts or contract months.
-

Stop limit order

An order that becomes a limit order when the market trades at a specified price. The order can only be filled at the stop limit price or better.

Stop loss order

An order that becomes a market order when the market trades at a specified price. The order will be filled at whatever price the market is trading at. Also called a stop order.

Tick

The smallest price change allowed in a particular contract.

Trader

A professional speculator who trades for his or her own account.

Underlying security

The instrument on which the security futures contract is based. This instrument can be an individual equity security (including common stock and certain exchange-traded funds and American Depositary Receipts) or a narrow-based index.

Volume

The number of contracts bought or sold during a specified period of time. This figure includes liquidating transactions.

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Blakes Extra-Provincial Services Inc.
Commerce Court West
Suite 4000, 199 Bay Street
Toronto, ON M5L 1A9
Canada

The name and address of Citi's agent for service of process in Quebec are as follows:

c/o Services Blakes Québec Inc.
1 Place Ville Marie, Suite 3000
Montréal, QC H3B 4N8
Canada

The name and address of Citi's agent for service of process in Manitoba are as follows:

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Position Limit and Large Open Position Reporting Requirements for Options and Futures Traded on the Hong Kong Exchanges

The Hong Kong regulatory regime imposes position limit and reportable position requirements for stock options and futures contracts traded on the Stock Exchange of Hong Kong and on the Hong Kong Futures Exchange.

These requirements are set out in the Hong Kong Securities and Futures (Contracts Limits and Reportable Positions) Rules (as amended) (the “**Hong Kong Rules**”) made by the Securities and Futures Commission (“**SFC**”) under the Securities and Futures Ordinance. The Hong Kong Rules impose monitoring and reporting obligations with regard to large open positions. It is the responsibility of the person holding or controlling a position to comply with the prescribed limits and to fulfil its reporting obligations under the Hong Kong Rules. For the purposes of the Hong Kong Rules, a client is the person who is ultimately responsible for originating instructions you receive for transactions, i.e. the transaction originator.

Further guidance on the Hong Kong Rules and what they require is set out in the SFC’s Guidance Note on Position Limits and Large Open Position Reporting Requirements (“**Guidance Note**”). Copies of the Hong Kong Rules and Guidance Note can be downloaded from the SFC’s website (www.sfc.hk).

Purpose of the Hong Kong Rules

The purpose of the Hong Kong Rules is to avoid potentially destabilizing market conditions arising from an over-concentration of futures/options positions accumulated by a single person or group of persons acting in concert, and to increase market transparency.

Some of the major requirements of the Hong Kong Rules and Guidance Note are summarised below. However, you should review the Hong Kong Rules and Guidance Note in their entirety, and consult with your legal counsel in order to ensure that you have a full understanding of your obligations in connection with trading in Hong Kong.

Please note that the Hong Kong Rules make you responsible for ensuring that you comply with the Hong Kong Rules. Section 8 of the Hong Kong Rules makes it a criminal offence not to comply with the Hong Kong Rules (subject to a maximum fine of HK\$100,000 and imprisonment for up to 2 years).

It should be noted that the SFC has expressly stated that it is not sympathetic to claims by overseas persons that they are not aware of the Hong Kong restrictions, and that a failure to trade within the limits or make reports reflects badly on a firm’s internal control measures (which might itself lead to disciplinary actions).

Position Limits

The Hong Kong Rules say that you may not hold or control futures contracts or stock options contracts in excess of the prescribed limit, unless you have obtained the prior authorisation of the Hong Kong regulators. For example, for stock index futures and/or options contracts that have either the Hang Seng Index, the Hang Seng Index (Gross Total Return Index) or the Hang Seng Index (Net Total Return Index) as an underlying index, the prescribed limit for such contracts is 10,000 net long or short position delta limit for all contract periods (including contract months or contract weeks) combined. Please note that stock index futures options contracts that have such aforementioned stock index futures contract as an underlying contract might also be captured.

The prescribed limit for each contract traded on the Hong Kong exchanges (any one Hong Kong exchange being an “**Exchange**”) is set out in Schedules 1 and 2 to the Hong Kong Rules. For futures contracts such as stock futures, stock index futures, stock index options contracts and currency futures contracts, the prescribed limits are calculated on a net basis for all contract months combined.

Reportable Positions

If you hold or control an open position in futures contracts or stock options contracts in excess of the reporting level, the Hong Kong Rules require you to report that position in writing to the relevant Exchange (i) within one business day⁵ (or in the case of holiday contracts, within one holiday contract trading day⁶) of first holding or controlling that position, and (ii) on each succeeding day on which you continue to hold or control that position. For the avoidance of doubt, once you hold or control a reportable position, you will be required to file the notice of the reportable position to the relevant Exchange on each reporting day even though your position remains unchanged.

The report must state:

(a) the number of futures contracts or stock options contracts held or controlled by the person that comprise the reportable position in each relevant contract period (including contract month or contract week) or option series; and

(b) if the position is held or controlled for any other person(s) (e.g. a client or clients), the identity of each other person, and the number of futures contracts or stock options contracts held or controlled for his own account (if applicable) and for each other person that comprise the reportable position in each relevant contract period (including contract month or contract week) or option series.

Where the reportable position is held or controlled for one or more funds or sub-funds of one or more umbrella funds, the name of each fund and sub-fund (if applicable) and the number of futures contracts or stock options contracts held or controlled for his own account (if applicable) and for each fund and sub-fund (if applicable) that comprise the reportable position in each relevant contract period (including but not limited to contract month or contract week) or option series.

The reporting level for each contract traded on the relevant Exchange is set out in Schedules 1 and 2 to the Hong Kong Rules. Reporting levels for futures contracts are calculated based on the number of contracts held or controlled for a contract period (e.g. a contract month or contract week) or series, while the reportable positions reporting levels for stock options contracts are calculated based on the number of contracts held or controlled in an expiry month.

Scope of the Hong Kong Rules

You should note:

- The prescribed limits and reporting levels apply to all positions held or controlled by any person, including positions in any account(s) that such person controls, whether directly or indirectly. The SFC takes the view that a person is regarded as having control of positions if, for example, the person is allowed to exercise discretion to trade or dispose of the positions independently without the day-to-day direction of the owner of the positions. (Section 4 of the Hong Kong Rules and Para. 2.6 of the Guidance Note).

⁵ For reference, "business day" means a day other than a Hong Kong public holiday, a Saturday, and a gale warning day or a black rainstorm warning day as defined in section 71(2) of the Interpretation and General Clauses Ordinance (Cap. 1) in the Securities and Futures Ordinance ("SFO").

However, please note that following HKEX's implementation of severe weather trading (SWT) arrangements (details of such arrangements are available on HKEX's website), you should be aware that "Business as Usual / BAU" operational arrangements, including but not limited to LOP and position limit reporting requirements, that apply on regular trading days will apply on SWT days. Notwithstanding the definition of "business day", this means your BAU reporting requirements applicable on regular trading days remain applicable on SWT days.

⁶ "Holiday contract trading day", in relation to a holiday contract, means a day determined by the Hong Kong Futures Exchange Limited to be a day on which the holiday contract may be traded through the facilities of the Hong Kong Futures Exchange Limited in accordance with the rules of the Hong Kong Futures Exchange Limited.

- A person who holds or controls futures contracts or stock options contracts for another person should disaggregate his own position and the positions he holds or controls for each of the other person in the application of prescribed limits and reporting levels, provided that he does not have discretion over the positions in question. If a person has discretion over positions held with him for other persons, all these positions should be aggregated with his own position in the application of the prescribed limits and reporting requirements. (Section 7 of the Hong Kong Rules and Paras. 5.1 and 5.3 of the Guidance Note).
- In situations where a person holds or controls positions for another person who is acting as agent, such person should obtain the ultimate client's identity information from the agent in order to decide whether the agent complies with the prescribed limits. If such person is unable to do so (e.g. the agent does not want to disclose the information for commercial reasons), such person should aggregate all positions held by this agent account in applying the prescribed limits. (Para. 5.6 of the Guidance Note).
- A person⁷ who holds or controls futures contracts or stock options contracts for one or more funds or sub-funds should apply the prescribed limits and reporting levels separately to his own position and to the positions he holds or controls for each fund or each sub-fund. (Sections 7A(1) and 7A(2) of the Hong Kong Rules and Para. 6.1 of the Guidance Note).
- A person⁸ who holds or controls futures contracts or stock options contracts for one or more funds or sub-funds **and** has discretion in relation to those contracts should apply the prescribed limits and reporting levels at two layers – (i) aggregately to his own position and the positions he holds or controls for each fund or each sub-fund; and (ii) separately to his own position and to the positions he holds or controls for each fund or each sub-fund. (Sections 7A(3) and 7A(4) of the Hong Kong Rules and Para. 6.2 of the Guidance Note).
- If a person holds or controls positions in accounts at more than one intermediary, the Hong Kong Rules require him to aggregate the positions for the purposes of applying the prescribed limits and reporting requirements. (Para. 7.1 of the Guidance Note).
- The person holding or controlling a reportable position in accounts at more than one intermediary has the sole responsibility to notify the relevant Exchange of the reportable position. The person may request its intermediary to submit the notice of the reportable position. If a firm agrees to submit the notice on his behalf, the person should provide to the firm its total positions held at other intermediaries so that the firm can submit the notice of the reportable position to the relevant exchange on the person's behalf. Alternatively, the person can ask all of his intermediaries to report the positions in each of the accounts separately to the relevant Exchange, even if the positions in the individual accounts may not exceed the reportable level. (Paras. 4.6 and 7.2 of the Guidance Note).
- The Hong Kong Rules apply separately to the positions held by each of the underlying clients of an omnibus account, except where the omnibus account operator has discretion over the positions in which case the account operator must also aggregate these positions with his own positions. Positions held by different underlying clients should not be netted off for purposes of calculating and reporting reportable positions or determining compliance with the prescribed limits. (Para. 7.11 of the Guidance Note).

⁷ In this context, the “person” refers to the legal holder of the positions of the funds or sub-funds. If the fund is constituted in a structure with legal personality, e.g. a corporate fund, then the legal holder is the corporate fund itself. If the fund is constituted in a structure with no legal personality, e.g. a unit trust, then the legal holder is the legal person holding the legal title to the positions of the funds or sub-funds, i.e. the trustee.

⁸ In this context, the “person” in general refers to the fund manager of the funds or sub-funds.

CME DISCLOSURE TO DISCLOSED SINGAPORE MARKET PARTICIPANTS

Pursuant to the terms of the Monetary Authority of Singapore's order authorizing Chicago Mercantile Exchange Inc. ("CME") as a recognized clearing house in Singapore Citi makes the following disclosures to Singapore-based customers.

- CME Clearing's operations are subject to the laws of the United States and regulations promulgated by the U.S. Commodity Futures Trading Commission ("CFTC");
- The rights and remedies available to Singapore-based participants as stated in CME's rules, policies and procedures may be governed by U.S. law. Such rights and remedies under U.S. law may differ from those available to Singapore-based participants when accessing Singapore-based clearing houses which are primarily regulated by Singapore laws;
- Funds and collateral posted to a clearing intermediary registered as a U.S. futures commission merchant ("FCM") are subject to customer protection provisions of U.S. law;
- U.S. law and regulation mandate segregation of customer positions and collateral from the positions and collateral of FCM clearing members and prescribe the customer segregation model for futures and swaps, respectively, at both the FCM- and clearing house-levels. The structure and insolvency law impacts of the U.S. customer protection regime may differ from those of Singapore;
- Trades cleared at CME will be subject to U.S. business hours and settlement timelines as set forth in Exchange or Clearing House rules;
- Trades cleared at CME may be subject to U.S. tax law and applicable provisions of the U.S. Internal Revenue Code, which may have a different impact than Singapore tax law; and
- Costs associated with clearing should be discussed with the clearing member offering clearing services.

Nothing included in this disclosure should be regarded as legal advice. Tax advisors, legal counsel and exchange or clearing house rules, as applicable, should be consulted in all cases where a Singapore-based participant has questions concerning the conduct of their business or the impact of U.S. law or regulation thereon.

A GUIDE TO THE STRUCTURE, MARKET TERMINOLOGY AND ORDER EXECUTION OF THE LONDON METAL EXCHANGE

INTRODUCTION AND PURPOSE

1. This Guide is designed to provide market participants on the London Metal Exchange (the “LME”), and particularly Clients of Members, with an overview of the structure of the LME, market terminology, and order execution. It is also intended as guidance to help participants interpret the Rules and Regulations of the LME (the “LME Rulebook”) and any Notice issued pursuant to Regulation 2 of Part 1 of the LME Rulebook (together the “LME Rules”) (and also in certain circumstances the Rules and Procedures of LME Clear Limited (the “LME Clear Rules”)) and to outline certain behaviours the LME expects of its market participants. It is not a comprehensive trading guide, nor a complete guide to market terminology. Market participants should always ensure that their requirements are explained in detail to the Member responsible for order execution.
2. This Guide is not a substitute for reading the LME Rules, the LME Clear Rules or the terms of business agreed between Clients and Members. In the event of any conflict between this Guide and either the LME Rules or the LME Clear Rules, the LME Rules and the LME Clear Rules shall prevail.
3. Capitalised terms not otherwise defined herein shall have the meaning ascribed to them in the LME Rulebook, as amended from time to time.

THE LME

Execution Venues

4. Trades on the LME may be agreed on any of the LME’s three trading venues (defined as Execution Venues in the LME Rulebook): by open outcry in the Ring (during ring and kerb sessions), between Members in the inter-office market, and over the LME’s electronic trading system, LMEselect. LME trading times are available on the LME website at <https://www.lme.com/en-GB/Trading/Trading-venues/Trading-times#tabIndex=0>.
5. Depending on the time of day, it is possible for Members to deal in the inter-office market, by LMEselect, or in the Ring. Clients should specify which mechanism their broker should use to effect an order, where they have a preference.

The Ring

6. Only Category 1 Members may trade in the Ring.
7. Clients can follow the Ring market activity by monitoring quoted and traded prices disseminated via the LME market data dissemination system, or by listening to the simultaneous floor commentary provided by Member(s). The LME market data dissemination system publishes quotes and trades during Ring and kerb sessions to market data vendor information services, and via its own market data platforms.

8. Members can continue to “make a market” when requested by a Client during the Ring and kerb sessions, although this is entirely at the Member’s discretion. Alternatively, the Client can decide whether to place an order.
9. Certain Contracts⁹ are not available for trading in the Ring.

Inter-office

10. Inter-office trading is conducted between Members, or between Members and their Clients, by telephone or by electronic means. On contacting a Member for a quote, Clients will usually be provided with the Member’s current bid and offer. The Client may trade on this quote, call another Member in an attempt to improve the quote, leave a resting order with a Member, or wait and monitor prices on the LME market data dissemination system.

11. To ensure adequate transparency in this market (as required by MiFIR), the LME operates a Systematic Fixed Price Auction (“SFPA”). For those in scope orders, the auction process will start at the point the LMEsmart matches the PTT Orders and last for a period of 30 seconds. During this period, any Member (other than a RIB) is able to enter their own bids/offers into that auction in LMEsmart, at the same price as the originating orders. Upon the completion of the SFPA, the bids and offers remaining in LMEsmart will be matched on a time priority basis.

LMEselect

12. Category 1, 2, 3 and 4 Members may be LMEselect Participants and enter into Contracts on LMEselect. In addition, Category 1, 2 and 4 Members may make available to a Client the order routing facility of the LMEselect API.

13. LMEselect allows LMEselect Participants to trade Contracts, including (but not limited to) Futures Contracts, Metal Options, Traded Average Price Options, Monthly Average Price Futures, Ferrous Cash Settled Futures, Non-Ferrous Cash Settled Futures and LMEmini Contracts. As explained above, some brokers offer their Clients an order-routing facility via an API where they can place orders, and execute trades.

14. Subject to relevant licensing requirements, market data vendors may display, amongst other things, bid and offer prices available on LMEselect, the total volumes available at these prices (subject to iceberg orders – see paragraph 62 below), and the price and volume of each trade.

15. Where a Member permits a Client to use the order-routing facility of the LMEselect API, and, as a result, (a) one or more Cleared Contracts comes into effect, and (b) one or more Client Contracts come into effect, then the Client Contract must be on the same commercial terms as the relevant Cleared Contract (save that it may be marked up or down to reflect a commission payable by the Client). The Member must ensure that the Client Contract and the relevant Cleared Contracts are inputted into the Matching System, and that Client orders are not offset against each other (for further information, see the section entitled “Transacting on behalf of Clients” below).

16. The LME understands that Members may offer over-the-counter (“OTC”) contracts to their clients on the basis of electronic orders sent to the Member (for example through the Member’s own dealing system). The Member may directly hedge such OTC contracts on LMEselect (by entering into a Cleared Contract, but without giving rise to a back-to-back Client Contract), provided that the OTC contracts will be considered Relevant OTC Contracts for the

⁹ Metal Options, Traded Average Price Options, Monthly Average Futures, LMEmini Contracts, Steel Scrap, Steel Rebar, Steel HRC FOB China, Steel HRC N. America, Cash Settled Cobalt, Molybdenum and Alumina.

purpose of the LME's Financial OTC Booking Fee Policy (for further information on this Policy, see the section entitled "OTC Contracts and Use of LME IP" below).

Contract Formation and Clearing

17. Trades agreed on the LME shall give rise either to (a) Cleared Contracts, or (b) Cleared Contracts and back-to-back Client Contracts. Each Trading Member is responsible for the input into the LME's Matching System, LMEsmart, of all Agreed Trades by it in relation to Contracts.
18. Cleared Contracts are cleared by the LME's appointed clearing house, LME Clear. LME Clear clears Contracts on an open offer basis. LME Clear will make an offer to each party to the trade: it will offer to act as the buyer to the party who wishes to be the seller, and it will offer to act as the seller to the party who wishes to be the buyer. On acceptance of LME Clear's offer by each party, two Cleared Contracts will be formed: one between LME Clear and the seller; another between LME Clear and the buyer. The time of execution will depend on the Execution Venue:
 - transactions (i.e. Agreed Trades) agreed in the Ring – the Cleared Contracts will arise at the time the trade is agreed in the Ring;
 - Agreed Trades arising in LMEselect – the execution time of the Cleared Contracts will be the point at which LMEselect confirms that the Agreed Trade has been matched and that all pre-execution checks have been satisfied; and
 - Agreed Trades in the inter-office telephone market – these will initially form a Contingent Agreement to Trade, the particulars of which the parties must then submit to the Matching System. The time of execution of the Cleared Contracts will be at the point that the Matching System confirms that the trades have been matched and that all pre-execution checks have been satisfied. This remains the case for trades that arise from a SFPA (save in the case of trades between RIBs and their clients, which shall initially give rise to an obligation on the RIB to submit the particulars of the initiating auction pair to the Matching System, rather than giving rise to a Contingent Agreement to Trade – see further Part 3 of the LME Rules.)
19. Where an Agreed Trade is made with a Client, upon execution of the Agreed Trade, Cleared Contracts shall be formed between the responsible Clearing Member and LME Clear and a back-to-back Client Contract shall automatically and immediately come into effect between the Client and the Member on the same terms as the Cleared Contract¹⁰. Where the Clearing Member facilitates Indirect Clearing arrangements, i) a further Client Contract will arise between the Client and the Indirect Client (where the Client is a Category 4 Member) or ii) a back-to-back exchange traded derivatives contract will be formed between the Client and the Indirect Client (where the Client is not a Category 4 Member).
20. In order to maintain the smooth and orderly operation of the market, the LME and LME Clear will carry out a number of pre-trade and post-trade checks. Further, Members must have adequate processes in place to ensure both they and their Clients have sufficient collateral in place before entering into trades.

LME Base

21. The LME offers contracts in base and ferrous metals (described in the LME Rules as "LME Base Contracts"). The LME has seven different categories of membership for the LME Base Service.

¹⁰ There are specific arrangements where the Client is a Category 4 Member. These are covered by LME Notice 17/184 dated 25 May 2017.

22. Where an Agreed Trade relates to an LME Base Contract, it shall be booked in LMEsmart in a manner to ensure the following allocation:
- a. an Agreed Trade between two Clearing Members shall be allocated to each Clearing Member's house account at LME Clear;
 - b. an Agreed Trade between a Client and the Clearing Member responsible for clearing the Agreed Trade shall result in the allocation of Cleared Contracts to both the Clearing Member's house account and the Clearing Member's appropriate client account at LME Clear; and
 - c. an Agreed Trade between a Client and any other person shall result in the allocation of Cleared Contracts to both the house account of the Clearing Member responsible for clearing the Agreed Trade and the client account of the Clearing Member responsible for clearing the Agreed Trade.
23. This is sometimes referred to as a "T4" model. In cases (b) and (c) above, the trade will initially be entered into the house account, and the Clearing Member responsible for clearing the Client's trades must cross the trade out of the house account into the client account.
24. Most LME Base Contracts are physically deliverable (with the exception of certain Contracts, including Ferrous and Non-Ferrous Cash Settled Futures, and so certain categories of Members must be LMEsword Account Holders for the LME Base Service.

Principal Nature

25. All Contracts are between parties acting as principals. This prevents any party entering into a Contract as agent for someone else but does not prevent an agent arranging a Contract between two parties if the resulting Contract is between disclosed parties, each acting as a principal. It is an essential requirement of a Client Contract that one party must be a Category 1, 2 or 4 Member. A list of Members is on the LME website: www.lme.com. A principal relationship does not mean that Members do not take on quasi-fiduciary responsibilities when they execute trades for Clients. In particular, if a Member undertakes to deliver a particular service, for example, to deal a specific number of lots in the Ring, then it should take care to ensure that it complies with all the terms of such an order.
26. In respect of Agreed Trades between Members, an LME broker buying futures or options Contracts from another Member cannot do so as agent for its Client. Where a Member buys metal from another Member with a view to selling that metal to its Client, this is achieved by entering into a back-to-back Client Contract with the Client. Members and Clients can agree the conditions that apply to their Client Contracts. For example, a Client may make it a condition to its entry of a Client Contract that the Member must enter into a back-to-back Agreed Trade with another Member for the metal being bought or sold. This does not make the Client a party to the Agreed Trade with the other Member (or the resulting Cleared Contract with LME Clear) but does create additional duties and obligations owed by the Member under the Client Contract.
27. Open position statements issued to Clients or Indirect Clients¹¹ of a Category 1 or 2 Member must state clearly "THIS IS AN LME REGISTERED CLIENT CONTRACT". Open position statements issued by Clients who are not Category 1, 2 or 4 Members to their own clients¹² should not state that the contracts are LME Registered Client Contracts, but may state that they are LME exchange-traded derivatives (or similar) to distinguish them from OTC trades provided

¹¹ An "Indirect Client" of a Clearing Member pursuant to the LME Rules may include a Client of a Category 4 Member.

¹² Such Clients being indirect clients of the Category 1, 2 or 4 Member but not "Indirect Clients" pursuant to the LME Rulebook.

that they have entered into Indirect Clearing Arrangements in accordance with the LME Rules. Contract criteria relating to Contracts, including metal specifications, acceptable currencies, prompt dates, option strike prices for metals etc. are detailed in the LME Rules.

OTC Contracts and Use of LME IP

28. Instead of entering into Contracts governed by the LME Rules, Members and other third parties may enter into OTC contracts either in respect of LME Warrants, or utilising LME reference prices. Where this is the case, the contract should clearly state that “THIS IS NOT AN LME REGISTERED CLIENT CONTRACT”. OTC contracts are not governed by the LME Rules and are not registered with, and/or cleared by, LME Clear. OTC contracts result in a bilateral credit exposure between the two parties. In the case of a party’s default, the general law of insolvency would apply and neither party would benefit from any protection under the LME’s and LME Clear’s purpose-designed default rules. Also, contracts that are opened and closed at the same broker do not benefit from the transparent global pool of competitive offers which the LME facilitates. Members providing their clients with OTC contracts should explain to their clients the difference between OTC contracts and the LME’s Contracts, and the different levels of protection afforded by each.
29. The LME applies a Financial OTC Booking Fee Policy on Members and other third party financial intermediaries who reference LME prices or other proprietary information in their OTC contracts. Such entities must register with the LME, report relevant OTC trades, and pay the relevant fees¹³. Members and other third parties who reference LME prices or other LME proprietary information in OTC contracts or otherwise use LME proprietary information must ensure that they have entered into the appropriate licences with the LME.
30. The LME Rules also contain restrictions on: (a) the use of LME Data, Product Specifications or other Intellectual Property Rights for the purpose of trading, clearing or settling Non-LME Platform Contracts; (b) using LME Warrants to settle Non-LME Platform Contracts or the ExCleared functionality of LMEsword to facilitate the settlement of Non-LME Platform Contracts; (c) using the inter-office market to route Non-LME Platform Contracts through the systems of the LME; and (d) bringing onto the LME Non-LME Platform Contracts.
31. Any Member operating electronic dealer-to-client platforms for OTC contracts will also need to consider the relevant provisions of MiFID II relating to systematic internalisers, pre- and post- trade transparency, etc.

Transacting on Behalf of Clients

32. When transacting on the LME’s Execution Venues, Members may transact both for their own account (i.e. on a proprietary basis, including where they are making prices on the LME) and on behalf of other market participants (i.e. as broker).

Dual Capacity

33. The LME’s market model operates such that Members are able to operate on both a proprietary basis and on behalf of its Clients at the same time, and by the same traders. This means that when trading with a Client, the Member can fill the Client directly from their own proprietary trading book, rather than going to the central market, and thus act both on behalf of the Client and their proprietary interest at the same time. In this context, the Member is acting in so-called “dual capacity”. As such, the nature of the contracts traded by the Member with the Client, and the Member with the market, may be different. This differs from so-called “agency execution”, whereby the Member solely acts on behalf of the Client in the central market. It should be noted that some execution on the LME market (generally in

¹³ For further information, see <https://www.lme.com/Trading/New-initiatives/Financial-OTC-BookingFee>.

respect of more liquid prompt dates) may be undertaken under an agency execution model. The complexity of the LME prompt date structure, and the lack of liquidity in the central market for parts of the structure mean that this dual capacity model is advantageous, as it allows Members to directly provide their Clients with liquidity. The dual capacity model does however give rise to specific risks of ensuring a duty of care to the Client. The LME expects Members who are permitted to transact both on their own account and on behalf of other market participants to understand the specific compliance risks of each respective transaction model and have adequate systems in place to mitigate against these risks.

34. Members may act in a particular manner depending on a number of circumstances, including the size of the order, the liquidity of the market at the time the order was placed, and (in relation to Client business), not least, the Client's instructions. Client orders may be filled directly from a Member's "book", or following the purchase/sale of Contracts in the LME market, or a combination of the two.
35. The validity and desirability of this market structure was confirmed during the LME's 2017 Discussion Paper, and the LME is committed to its maintenance for as long as it remains consistent with both the needs of its users and the LME's regulatory obligations.

Considerations Around Dual Capacity Execution

36. Clearly, the dual capacity model places a greater onus on Members to demonstrate that they act in the best interests of their Client. While it is for Members to satisfy themselves and their Clients of the sufficiency of their arrangements, the LME would make certain observations as to the behaviours which it would expect to observe in a dual capacity market. This represents a non-exhaustive list.
37. At the heart of such a model must be a clear understanding between Member and Client as to the basis on which execution is being undertaken - in particular, whether a particular Client order is to be executed under a dual capacity or an agency model. It is expected that Members are clear with their Clients in respect of the execution model.
38. Furthermore, Clients should be made aware of the fact that - as a natural corollary of the dual capacity model - the Member may eventually be able to hedge the risk at a more attractive price than that offered to the Client. The LME understands that Clients are, in general, satisfied with such a model (given that the Member is, in effect, being compensated for accepting the risk associated with the trade).
39. The dual capacity model also places responsibilities on Clients – for example, Clients with specific order requirements must make these known to the Member at the time the order is placed.
40. The LME further recognises that certain Client execution scenarios may be more complex. For example, a Member may seek to trade a Client order in the market, while guaranteeing the Client a particular price for their order. In such a case, it would again clearly be necessary for the Client to be fully aware of the Member's execution approach - and, in particular, the impact on the Client's economic terms, were the Member to subsequently obtain a price better than that guaranteed to the Client.
41. Clearly, the broader rules of market conduct (arising from, without limitation, the European Market Abuse Regulation, as onshored into UK law pursuant to the European Union (Withdrawal) Act 2018 following Brexit, and as amended from time to time) apply to firms trading on the LME market, whether such firms are operating in an agency execution or dual capacity model. Restrictions on activities such as front-running apply when operating in a dual capacity market and also when acting in agency execution - and, in particular, the LME would differentiate between (i) Member trades made purely for the purposes of offsetting risk from a Client position, and (ii) Member

proprietary trading. The latter activity, in particular, must be appropriately segregated from Client execution (whether such Client execution is under a dual capacity or agency execution model).

42. Clients should be clear about the conditions that apply to the terms on which their Client Contracts are traded and about the obligations and duties that the Member owes as a result of those conditions. Members should be clear about the duties and obligations they owe as a result of the conditions attaching to the terms on which their Client Contracts are traded.

Rules Preventing Netting Up

43. The LME is concerned to ensure that the market can view a transparent post-trade record of market activity and that financial advantage is not extracted by the systematic “netting up” of trading designed to reduce the fee burden. Consequently, Members must ensure that, in respect of trades arranged in the inter-office market or on LMEselect, the details of each Agreed Trade entered into the Matching System constitute the details of a single transaction, without the application of any prior netting, compression or aggregation of multiple transactions. However, prompt date adjustments are permissible. Furthermore, Members must ensure that, in respect of both Client and Members’ house orders normally intended to be entered into LMEselect, Members must not cross-up any such trades in their own systems before they are executed as Agreed Trades in LMEselect.

Conduct of Business Rules

44. Members are reminded that they may be subject to certain conduct of business rules, and other regulatory obligations, pursuant to MiFID II and the rules and regulations of the FCA and other relevant regulators. The LME also reminds Members that from time to time regulators, including but not limited to the FCA, issue notices, updates and guidance to the market, which the LME expects its Members to review, consider and, where appropriate, implement into their policies, procedures and systems.
45. Members may also be subject to additional regulatory obligations in the jurisdictions in which they are incorporated or otherwise operate. The extent to and way in which these obligations may apply will depend on a range of factors including, amongst others, the nature of the relationship between the relevant Member and its Client, the Execution Venue in question, the terms of business between the Member and its Client, the Member’s regulatory status, and any internal compliance policies and procedures to which the Member is subject.
46. Compliance with all applicable rules and regulations is (where applicable) the sole responsibility of the Member and Members must seek their own advice in this regard.
47. Whilst by no means an exhaustive list, and of particular interest in the context of Client business, the LME wishes to draw Members’ attention to the following:

Conflicts of interest – Members must take all appropriate steps to identify and to prevent or manage conflicts of interest. This requires Members to actively identify circumstances in which potential and actual conflicts of interest may arise, and to establish arrangements to prevent or manage them effectively. Members should have regard to relevant regulatory requirements and guidance on conflicts of interest, including in relation to Payment for Order Flow or “PFOF”¹⁴. PFOF is described as occurring when an investment firm (typically a broker who both sources liquidity and executes orders for its client) receives a fee or commission from both the client that originates the order and the counterparty the trade is then executed with (typically a market maker or other liquidity provider). The LME is aware

¹⁴ See particular 2019 FCA guidance at <https://www.fca.org.uk/publication/multi-firm-reviews/paymentfor-order-flow-pfof.pdf>.

that some Members and authorised representatives of Members do act as agents for their clients (for example, when a Member is acting purely in a broking capacity) and Members are therefore reminded of the requirement to comply at all times with their regulatory obligations. In particular, where a Member is sourcing exclusive liquidity (and executing orders) for a specific client, charging the counterparty to the client's transaction creates a conflict the firm cannot manage effectively and so should prevent (i.e. by ceasing to charge PFOF), regardless of the client's categorisation. Even where a Member is sourcing non-exclusive liquidity for eligible counterparties (as defined in the FCA COBS), a conflict of interest is likely to arise and must, at a minimum, be subject to appropriate controls. It is therefore important that firms correctly identify the nature of their activities, on a transaction-by-transaction basis, to ensure the appropriate prevention or management of conflicts of interest from charging both sides of transactions.

Fees and inducements – Members must disclose certain information to Clients in relation to the services to be provided to them. This information includes, amongst other things, information regarding all the costs and related charges that apply to the relevant service(s). In an LME context, this is likely to include any commission or mark-up on LME fees that may be applied by a Member to the fees charged to their Client. Members are expected to periodically review their pricing structures to ensure that when acting in an agency role for their Client, they are not inappropriately charging commission (or however otherwise characterised) to the counterparty that their Client's trade was executed with. Members should also not pay or accept any inducement (i.e. payment and receipt of fees, commissions and non-monetary benefits) in relation to an investment service unless it falls within a "safe harbour" (e.g. where a payment received by the Member is paid to the Client).

Best execution – Members within the scope of the best execution rules are required to take all sufficient steps to obtain the best possible result for their Clients when executing Client orders (or passing them on to other firms for execution). To the extent that firms follow specific instructions from their clients relating to the order, the firm should satisfy its best execution obligations. Members should be aware that in an LME context, the best execution obligation may apply differently depending on whether a Member is acting in a proprietary capacity giving a Client a firm quote, or acting on an agency basis working an order for a Client. Members should ensure that their Clients are aware of the capacity in which the Member is acting, and thus understands the best execution rules that apply.

Client order handling – Members that execute orders on behalf of Clients must implement procedures and arrangements to provide for the prompt, fair and expeditious execution of Client orders relative to other orders or the trading interests of the Member. In accordance with MiFID II and the FCA conduct of business requirements, Members must also satisfy certain conditions when carrying out Client orders, and when carrying out a Client order or a transaction for their own account in aggregation with another Client order.

Risk Management Systems and Controls to Detect, Deter and Deal with Potentially Abusive Trading Activity

48. Members are reminded, pursuant to their obligations under Regulation 12.6(b) of Part 2 of the LME Rulebook, of the importance of having in place appropriate and adequate systems and controls to detect, deter and deal with trading activity that is indicative of market abuse¹⁵. This section is intended to give guidance as to how the LME would assess the adequacy of a Member's systems and controls during a Member audit or investigation. Members should note disciplinary proceedings brought by the LME against Members for systems and controls failings, resulting in financial penalties for the Members concerned.
49. When undertaking an assessment into the adequacy of their systems and controls, the LME considers it prudent for Members to produce a market abuse risk assessment in order to assess the potential market abuse risks to which

¹⁵ For the avoidance of doubt, the obligations of a Member under Regulation 12.6(b) of Part 2 of the LME Rulebook apply not only to the obligation to have in place appropriate and adequate risk management systems in order to detect, deter and deal with trading activity that is indicative of market abuse, but also to the obligation to have in place appropriate and adequate risk management systems that enable a Member to comply with all of its obligations under the LME Rulebook.

they are exposed. Failure to have produced a market abuse risk assessment may constitute evidence of poor systems and controls.

50. Members should also have regard to the following non-exhaustive list of factors when considering their compliance with their obligations pursuant to Regulation 12.6(b) of Part 2 of the LME Rulebook:
- a. the extent to which the systems and controls (including but not limited to electronic surveillance system(s)) are appropriately calibrated considering and taking into account the nature, size and complexity of the business that a Member conducts on the LME market (whether such business is conducted by a Member, a Member's Clients, or the underlying clients of a Member's Clients). Members who choose to offer Direct Electronic Access ("DEA") to their Clients are reminded that they retain responsibility for the trading of those Clients¹⁶. Such Members should consider putting in place policies and procedures that consider the suitability of DEA Clients in order to ensure that DEA Clients comply with the LME Rulebook at all times;
 - b. the extent to which the Member has suitable arrangements to identify suspicious trading activity and undertakes appropriate action when such activity is identified (such as, but not limited to, investigating such activity in a timely manner);
 - c. the extent to which the Member has control over its surveillance activity and has appropriate oversight of any outsourced arrangements;
 - d. the frequency with which assessments are performed into the adequacy of a Member's risk management systems and controls;
 - e. the records that are maintained with regard to surveillance arrangements. This would include, without limitation, records of how systems, such as surveillance systems, are calibrated, and how decisions are made as to calibration amendments, as well as e.g. records of risk assessments undertaken;
 - f. the policies, procedures and processes that are in place to detect, deter and deal with potential instances of market abuse, including the frequency with which these policies, procedures and processes are reviewed and updated where necessary and how they are communicated to relevant staff;
 - g. the extent to which staff are appropriately qualified to detect, deter and deal with potential instances of market abuse;
 - h. the extent to which arrangements for staff involved in surveillance activities (e.g. responsibilities, reporting lines etc.) are appropriate and ensure freedom from conflicts of interest;
 - i. the extent to which staff receive appropriate and regular training regarding, amongst other things, activity constituting market abuse, and an understanding of the obligations of a Member under the EU Market Abuse Regulation;

¹⁶ Regulation 12.9, Part 3 of the LME Rulebook states that: "LME Select Participants may offer orderrouting facilities (also known as direct electronic access under MiFID II) to a Client, but in such cases the LME Select Participant retains responsibility for, and remains liable for, all trading activity conducted by such Client, including all orders submitted and trades executed using the order-routing facility."

- j. the extent to which senior management have appropriate oversight of the surveillance function, including but not limited to, undertaking quality assurance checks of the work performed by surveillance staff in relation to the detection of potential instances of market abuse, the availability of management information with regard to potential instances of market abuse, and documented escalation procedures; and
- k. the adequacy of pre-trade controls that are in place to assist in the prevention of disorderly trading on the LME.

ORDER STYLES

51. The principal order styles for Client orders are summarised below. These order styles do not represent all possible methods of order execution on the LME. Members and Clients should ensure that orders are communicated in meaningful terms that deliver the required execution in accordance with LME Rules.

Ring

- 52. Client orders are not traded in the Ring, so an order using the term “in/on the Ring or during the Ring/kerb” will be executed on the basis of the prices traded/quoted in the Ring or during the particular Ring or kerb session. If a Client requires their order to be “shown” or traded across the Ring then they should make this requirement known to their executor, who may or may not accept this as a term of the order. The equivalent Member-to-Member Agreed Trade for a Client order might not replicate its terms. As the Client is not a party to any Cleared Contracts which arise from Agreed Trades made in the Ring, in specifying Ring/kerb, the Client is merely identifying a pricing mechanism. A Member which undertakes to match a price traded in the Ring/kerb is not necessarily undertaking that it will trade during that Ring/kerb, only that it may do so. However, a Client may place an order with the specific request that the Member concludes an Agreed Trade in the Ring, replicating its order. In such circumstance, the Category 1 Member can only trade this order by open outcry in the Ring.
- 53. If a Client trades at the prevailing market quote proffered in the Ring/kerb, their executor is not necessarily obliged to effect an Agreed Trade in the Ring at the same price. This can lead to situations where the Client has traded at the prevailing market quote, without that same price trading in open outcry across the Ring. However, if the instructions from the Client are to achieve a specific price i.e. close of Ring 2, then this is the price that should be given, if that specific order is accepted.
- 54. The timings for the acceptance of orders from a Client to a Member which are executed “on the close” of the relevant Ring/Kerb should be agreed between the two parties. The timings may be dependent on the nature of the order (for example large in size orders may have different timings from smaller orders). However, the instructions should be clearly understood so there is no doubt how and when the order may be executed by the Member. If an ‘*on the close*’ order is not placed in sufficient time before the close of the relevant Ring/Kerb, the Member may reserve the right to decline acceptance of any such order.

Market

55. In normal circumstances a market order is one executed on a timely basis at the prevailing market price. As mentioned above, at certain times of the business day, trading is taking place simultaneously in the Ring or kerb, on LMEselect, and in the inter-office market. Traditionally, when open outcry trading is in session, the market tends to be led by activity within the Ring/kerb. At other times, the market is split between inter-office trading and trading on LMEselect. During LMEselect trading periods, firm prices are available on LMEselect and the LMEselect page on information vendors’ systems. Members should ensure they consider their best execution obligations as defined by prevailing regulations when executing an “at market” order on behalf of a Client.

Best

56. "At best" orders may be executed on any of the Ring, inter-office market and on LMEselect. Inter-office trades rely upon the Members' skill in determining the level of the market at any particular time. Best orders received during Ring/kerb times may not result in the Client receiving the "best" price achieved during the session if the price improves after the Member has filled the Client order. At any given time, the best price on LMEselect will be displayed on the system and by the market data vendors. Clients should be aware that depending on market conditions, the best price may move during the period from when the order was placed and when it was executed. Members should ensure they consider their best execution obligations as defined by prevailing regulations when executing an at best order on behalf of a Client.

Close

57. Most orders placed "on the close", or "market on close" ("MOC") are for either the close of the second Ring (i.e. the Official Price) or the final kerb (i.e. the Closing Price). Both of these prices are published. Closing prices for other sessions are harder to determine, although the LME does publish the Unofficial Closing Prices which are established at the close of the third Ring. In all circumstances, Clients and Members need to agree the style of execution i.e. bid/offer, mean or traded price. Members may not always be able to guarantee execution (price or volume) due to prevailing market conditions.

Open

58. Clients placing orders to trade on the opening of a market session must provide clear instructions to the Member which indicate how this order should be activated i.e. basis the opening bid/offer or basis the first trade in the session. Clients will also need to inform their executor of their requirements if the executor is unable to fill the order basis the opening price in its entirety, due to market constraints such as insufficient liquidity. Clients may place orders with Members for LMEselect that can be placed into the system for activation when the market opens.

Resting Orders

59. When placing resting orders such as "good 'til cancelled" ("GTC", or any derivations thereof) or stop loss orders, Clients should ensure that they are in agreement with their executor's definition of the trigger point of the order. Usually, this is interpreted as being the point when the order price is seen to be trading in the market, but it is possible to request the order be activated when the order level is either bid or offered as appropriate, via the prevailing market quote.
60. It is possible for a Client not to receive a fill on a resting order despite the order price trading in the market. This could be due to a number of circumstances such as order priority etc. Whatever the reason, the executor should be able to provide the Client with a full explanation of why it was unable to fill the order.
61. Clients should be aware that resting orders might be activated during periods of illiquidity in the market. As previously mentioned, this could result in the trade not being filled, or for "stop" orders, a worse fill than anticipated (known as "slippage"). Clients should ensure the executor is fully aware of their requirements regarding the execution of an order, and adheres to any limitations, especially if the Client is not in contact with the market / Member when the trigger point is reached.

LMEselect

62. It is possible for Clients to route orders to LMEselect, or to ask Members to place resting orders in LMEselect, on their behalf. LMEselect has multiple available order types and validity conditions, including but not limited to: GTC (for Cash and 3 month prompt dates only), "Good for day", "Iceberg"¹⁷, "Scaling"¹⁸ and "Fill or Kill" orders¹⁹. Further information on available order types, their characteristics and any restrictions on their use, is set out in the LMEselect User Guide, the current version of which is available on the LME website. Members are encouraged to read the LMEselect User Guide carefully to ensure compliance with any restrictions²⁰.

SEGREGATION & PORTABILITY

Segregation

63. When registering Agreed Trades in the Matching System, a Clearing Member must specify to which account at the Clearing House the resulting Cleared Contracts should be allocated. Where any Cleared Contract is to be allocated to a client account (because the trade has been executed for a Client) the registration must align the Contract to a specific omnibus (which may be net or gross for Direct Clients or net for Indirect Clients) or individually segregated account at LME Clear. Members are required to offer Clients a choice of accounts. The distinguishing factor between the two is: either (i) an omnibus account which has assets and positions allocated to it for multiple Clients, or multiple Clients with Indirect Clients; or (ii) an individually segregated account which has assets and positions allocated to it for a single Client, or a single Client with Indirect Client/s. Clearing Members, Clients and Indirect Clients wishing to know more about segregation options may review LME Clear's EMIR Article 39(7) disclosure on the LME Clear website.

Portability

64. Where LME Clear has declared an Event of Default in relation to a Clearing Member and a Client wishes to transfer its positions from an account maintained with the defaulting Clearing Member to another Clearing Member, it must notify²¹ LME Clear in accordance with the procedures set out by LME Clear from time to time. LME Clear will effect the transfer of positions and, where possible, assets subject to and in accordance with the LME Clear Rules²². Where the Client fails to submit its request in accordance with the LME Clear procedures or porting is not possible in accordance with the LME Clear Rules, the positions in the relevant account may be closed out by LME Clear and assets in the account used to offset any losses in the account. Members, Clients and Indirect Clients wishing to know more about default porting may review LME Clear's Article 39(7) disclosure on the LME Clear website.

¹⁷ Iceberg orders allow a trader to place an order without disclosing the full order quantity to the market. The trader specifies the open quantity amount seen by the market and the subsequent open order amounts at the time of the order placement. Any subsequent amendments to open quantity amount only take effect with the next order quantity to be placed; the current open quantity seen by the market does not change.

¹⁸ A scaling order allows the user to automatically place repeat orders for an outright valid prompt date with a scaled order price. i.e. scaled down buying or scaled up selling; although the user is not forced to change the order price and therefore can enter repeat order at the same price level. This function will place an order with the same quantity and prompt date with an adjusted order price if desired, once the previous order has traded in the LMEselect system.

¹⁹ A Fill and Kill Order is entered at a specific price with the intention to execute immediately and therefore fill all or part of, the order and immediately cancel any unfulfilled balance.

²⁰ By way of example, whilst it is technologically possible for Members to submit discretionary orders in relation to LME Contracts, use of this order type (whether submitted via the LMEselect trading GUI, for example, or via any third party software application that utilises native LMEselect functionality for the discretionary order type) was prohibited by LME Notice 20/283. Similarly, Notice 20/283 also prohibits the use of native iceberg functionality in relation to Cash-Settled Futures Contracts.

²¹ It is not possible to accept such notifications from Indirect Clients, and the request must always be made by the Client.

²² The LME Rules contain provisions to ensure that, where any Cleared Contract is ported in accordance with LME Clear Rules, the back-to-back Client Contracts shall also port.

EMIR Article 7c(1) Information Statement

December 2024

Throughout this document references to “we”, “our” and “us” are references to Citigroup Global Markets Inc. and references to “you” and “your” are references to the client.

Citigroup Global Markets Inc. provides clearing services at one or more central counterparties (“CCPs”) recognised under EMIR Article 25 (“**a recognised non-EU CCP**”), as well as at one or more CCPs authorised under EMIR Article 14 (“**an authorised EU CCP**”).

Pursuant to EMIR Article 7c(1), we are required to inform you that, where we offer the relevant clearing service, it is possible to clear contracts through an authorised EU CCP in addition to, or in place of, a recognised non-EU CCP. We note that you would need to be satisfied that you will continue to meet your local regulatory requirements by clearing contracts through the relevant authorised EU CCP, and we cannot be held responsible for any non-compliance thereof.

The list of CCPs that have been authorised to offer services and activities in the European Union under EMIR Article 14 together with the classes of financial instruments covered by the CCP’s authorisation is available on ESMA’s website ([here](#)), and may be updated from time to time.

EMIR Article 38(8) Disclosure Statement

December 2024

Throughout this document references to "we", "our" and "us" are references to Citigroup Global Markets Inc. (referred to as the 'clearing service provider'). References to "you" and "your" are references to the client.

1. Introduction

Pursuant to EMIR Article 38(8), we are required to provide the following information to our clearing customers about CCPs organized and authorized in the European Union, namely Eurex, Euronext Clearing, and any others listed in the Appendix:

- (a) information on the way that the margin models of the CCP work;*
- (b) information on the situations and conditions that might trigger margin calls;*
- (c) information on the procedures used to establish the amount to be posted by the clients; and*
- (d) a simulation of the margin requirements to which clients might be subject under different scenarios.*

The European Securities and Markets Authority ("ESMA") is required to develop and submit draft regulatory technical standards, within 12 months from the date of entry into force of EMIR 3.0, to further specify (among other things): (i) the information to be provided by clearing service providers to their clients and (ii) the requirements of the simulation of margins to be provided to clients and the type of output to be provided.

At the time of this Disclosure Statement, ESMA has not yet published the draft regulatory technical standards referred to above, therefore this document has been drafted on a 'best efforts basis' considering the requirements in EMIR Article 38(8) set out above and considering information made publicly available by CCPs.

2. Information on the way that the margin models of the CCP work

2.1 General CCP margin information

CCPs usually call their members for two margin types, namely variation margin and initial margin.²³

2.1.1 Variation margin

Variation margin (VM) represents margin collected or paid out to reflect current exposures resulting from actual changes in market price²⁴. VM, normally paid in cash and transferred outright or with full title to a CCP or by a CCP, is a risk management tool designed to ensure that amounts representing the gains and losses under cleared derivatives contracts are transferred regularly as market prices fluctuate, preventing the build-up of large, unrealized losses. CCPs typically require that VM be posted in cash in the currency of the underlying transactions, depending on the specific terms of the contract.

²³ Please note that margin terminology may differ from one EU CCP to the other, and clients are advised to refer to the rules of each CCP to familiarise themselves with the margin terminology that the specific CCP uses in its rules.

²⁴ See Article 1(6) of COMMISSION DELEGATED REGULATION (EU) No 153/2013 of 19 December 2012 supplementing Regulation (EU) No 648/2012 of the European Parliament and of the Council with regard to regulatory technical standards on requirements for central counterparties ([EMIR CCP RTS](#)), as amended.

For some other contracts, VM is collected and accrued by the CCP for the duration of the contract. This is often referred to as “contingent” VM.²⁵ Such contingent VM is considered as Initial Margin (see below) and can be covered in cash or non-cash collateral.

2.1.2 Initial margin and additional margins

Initial margin (IM) represents margins collected by the CCP to cover potential future exposure to clearing members providing the margin and, where applicable, to interoperable CCPs. This margin is intended to cover the market risk resulting in a change in mark-to-market value of the cleared contracts held by the clearing member at the CCP during the period between the last margin collection and the liquidation of positions following a default of a clearing member or of an interoperable CCP.²⁶

IM is posted by clearing members to the CCPs either by way of cash (which is usually transferred outright) or securities (by way of security or outright transfer). As reference above, IM primarily covers market risk, which is the risk of a change in the mark-to-market before additional VM is posted or the position is closed out. Essentially, this is a function of the time it takes to post VM, the volatility of the cleared derivative and the close out timeline (margin period of risk). Other types of risk, such as concentration or stress conditions, can be covered via additional margins.

The application of IM and additional margins is CCP-specific. For example, some CCPs may include risks other than price risks in their IM, while other CCPs may apply additional margins. CCPs also reserve the right in their rules to call for any extraordinary additional margins to their members. CCPs use margin models to compute IM and additional margins. IM is typically calculated by applying one of the following two model types: SPAN like model or portfolio VaR model²⁷.

In the European Union (EU), CCPs are required to have anti-procyclical tools embedded in their margin models to mitigate risks associated with rapid margin changes. For IM, CCPs can use three different options: (a) applying a margin buffer at least equal to 25 % of the calculated margins, (b) assigning at least 25 % weight to stressed observations in the lookback period, or (c) ensuring that its margin requirements are not lower than those that would be calculated using volatility estimated over a 10-year historical lookback period.²⁸

CCPs have a right to amend their margin methodologies and relevant parameters subject to applicable governance. Typically, CCPs review margin parameters on a periodic basis to ensure the level of margin coverage remains appropriate under any prevailing market conditions to cover market and counterparty credit risk.

Key CCP margin model parameters include:

- Margin period of risk (MPOR) which is the period of time from the last transfer of collateral covering a set of transactions with a defaulting clearing member, until the transactions are closed out and the resulting market risk is re-hedged. The MPOR for specific product sets is prescribed in the EU by regulation and currently stands at a minimum of
 - o 2-days for exchange-traded derivatives (ETDs) or
 - o 1-day for ETDs on a gross basis for client accounts under specific conditions²⁹ and

²⁵ This is a prevalent VM method for listed equity options.

²⁶ See Article 1(5) of the EMIR CCP RTS.

²⁷ Please refer to Section 2 of the [ECB Occasional Paper Series on CCP initial margin models in Europe](#) published by the ECB in April 2023 for further details of the main modelling frameworks used, including Standard Portfolio Analysis of Risk (SPAN) and Value at Risk (VaR) models.

²⁸ See Article 28 of the [EMIR CCP RTS](#).

²⁹ See Article 26(1)(c) of the [EMIR CCP RTS](#), called “liquidation period” therein.

- 5-days for cleared OTC derivatives;
- The “confidence interval” for calculating IM, based on historical volatility and anticipated liquidation periods, which is set to 99.0% for ETDs and 99.5% for cleared OTC derivatives under EU regulations³⁰;
- The anti-procyclical parameters: (a) the weight of stress periods, (b) the length of the lookback period, or (c) the buffer size.

CCPs typically compute margin for groups of positions in portfolios that are part of a specific clearing service or market, such as exchange-traded equity derivatives, exchange-traded interest rate derivatives or cleared OTC interest rates derivatives. However, some CCPs allow cross-product margining between correlated markets, such as, for example, exchange-traded and OTC cleared interest rate derivatives.

Appendix to this Disclosure Statement includes basic EU CCP-specific margin information for illustration purposes.

2.1.3 Collateral

IM can be met by market participants in the form of eligible collateral, typically cash in the main fiat currencies and high credit quality and liquid non-cash collateral in the form of US/EU and UK government bonds. CCPs establish a list of eligible collateral which may be subject to a ‘haircut’ that represents a discount to mitigate for the potential decrease in value of the collateral.

CCP haircut models, similar to CCP margin models, estimate the potential loss in value of eligible collateral. Considering the liquidity, credit risk, price volatility and other factors of the instrument, the CCP haircut model will dictate the discounted value of the instrument³¹.

CCPs also set concentration limits with respect to the amount of certain collateral types that can be posted as IM and set limit on the level of excess collateral that can be posted to cover future IM requirements.

2.1.4 CCP margin payment cycle

CCPs have specific daily payment schedules to receive and pay VM and IM (typically once a day) and may also require ad hoc payments of margin (intraday margin calls).

Intraday IM calls can often only be met with cash collateral, but some CCPs may have stricter collateral criteria in place and only accept specific cash currency (such as Euro). These ad hoc calls usually occur during business hours, but, depending on market conditions, they can also take place outside of business hours and can be met in a different currency (such as US Dollars, for example).

2.1.5 CCP Transparency

CCPs provide information to their clearing members in different formats and at different levels. Certain CCPs do not distinguish between the impact of house and client activity on additional margin applied to the clearing member’s business. For this reason, the information that clearing members make available to their clients is highly dependent on the level of transparency and disclosure that they receive from each individual CCP. The same applies with respect to the level of information available to clearing service providers further down the clearing chain.

CCPs have margin simulation tools enabling computations of IM. Some CCPs make their margin simulation tools publicly available, whereas others make them available to their members and clients only. These tools may also include features to compute CCP additional margins. (*See Section 5 below for further details.*) It may be the case that

³⁰ See Article 24(1) of the [EMIR CCP RTS](#).

³¹ For example, assuming a margin requirement of EUR95 for a counterparty. That counterparty decides to use 10Y Italian Government Bonds against which the CCP set a 5% haircut. The counterparty should post in excess of EUR100 notional value of the 10 Y Italian Government Bond to meet its margin requirement (collateral = margin requirement / (1 - haircut) = 95 / (1-0.05) = 100).

new types of additional margin are not immediately reflected in CCP margin simulation tool, which limits the transparency that can be shared with clients.

3. Information on the situations and conditions that trigger margin calls

3.1 General information

CCPs typically collect IM and VM once a day based on the settlement price or mark-to-market value of cleared derivative positions at the end of the previous day (EoD margin), usually on a T+1 basis (i.e., at open of business the next morning). As mentioned above, CCPs can also call for margin outside the traditional EoD schedule. Intraday payments may be triggered if the cleared derivative positions have suffered unrealised or realised losses beyond a certain limit as defined by the CCP.

Several factors can result in changes to CCP IM. For example, trading activity that results in changes to the size of a position or composition of a portfolio can lead to higher CCP IM requirements. Larger or more concentrated positions generally require more IM to ensure adequate coverage.

Another key factor that can trigger a change in IM is increased market volatility. When markets become more volatile, the likelihood of large price movements increases, prompting CCPs to require higher margins to cover any such potential price movements.

CCPs also periodically review and update their risk models. Changes in these models can lead to adjustments in IM requirements to better reflect current market conditions and risks.

It is important to note that both VM and IM requirements can change daily even if cleared derivative positions remain unchanged.

In summary, CCP margin calls can be triggered by a number of different factors including (but not limited to) a change in trading activity, increased market volatility and CCP margin models reacting to market conditions. For more detailed information, please refer to relevant CCP margin documentation on the relevant CCP websites.

3.2 Margin calls by clearing service providers

Clearing members typically call clients for the CCP required VM and/or IM called by the CCP. A client of a clearing member providing clearing services to its clients would in turn call its clients for at least the same amount of margin following a call from the clearing member.

Clearing service providers may call clients for additional margin in line with the contractual framework that they have in place with them. This can be done either by applying a multiplier to the CCP margin requirement or via a fixed margin buffer. In some cases, clearing service providers may also apply their own in-house margin methodology.

To determine whether additional margin is required, clearing service providers perform daily monitoring of client portfolios, evaluating a wide array of quantitative and qualitative factors. These include (but are not limited to) counterparty risk, credit risk, portfolio risk, country risk, market price movements, potential future volatility, the capacity of clients to respond to intraday margin calls and other risks assessed against each individual client. It is important to note that these risks may not be assessed by CCPs, and CCPs may not be aware of the identity of end clients in certain segregation models.

Clearing service providers also evaluate the level of the CCP margin in relation to their assessment of anticipated market conditions, the specific client portfolios, or other client specificities, and may apply additional margin. They may also apply additional margin to facilitate clients' intraday trade registrations and to absorb potential negative intraday market movements, which clients might not be able to respond to promptly. Clients should contact their relationship managers at the clearing firm for further information around the terms of their contractual framework with the clearing service provider.

4. Information on the procedures used to establish the amount to be posted by the clients

For more details on the procedures used to determine the amount of margin required by each CCP, please refer to the CCP margin information in the Appendix below that is not exhaustive and has been produced for illustration purposes only.

Client clearing agreements typically govern the provision of margin by clients to clearing service providers. The agreement may also cover the provision of margin by clearing service providers to clients, where relevant and mutually agreed upon. Clients are typically required to transfer margin to the clearing service provider to meet the requirements set by the CCP, as well as any additional margin requirement set by the clearing service provider, as explained above.

Where a CCP provides different clearing services, CCP rules may require clearing members to make separate margin calls on clients in respect of transactions cleared through each CCP Service. Client clearing documentation may provide for the option that the clearing service provider may make separate, or aggregated, margin calls on a client in the clearing service provider's sole and absolute discretion.

The ability for the clearing service provider to apply additional margin is governed by the terms of the client clearing agreement. To determine whether additional margin is required, clearing service providers usually assess a wide range of client-specific and portfolio-specific factors among others. In the event additional margin is to be applied, the client is notified and informed in accordance with the terms that govern its relationship with the clearing service provider.

Clients should contact their relationship managers at the clearing service provider for further information around the terms of their client clearing documentation.

5. Simulation of the margin requirements to which clients might be subject under different scenarios

CCPs provide margin simulation tools that help clearing service providers and clients estimate their margin requirements. In some instances, these tools also allow for scenario-based simulations. However, as mentioned above, certain margin components, such as additional margins, may not be always immediately included in those simulations.

You will find a link to CCP-specific margin tools for each of the CCPs listed in the Appendix. Some CCP tools allow simulation of the same portfolio at different historical dates, which can help clearing service providers and/or clients get a sense of the volatility of margin requirements during stressed periods.

When additional margins are required by a clearing service provider, a comprehensive assessment of various quantitative and qualitative factors is conducted. As these requirements are specific to each client, clearing service providers might not be in a position to simulate such information systematically across their client base. Clients should contact their relationship manager at their clearing service provider should they require further information on the margin requirements under different scenarios.

Appendix – CCP-specific margin information

CCPs typically publicly disclose information of their margin models on their websites.

Disclaimer: *CCP-specific margin information provided in this Appendix is accurate as of the date specified for each CCP separately below. CCP margin models can change from time to time and we have no obligation to dynamically review and update information set out in this Appendix. Clients should refer to the relevant CCP websites for the most up to date information.*

EUREX (Date: 9 December 2024)	Nasdaq Equity (Date: 9 December 2024)
CCP Name: Eurex Clearing AG	CCP Name: Nasdaq OMX Clearing AB
Margin model documentation weblink: Eurex Clearing Prisma	Margin model documentation weblink: Nasdaq Clearing Margin Methodology
Margin simulation model weblink: https://cpme.eurex.com/	Margin simulation model weblink: Nasdaq Clearing Technology and Connectivity (only available upon contacting Nasdaq)
Margin model Name: Prisma	Margin model Name: OMS II Model
Margin model Type: Portfolio VaR	Margin model Type: Span-like
Risks captured by margin model: Market risk, liquidity (or concentration) risk, option risk and time-to-expiry (settlement) risk	Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk
Cross-product margining: Applicable between ETDs and Cleared OTC Interest Rates	Cross-product margining: Only between equity products
Margin Period of Risk (holding period): 2-days for ETDs / 5-days for OTC	Margin Period of Risk (holding period): 2-days for ETDs
Anti-Procyclical component: Yes – 25% weighted stress period scenarios	Anti-Procyclical component: Undisclosed
Lookback period: 3 years	Lookback period: 1 year
Confidence level: 99.0% for ETDs / 99.5% for OTC	Confidence level: 99.2%
Metric: Value-at-Risk (VaR)	Metric: Stress Value

<p>Nasdaq Fixed Income (Date: 9 December 2024)</p> <p>CCP Name: Nasdaq OMX Clearing AB</p> <p>Margin model documentation weblink: Nasdaq Clearing Margin Methodology</p> <p>Margin simulation model weblink: Nasdaq Clearing Technology and Connectivity (only available upon contacting Nasdaq)</p> <p>Margin model Name: CFM Model (Cash Flow Margin)</p> <p>Margin model Type: Principal Component Analysis</p> <p>Risks captured by margin model: Market risk (Curve Risk)</p> <p>Cross-product margining: Only between fixed income products</p> <p>Margin Period of Risk (holding period): 2-days for ETDs and 5-day for OTC</p> <p>Anti-Procyclical component: Undisclosed</p> <p>Lookback period: 10 years and 1 year</p> <p>Confidence level: 99.2% for ETDs and 95% for OTC</p> <p>Metric: Stress Value</p>	<p>Nasdaq Commodities (Date: 9 December 2024)</p> <p>CCP Name: Nasdaq OMX Clearing AB</p> <p>Margin model documentation weblink: Nasdaq Clearing Margin Methodology</p> <p>Margin simulation model weblink: Nasdaq Clearing Technology and Connectivity (only available upon contacting Nasdaq)</p> <p>Margin model Name: SPAN® Model</p> <p>Margin model Type: SPAN</p> <p>Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk</p> <p>Cross-product margining: Only between certain commodities product group</p> <p>Margin Period of Risk (holding period): 2-days to 5-days for ETD</p> <p>Anti-Procyclical component: Undisclosed</p> <p>Lookback period: 1 year</p> <p>Confidence level: 99.2% for ETDs</p> <p>Metric: Stress Value</p>
<p>Euronext Equity Derivatives (Date: 9 December 2024)</p> <p>CCP Name: Euronext Clearing</p> <p>Margin model documentation weblink:</p> <ul style="list-style-type: none"> • Methodologies Euronext Clearing • Parameters Euronext Clearing <p>Margin simulation model weblink: The tool is not available publicly, for access please contact CCP-rm.group@euronext.com</p> <p>Margin model Name: EQDER Risk Engine</p> <p>Margin model Type: SPAN-like</p>	<p>Euronext Fixed Income Derivatives (Date: 9 December 2024)</p> <p>CCP Name: Euronext Clearing</p> <p>Margin model documentation weblink:</p> <ul style="list-style-type: none"> • Methodologies Euronext Clearing • Parameters Euronext Clearing <p>Margin simulation model weblink: The tool is not available publicly, for access please contact CCP-rm.group@euronext.com</p> <p>Margin model Name: Fixed Income Risk Engine</p> <p>Margin model Type: VaR</p>

<p>Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk</p> <p>Cross-product margining: Only between equity products</p> <p>Margin Period of Risk (holding period): 2-days for ETDs and 5-days for OTC</p> <p>Anti-Procyclical component: 25% Stressed weight</p> <p>Lookback period: 5 years</p> <p>Confidence level: 99.5%</p> <p>Metric: Stress Value</p>	<p>Risks captured by margin model: Market risk</p> <p>Cross-product margining: Only for instruments from same issuer</p> <p>Margin Period of Risk (holding period): 5-days</p> <p>Anti-Procyclical component: 10 Year lookback period</p> <p>Lookback period: Anchored from 2004</p> <p>Confidence level: from 99.5% to 99.8%</p> <p>Metric: Expected Shortfall</p> <p>Note the following margin add-ons are applied separately: decorrelation, concentration/idiosyncratic and repo concentration</p>
<p>Euronext Commodity Derivatives (Date: 9 December 2024)</p> <p>CCP Name: Euronext Clearing</p> <p>Margin model documentation weblink:</p> <ul style="list-style-type: none"> • Methodologies Euronext Clearing • Parameters Euronext Clearing <p>Margin simulation model weblink: The tool is not available publicly, for access please contact CCP-rm.group@euronext.com</p> <p>Margin model Name: COMDER Risk Engine</p> <p>Margin model Type: VaR</p> <p>Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk</p>	

<p>Cross-product margining: Between commodity products excluding farmed salmon</p> <p>Margin Period of Risk (holding period): 2-days</p> <p>Anti-Procyclical component: 25% Stressed weight</p> <p>Lookback period: 5-year</p> <p>Confidence level: from 99.5%</p> <p>Metric: Expected Shortfall</p> <p>Note the following margin add-ons are applied separately: decorrelation</p>	
<p>ECC Derivatives Margining (Date: 9 December 2024)</p> <p>CCP Name: European Commodity Clearing AG</p> <p>Margin model documentation weblink: Margining</p> <p>Margin simulation model weblink: Q & A Session – PC-Span® (Please follow these steps to install and run ECC margin simulation tool)</p> <p>Margin model Name: SPAN® Model</p> <p>Margin model Type: SPAN</p> <p>Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk</p> <p>Cross-product margining: Only applicable between “cross margin group”</p> <p>Margin Period of Risk (holding period): 2-days</p> <p>Anti-Procyclical component: Undisclosed</p>	<p>BME Financial derivatives (Date: 9 December 2024)</p> <p>CCP Name: BME Clearing</p> <p>Margin model documentation weblink: MEFFCOM2 BMEClearing</p> <p>Margin simulation model weblink: Not available publicly</p> <p>Margin model Name: MEFFCOM2</p> <p>Margin model Type: SPAN-like</p> <p>Risks captured by margin model: Undisclosed</p> <p>Cross-product margining: Undisclosed</p> <p>Margin Period of Risk (holding period): Undisclosed</p> <p>Anti-Procyclical component: Undisclosed</p> <p>Lookback period: Undisclosed</p>

<p>Lookback period: 1-year</p> <p>Confidence level: from 99%</p> <p>Metric: stress value</p> <p>Note the following margin add-ons are applied separately: Concentration, power, gas, emission and short option delivery</p>	<p>Confidence level: Undisclosed</p> <p>Metric: Undisclosed</p> <p>Note the following margin add-ons are applied separately: Undisclosed</p>
<p>KDPW CCP Listed derivatives (Date: 9 December 2024)</p> <p>CCP Name: KDPW_CCP S.A.</p> <p>Margin model documentation weblink: SPAN – margin calculation methodology</p> <p>Margin simulation model weblink: SPAN – margin calculation methodology (please follow the steps in this page to install and run KDPW_CCP margin simulation tool)</p> <p>Margin model Name: SPAN®</p> <p>Margin model Type: SPAN</p> <p>Risks captured by margin model: Market risk, option risk and time-to-expiry (settlement) risk</p>	

<p>Cross-product margining: Yes</p> <p>Margin Period of Risk (holding period): 2-Days</p> <p>Anti-Procyclical component: 10-Years lookback</p> <p>Lookback period: 10-Year</p> <p>Confidence level: 99% (and 99.5% where history is shorter than the lookback period)</p> <p>Metric: Stress value</p> <p>Note the following margin add-ons are applied separately: Undisclosed</p>	
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EMIR ARTICLE 38(9) AND CCPR DISCLOSURE STATEMENT

In accordance with Citigroup Global Market Inc.’s obligations under the EU CCP Recovery and Resolution Regulation (“**CCPR**”)³² and the European Market Infrastructure Regulation (“**EMIR**”)³³, we are including this document to inform you, with respect to central counterparties (“**CCPs**”) organized and authorized in the EU, (i) about how measures in a CCP’s recovery plan may affect you (Article 9(23) CCPR), and (ii) of the potential losses or other costs that you may bear as a result of the application of the default management procedures and loss and position allocation arrangements under the CCP’s operating rules (Article 38(9) of EMIR, which was introduced by Article 87(7) CCPR and replaced pursuant to Article 1(41) of EMIR 3.0³⁴).

I. CCPR

CCPR establishes a harmonised framework for the recovery and resolution of EU CCPs. CCPR is intended to ensure that both CCPs and their regulators will act decisively in a crisis scenario to keep CCPs providing their critical functions and to limit the impact on the financial system and on public funds.

CCPR comprises the following three pillars:

1. Preparation

a. Recovery plans

CCPs are required to prepare recovery plans setting out measures they would take in crisis scenarios to restore their financial soundness and continue providing their critical functions. Recovery plans are not standardised and will likely differ from CCP to CCP. CCP Recovery plans are required to include a comprehensive range of:

- i. capital actions;
- ii. loss allocation actions (including recovery cash calls and a reduction in the value of gains payable by the CCP to non-defaulting clearing members);

³² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0023&from=EN>

³³ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202402987

³⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202402987

iii. position allocation actions; and

iv. liquidity actions,

to maintain or restore the viability and financial soundness of the CCP.

b. **Resolution plans**

Resolution authorities are required to prepare resolution plans setting out the resolution actions they would take if the CCP were likely to fail, in order to keep the CCP providing its critical functions and to limit the impact on the financial system and on public funds.

c. **Resolvability**

Where a resolution authority identifies obstacles to the resolvability of a CCP in the course of the planning process, it can also require the CCP to take appropriate measures. These measures may include changes to the CCP's operational or legal structure or to its pre-funded loss-absorbing resources.

2. **Early intervention**

Where a CCP is about to breach its prudential requirements, CCPR gives regulators powers to intervene before the problems become critical and the financial situation deteriorates irreparably. These powers may include requiring a CCP to undertake specific actions envisaged in its recovery plan or to make changes to its business strategy or legal or operational structure.

3. **Resolution**

CCPR gives resolution authorities resolution tools to manage the failure of a CCP in an orderly way and to ensure that essential clearing functions and services are preserved.

Specifically, CCPR envisages the following resolution tools:

a. the **position and loss allocation tools**, including:

- (i) the **tear-up tool**: This resolution tool allows the resolution authority to terminate specific clearing contracts to balance the books of the CCP. In practice, this tool would be used by a resolution authority if a clearing member defaults and its positions cannot be auctioned off. In these circumstances, the resolution authority would terminate corresponding opposing positions to re-balance the CCP's books.
- (ii) the **variation margin gain haircut (VMGH) tool**: This resolution tool allows the resolution authority to reduce the amount the CCP owes a clearing member in

respect of post-resolution variation margin gains due in accordance with the CCP's process for paying variation margin. B.

- b. the **write-down and conversion tool**: This resolution tool allows the resolution authority to write down or convert instruments of ownership, debt instruments or other unsecured liabilities of the CCP.
- c. the **sale of business tool**: This resolution tool allows the resolution authority to sell all or part of the failing CCP to another entity.
- d. the **bridge CCP tool**: This resolution tool allows the resolution authority to separate out essential functions of a CCP and transfer them to a new CCP (the bridge CCP), which is controlled by the resolution authority.

To apply the resolution tools, resolution authorities are given wide resolution powers, including the power to:

- (a) close out and terminate financial contracts;
- (b) reduce the amount of variation margin due to a clearing member;
- (c) cancel or modify the terms of a contract with the CCP;
- (d) suspend payment and delivery obligations;
- (e) restrict security interest enforcement; and
- (f) suspend termination rights.

The application of the resolution tools and powers under CCPR is subject to certain safeguards (such as the 'no creditor worse off' principle). CCPR does not apply these safeguards to the recovery plans or default management procedures discussed in Section II below.

II. Impact on you

Provisions under CCPR and EMIR require us to inform you:

- (a) if and in what way measures in the CCP's recovery plan may affect you; and
- (b) of the potential losses or other costs that you may bear as a result of the application of the default management procedures and loss and position allocation arrangements under a CCP's operating rules.

The measures described below may affect transactions we are clearing for ourselves as well as transactions we are clearing for you or, where we are providing a clearing service to you as a

client of a clearing member (known as “indirect clearing”), transactions cleared by that clearing member for us and you. Therefore, if the measures below are exercised, what we pay or deliver to you may be correspondingly reduced.

In addition to the specific costs and losses set out below, you may incur further costs and losses as a result of any market disruptions ensuing from the financial difficulties of the relevant CCP or its clearing members (such as increased margin requirements or stressed market circumstances which may adversely impact the value of your transactions).

1. CCP recovery plan measures

As CCPs are not required to make their recovery plans public, we cannot confirm with certainty which measures will be included in each CCP’s recovery plan.

However, we expect each CCP’s recovery plan to comprise one or more of the following measures, each of which may impact you in the ways outlined in the table below. The appendices to this letter set out details of which of the below measures have been provided for in the rulebook of each CCP we clear at on your behalf or, where we are facilitating an indirect clearing service, at which your transactions are cleared by a clearing member. If a measure is provided for in a CCP’s rulebook, we would also expect that measure to be included in that CCP’s recovery plan.

Measure	Description	Impact on you
Tear up	<p>A process by which a CCP may terminate a class of contracts in order to rebalance its book. This tool is normally available to CCPs if a clearing member defaults and its positions cannot be auctioned off. The CCP can terminate corresponding positions in whole or part to re-balance the CCP's books. It may also be available following a non-default loss, a force majeure or other emergency.</p> <p>Normally a tear-up will be in the form of a partial tear-up, in which only a portion of each contract of a particular class of contracts will be subject to the tear-up. Generally, this portion will be sized at the minimum level to permit the CCP to rebalance the contracts of that class following</p>	<p>If the CCP implements tear-up measures in respect of a contract we are clearing for you, the CCP will terminate the relevant contract (or a portion of it), perform a close-out calculation and pay any positive resulting sum to us or require us to pay any resulting amount to it.</p> <p>Where we are facilitating an indirect clearing service, the CCP will make the initial payment of any positive resulting sum to or require payment of any resulting amount from the clearing member providing indirect clearing services and the clearing member will either make a corresponding payment to us or require us to make a corresponding payment to it.</p>

	<p>the default or other event leading to the tear-up.</p> <p>A partial tear-up may lead to the tear-up of only portions of contracts that have an opposing directional position to contracts in the defaulting clearing member's portfolio or it may lead to the tear-up of portions of contracts that have both an opposing directional position and the same directional position.</p> <p>A tear-up may also be in respect of the entirety of the contracts in a particular class. Such a tear-up will lead to the tear-up of all contracts in the class, regardless of the direction of the position.</p> <p>Typically, a CCP will have broad discretion to determine what constitutes a class of contracts for these purposes.</p> <p>Partial tear-up is to be contrasted with an invoicing back (described below) because it will apply to all the contracts of a particular class of contracts cleared by a CCP (as opposed to only certain contracts identified to offset the defaulted contracts) and so its impact will fall evenly across all equivalent contracts forming part of the same class, although the impact may fall upon only those contracts having an opposing directional position to the defaulted contracts.</p>	<p>Whilst we will account to you for any payment we receive, if we are required to make a payment to the CCP or our clearing member, we will claim that amount from you.</p> <p>In this context, you may incur incidental costs in the process of the closing out of your contracts and you may incur additional costs if you decide to enter into a replacement contract. You may also suffer a loss if the close-out value is different to the value of the closed-out contract recorded in your books.</p> <p>If you decide not to enter into a replacement contract, you will be exposed to the risk of adverse market movements that were previously hedged by the contract.</p>
<p>Invoicing Back</p>	<p>A process by which a CCP may terminate specific contracts in order to rebalance its book. This tool is normally available to CCPs if a clearing member defaults and its positions cannot be auctioned off. The CCP can terminate contracts that have an opposing directional position to re-balance the CCP's books. It may also be available following a non-</p>	<p>If the CCP implements invoicing back measures in respect of a contract we are clearing for you, the CCP will terminate the relevant contract, perform a close-out calculation and pay any positive resulting sum to us or require us to pay any resulting amount to it (although a requirement to pay the</p>

	<p>default loss, a force majeure or other emergency.</p> <p>Invoicing back is to be contrasted with a partial tear-up (described above) because it will apply to some, but not all the contracts of a particular class of contracts cleared by a CCP (as opposed to portions of all those contracts in the same class as the defaulted contracts) and so its impact may not fall evenly across all clearing members holding equivalent contracts forming part of the same class. Unlike partial tear-up, which may apply to contracts having different directional positions, invoicing back will only apply to contracts having a corresponding opposing directional position to the defaulted contracts.</p>	<p>CCP is significantly less likely in an invoicing back).</p> <p>Where we are facilitating an indirect clearing service, the CCP will make the initial payment of any positive resulting sum to or require payment of any resulting amount from the clearing member providing indirect clearing services and the clearing member will either make a corresponding payment to us or require us to make a corresponding payment to it.</p> <p>Whilst we will account to you for any payment we receive, if we are required to make a payment to the CCP or our clearing member, we will claim that amount from you.</p> <p>In this context, you may incur incidental costs in the process of the closing out of your contracts and you may incur additional costs if you decide to enter into a replacement contract.</p> <p>You may also suffer a loss if the close-out value is different to the value of the closed-out contract recorded in your books.</p> <p>If you decide not to enter into a replacement contract, you will be exposed to the risk of adverse market movements that were previously hedged by the contract.</p>
<p>Forced allocation</p>	<p>A process by which a CCP may require a clearing member to enter into a contract at a price and on terms specified by the CCP in order to rebalance its book.</p> <p>Similar to invoicing back, this tool is normally available to CCPs if a clearing member defaults and its positions cannot be auctioned off.</p>	<p>If the CCP implements forced allocation measures in respect of a category of contracts we clear on your behalf or, where we are facilitating an indirect clearing service, a category of contracts which a clearing member clears on your behalf, we may allocate certain of the contracts we are required to enter into to your client account.</p>

	<p>In the case of forced allocation, the CCP will divide up the unsold portfolio of the defaulted clearing member and allocate portions of such portfolio to the remaining non-defaulting clearing members. In most cases, the CCP has ultimate discretion to determine which clearing members are allocated such trades and the price at which the portfolio is allocated. This tool may also be available following a non-default loss, a force majeure or other emergency.</p>	<p>Following the allocation of such contracts to your client account, related back-to-back contracts will automatically arise between you and us and you will be required to perform payment and margining obligations in respect of such related back-to-back contracts.</p>
<p>Variation Margin Gains Haircutting (VMGH) measures</p>	<p>VMGH is used to reduce the amount of variation margin a CCP is required to transfer to non-defaulting clearing members where such obligation arises from a move in the mark-to-market value of a contract in favour of the clearing member after the CCP triggers a default process.</p> <p>Different drafting may be used to achieve this effect, for example, there may be a permanent reduction in the variation margin obligation that affects the value of the affected contract or an additional payment obligation may arise in favour of the CCP under the affected contract that has the effect of reducing the CCP's variation margin obligation.</p>	<p>If the CCP implements VMGH measures in respect of any variation margin to be transferred in respect of your contracts, we will pass the impact of any reduction in such variation margin on to you or, where we are facilitating an indirect clearing service, the impact of any reduction of variation margin on the clearing member acting for us in respect to contracts cleared on your behalf.</p> <p>This may result in you not receiving any variation margin in respect of any increase in the mark-to-market value of such contracts in your favour. This may mean that you do not obtain the full value that would otherwise accrue to your affected contracts that would have arisen from market movements after the default and, to the extent that you hold an opposite position in relation to any asset or liability that was hedged by the affected contract, you may face a loss on that position.</p>
<p>Assessments</p>	<p>Assessments are additional contributions to the default fund, which the CCP may call upon a non-defaulting clearing member to make during the default management</p>	<p>If the CCP or, where we are facilitating an indirect clearing service, the clearing member calls us for an assessment as part of a default management process, we</p>

	<p>process in order to ensure that it has sufficient resources to enable the CCP to manage the default of one or more clearing members. Assessments are amounts called for in addition to default fund contributions already made by clearing members. They will only be called for during a default management process and should be differentiated from replenishments, which the CCP will call to restore the default fund to its steady state following the end of the default management process.</p>	<p>may call for an amount equal to a portion of such assessment from you. The amount we will call for shall represent the portion of the portfolio of contracts we clear at the CCP which comprises contracts we clear on your behalf or, where we are facilitating an indirect clearing service, the proportion of contracts we clear at the CCP through that clearing member which comprises contracts we clear on your behalf.</p>
Changes to Margin Criteria	<p>A CCP may have discretion under its rulebook to amend the criteria used to determine the quantum of margin calls (whether variation margin or initial margin), the timing of such margin calls and the assets it will accept as eligible collateral.</p>	<p>If the CCP amends its margin criteria such that the type or amount of variation margin or initial margin we are required to transfer in respect of your contracts (or, where we are facilitating an indirect clearing service, the clearing member acting for us is required to transfer), or the timing on which we are required (or the clearing member, as applicable, is required) to make such transfer, changes, we will pass the impact of such changes onto you.</p> <p>This may result in you having to post additional margin in respect of your contracts, no longer being able to transfer certain assets as eligible collateral or us changing the deadline by which you must transfer margin to us on each business day.</p>
Contingent Variation Margin	<p>In certain situations (e.g. following the default of a clearing member), in order to preserve its cashflow, the CCP may credit a clearing member with an entitlement to variation margin (e.g. by way of a credit to their account) whilst, at the same time, restricting payment of such variation margin to the clearing member or withdrawal of amounts credited to its account by the clearing member. In the future, the clearing</p>	<p>We will only transfer an amount of variation margin to you equal to the amount of variation margin we receive from the CCP in respect of the contracts we clear on your behalf or, where we are facilitating an indirect clearing service, the amount of variation margin the clearing member acting for us receives from the CCP in respect to contracts cleared on your behalf.</p>

	<p>member may be able to use this contingent variation margin credit in settlement of an obligation to post variation margin (and so the clearing member will not need to transfer variation margin to satisfy such obligation).</p>	<p>Therefore, if the CCP implements contingent variation margin measures in respect of any variation margin to be transferred in respect of your contracts, you may not receive the full amount of variation margin due in respect of those contracts at the time such transfer is due.</p> <p>However, you will be credited with an entitlement to such variation margin which you may be able to use against your variation margin obligations in the future (rather than transferring additional variation margin).</p>
<p>Emergency Powers</p>	<p>In emergency conditions (such as market disruption, war, force majeure or following governmental or regulatory action), a CCP may have additional powers to amend its rulebook or require clearing members to take certain actions with regard to the performance of each clearing member's contracts. Such emergency powers may include Tear ups, Invoicing Back, Contingent Variation Margin and Forced Allocation (each as described above). The CCP may also elect to close one or more of its services and terminate all outstanding contracts cleared at that service.</p>	<p>See further above as to the impact of Tear ups, Invoicing Back, Contingent Variation Margin and Forced Allocation and below as to the impact of a service closure.</p> <p>In addition, if the CCP's exercise of emergency powers impacts the terms of any of your contracts or the amount of margin we are required to transfer to the CCP or a clearing member on your behalf or the CCP or clearing member is required to transfer to us in respect of your contracts, we will pass the impact of such changes onto you. This may result in an amendment to the terms of your contracts, the close-out of contracts to which you are party, an increase in the amount of margin you are required to transfer or a decrease in the amount of margin you may receive.</p> <p>If a contract which is being cleared for you is closed out, you may incur incidental costs in the process of the closing out of such contract and you may incur additional costs if you decide to enter into a replacement contract at another CCP. You may</p>

		<p>also suffer a loss if the close-out value is different to the value of the closed-out contract recorded in your books. If you decide not to enter into a replacement contract, you will be exposed to the risk of adverse market movements that were previously hedged by the contract.</p> <p>If you receive less margin in respect of a contract we clear on your behalf or, where we are facilitating an indirect clearing service, which is cleared by a clearing member on your behalf, this may mean that you do not obtain the full value that would otherwise accrue to such contract as a result of market movements and, to the extent that you hold an opposite position in relation to any asset or liability that was hedged by the affected contract, you may face a loss on that position.</p>
<p>Service Closure</p>	<p>The CCP may elect to close one or more of its services and terminate all outstanding contracts cleared at that service.</p>	<p>If the CCP closes a service at which we are clearing contracts for you and you have not arranged for your positions to be closed out yourself before the closure, the CCP will terminate the relevant contracts, perform a close-out calculation and pay any positive resulting sum to us or require us to pay any resulting amount to it.</p> <p>Where we are facilitating an indirect clearing service, the CCP will pay any positive resulting sum to or require payment of any resulting amount from the clearing member providing indirect clearing services and the clearing member will either make a corresponding payment to us or require us to make a corresponding payment to it.</p>

		<p>Whilst we will account to you for any payment we receive, if we are required to make a payment to the CCP or our clearing member, we will claim that amount from you.</p> <p>In this context, you may incur incidental costs in the process of the closing out of your contracts and you may incur additional costs if you decide to enter into a replacement contract at another CCP.</p> <p>You may also suffer a loss if the close-out value determined by the CCP is different to the value of the closed-out contract recorded in your books.</p> <p>If you decide not to enter into a replacement contract, you will be exposed to the risk of adverse market movements that were previously hedged by the contract.</p> <p>Due to the closure of the relevant service, it also may not be possible to enter into replacement contracts.</p>
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Please see further the Appendices to this letter for details as to which of these measures are included in the rulebook of the relevant CCPs at which we clear on your behalf.

2. **Default management procedures**

In summary, if a clearing member is declared to be in default under a CCP's default management procedures, the CCP will usually try to transfer (port) transactions and assets related to the clients of that clearing member to another clearing member. If porting cannot be achieved, the CCP will terminate the transactions related to the clients of that clearing member and perform a close-out calculation in respect of them. If there is an amount owed by the CCP, the CCP may pay such amount directly to such clients subject to certain conditions, including if it knows their identity. If the CCP does not pay directly to such clients, it will pay such amount to the defaulting clearing member (or its insolvency practitioner) for the account of the clearing member's clients.

If we are or, where we are facilitating an indirect clearing service, the clearing member providing the indirect clearing service is declared to be in default, you may incur costs and losses, the most relevant of which we expect to be the following:

- (a) If your transactions and assets are ported and (i) we are the defaulting clearing member, you may incur incidental costs for transferring your positions and assets to another clearing broker; or (ii) we are facilitating an indirect clearing service, whilst we will continue to provide you with an indirect clearing service, we may pass on to you incidental costs associated for transferring your positions and assets to another clearing broker. In each case, you may be required to post additional collateral to enable porting to occur.
- (b) If your transactions are terminated and (i) we are the defaulting clearing member and the resulting sum is paid directly to you, you may incur incidental costs in the process of the closing out of your contracts; or (ii) if we are facilitating an indirect clearing service through a clearing member that has defaulted and the resulting sum is paid directly to us, we will hold this sum for you and you may incur incidental costs in the process of the closing out of your contracts. In each case, you may also suffer a loss if the close-out value is different to the value of the closed-out contract recorded in your books. Further, you may incur additional costs if you decide to enter into replacement transactions and if you decide not to (or cannot) enter into a replacement contract, you will be exposed to the risk of adverse market movements that were previously hedged by the contract.
- (c) If we are the defaulting clearing member and your transactions are terminated and the resulting sum is paid to us, you may incur the costs and losses described in the paragraph above and additional losses resulting from our insolvency. If your transactions are terminated, we are facilitating an indirect clearing service through a clearing member that has defaulted and the resulting sum is paid directly to the defaulted clearing member, you may incur the costs and losses described in the paragraph above and additional losses resulting from the insolvency of the defaulted clearing member.

If another clearing member is declared to be in default, the CCP will terminate any outstanding transactions of that clearing member. Any losses suffered by the CCP in respect of those transactions will be allocated amongst the CCP and its members in accordance with its loss and position allocation tools. The CCP may also seek to reduce those losses through the application of certain other measures provided for in its rulebook.

As part of such loss allocation and reduction tools, the CCP may apply default contributions provided by its clearing members against losses it incurs in respect of any transactions it has

entered into with the defaulting clearing member. If we are your clearing member, to the extent any default fund contributions we have made in respect of transactions we clear on your behalf are applied to reduce such losses, we may pass on the amount by which such default fund contributions are reduced to you under the client clearing agreement between us. If we are facilitating an indirect clearing service through a clearing member and that clearing member, to the extent any default fund contributions that clearing member has made in respect of transactions we clear on your behalf are applied to reduce such losses and such costs are passed on to us, we may pass on the amount of such costs incurred by us to you under the client clearing agreement between us,

Such loss allocation and reduction tools may also include the following, each of which will impact you in the manner described under “CCP recovery plan measures” above:

- (a) assessments;
- (b) tear up;
- (c) invoicing back;
- (d) forced allocation;
- (e) variation margin gains haircutting (VMGH) measures;
- (f) changes to margin criteria;
- (g) service closure;
- (h) contingent variation margin; and
- (i) use of emergency powers.

Please see further the Appendices to this letter for details as to which of these measures are included in the rulebook of the relevant CCPs at which we clear or, where we are facilitating an indirect clearing service, at which your transactions are cleared by a clearing member on your behalf.

III. Disclaimer

Recovery plans are not public and clearing members have to rely on voluntary disclosures by CCPs and the provisions of CCPs’ rulebooks. Additionally, CCPs may take actions which are not reflected in the information they have provided. Therefore, there may be other ways in which a CCP's recovery plan may impact you which are not reflected in this notification.

The information in this notification is based on the general provisions of CCPR and EMIR, as well as the information publicly available on CCPs' websites (including in the rulebooks of those CCPs).

This notification may be updated from time to time to reflect regulatory guidance and the appendices hereto may be updated as CCPs update their rulebooks or disclose information about their recovery plans. However, we are under no obligation to keep the disclosure contained in this notification up to date at all times and there may therefore be some delay between a CCP updating its rulebook, or disclosure relating thereto, and consequential updates being made to the disclosure in this notification. Clients are therefore advised to consult the latest version of the relevant CCP's rulebook, in addition to the latest version of this notification and the appendices, which are available here: [Regulatory Disclosures | Citi](#).

This notification does not constitute legal or any other form of advice and must not be relied on as such. This notification provides a high-level overview of a complex and new area of law, the effect of which will vary depending on the specific facts of any particular case. You and, where applicable, your clients may wish to appoint independent professional advisors to advise you on this.

This notification is not an exhaustive information document, please also refer to other disclosure documents on other aspects of CCPR and EMIR.

If you have questions in the meantime, please contact your usual Citi relationship manager.

Appendix to FIA Template CCPR Client Notification – Nasdaq Clearing AB

Version 1.0

March 2023

This Appendix sets out the recovery and default tools available to, or that may be applied to, Nasdaq Clearing AB (“**Nasdaq**”) in a recovery and resolution scenario as set out in the Clearing Rules of Nasdaq Derivatives Markets (the “**Rulebook**”) and certain other documentation published by Nasdaq referred to in this Appendix.

* indicates that while this measures is not specifically contemplated in the Rulebook, it is likely to be available to Nasdaq by virtue of its general powers.

Measure	Contemplated in Rulebook	Rulebook Reference	Additional Comments
Tear-up	✓	Schedule 2 to Appendix 16 of the Rulebook.	Tear-up may be applied in both directions (i.e. tear-up may be applied to portions of contracts that have both an opposing directional position and the same directional position to contracts in the defaulting clearing member’s portfolio).
Invoicing Back	x*	n/a	n/a
Forced Allocation	x*	n/a	n/a
Variation Margin Gains Haircutting (VMGH)	x*	n/a	n/a
Assessments	✓	Articles 1.9A.26 -28 of Appendix 16 of the Rulebook.	There is a cap on the amount of assessments that may be called.
Changes to Margin Criteria	✓	Articles 2.8.2a, 2.8.14, 2.8.16 and 2.8.17 of the Rulebook	-
Contingent Variation Margin	x*	n/a	n/a
Emergency Powers	✓	Articles 1.17.1 and 1.19 of the Rulebook.	In an emergency situation, Nasdaq may take various measures (including amending its rules) without

			notice. This means that Nasdaq could in practice adopt any of the measures outlined above which are not specifically provided for explicitly in the Rulebook.
Service Closure	✓	Schedule 4 of Appendix 16 of the Rulebook.	-

Appendix to FIA Template CCPR Client Notification - BME Clearing, S.A.U

Version 1.0

March 2023

This Appendix sets out the recovery and default tools available to, or that may be applied to, BME Clearing S.A.U (“**BME**”) in a recovery and resolution scenario as set out in the BME Central Counterparty Rulebook effective from 12 February 2023 (the “**Rulebook**”) and certain other documentation published by BME referred to in this Appendix.

* indicates that while this measure is not specifically contemplated in the Rulebook, it is likely to be available to BME by virtue of its general powers.

Measure	Contemplated in Rulebook	Rulebook Reference	Additional Comments
Tear-up	x*	n/a	n/a
Invoicing Back	x*	n/a	n/a
Forced Allocation	x*	n/a	n/a
Variation Margin Gains Haircutting (VMGH)	x*	n/a	n/a
Assessments	✓	Articles 29(5)(F), 45(8)(C)(7) and 55(1) of the Rulebook and Condition 1.14 of the General Conditions ³⁵ .	Although the BME rulebook does not explicitly provide for assessments, a clearing member may be required to provide additional contribution amounts to ensure the continuity of the service. A resolution authority may call a clearing member for a cash contribution of an amount equal to up to twice its contribution to the default. A failure to meet the required amount may result in the member being declared in default.

³⁵ BME Central Counterparty General Conditions, Financial Derivatives Segment dated 3 June 2021 and effective from 1 July 2021 (“**General Conditions**”).

Changes to Margin Criteria	✓	CPMI-IOSCO Self-Assessment 2020 (Q6.7.2); Articles 2(5) and 29(4) of the Rulebook; and Financial Derivatives General Conditions, Circular C GEN 12/2022 (<i>Valuation of Securities posted as Margins</i>).	-
Contingent Variation Margin	x*	n/a	n/a
Emergency Powers	✓	Article 2(5) of the Rulebook	In an emergency situation, BME has broad powers to amend its rules without notice. This means that BME could in practice adopt any of the measures outlined above which are not specifically provided for explicitly in the Rulebook.
Service Closure	✓	Article 45.8(C)(10) of the Rulebook	-

**Appendix to FIA Template CCPR Client Notification – European Commodity Clearing
AG**

Version 1.0

May 2023

This Appendix sets out the recovery and default tools available to, or that may be applied to, European Commodity Clearing AG (“ECC”) in a recovery and resolution scenario as set out in the Clearing Conditions of European Commodity Clearing effective from 8 May 2023 (the “**Rulebook**”) and the guide published by ECC entitled “Impact of Recovery and Resolution Tools on Members and Clients” effective from 19 December 2022 (the “**Recovery Guide**”).

* indicates that while this measure is not specifically contemplated in the Rulebook, it is likely to be available to ECC by virtue of its general powers.

Measure	Contemplated in Rulebook or Recovery Guide	Rulebook Reference	Additional Comments
Tear-up	✓	Section 3.11.9 of the Rulebook.	ECC may effect a “Partial Tear-Up” of remaining opposing positions held by a non-defaulting Clearing Member after at least one voluntary auction has been held and was insufficient to close out all positions in the default portfolio.
Invoicing Back	x*	n/a	n/a
Forced Allocation	✓	Sections 3.11 and 3.11.8 of the Rulebook.	ECC may hold mandatory auctions if at least one voluntary auction has been held and was insufficient to sufficiently reduce the risk in the default portfolio. ECC may also apply Forced Allocation in respect of remaining open positions after at least one voluntary and one mandatory auction has been held.
Variation Margin Gains Haircutting (VMGH)	x*	n/a	n/a

Assessments	✓	Sections 3.4.6.2(3) and 3.7.4 of the Rulebook.	-
Changes to Margin Criteria	✓	Sections 3.4.6.1(1) and 3.4.7(1) of the Rulebook.	
Contingent Variation Margin	x*	n/a	n/a
Emergency Powers	✓	Section 3.3.11 of the Rulebook.	In certain emergency scenarios, ECC has broad powers to take all appropriate and necessary measures to ensure orderly clearing. This means that ECC could in practice adopt any of the measures outlined above which are not specifically provided for in the Rulebook.
Service Closure	x*	n/a	n/a

Appendix to FIA Template CCPR Client Notification – Eurex Clearing

Version 1.0

March 2023

This Appendix sets out the recovery and default tools available to, or that may be applied to, Eurex Clearing AG (“**Eurex**”) in a recovery and resolution scenario as set out in the Clearing Conditions of Eurex Clearing AG as published on 12 February 2023 (the “**Rulebook**”) and certain other documentation published by Eurex referred to in this Appendix.

* indicates that while this measure is not specifically contemplated in the Rulebook, it is likely to be available to Eurex in certain circumstances by virtue of its general powers.

Measure	Contemplated in Rulebook	Rulebook Reference	Additional Comments
Tear-up	✓	Chapter I Part 1, Conditions 7.5.4.1, 7.5.4.3, 17.7.2(2)(a) and 17.7.2(b)(i) and (iii).	Eurex or the resolution authority may terminate transactions with opposite directional positions to those of the defaulting clearing member. Eurex or the resolution authority may also terminate all transactions within a liquidation group on the occurrence of a clearing member default where the resources available to Eurex are not sufficient to cover its losses.
Invoicing Back	✓	Chapter I Part 1, Conditions 13.3.1 and 13.3.3.	Eurex may establish opposite corresponding transactions with respect to transactions affected by a force majeure event, market disorder event or an impossibility event.
Forced Allocation	x*		-
Variation Margin Gains Haircutting (VMGH)	✓	Chapter I, Part 1, 17.7.2(3).	-
Assessments	✓	Chapter I Part 1, Conditions 6.3.1 and 17.7.2(4).	There is a cap on the amount of assessments that may be called

Changes to Margin Criteria	✓	Chapter I Part 1 Conditions 1.6.3 (b), 3.2.1, 3.2.4, 3.2.5 and 16.1.	
Contingent Variation Margin	x*	n/a	n/a
Emergency Powers	✓	Chapter I, Part 1, Condition 13.3.1(2)(ii) and 17.3.1(2) Chapter VIII, Part 1, Condition 1.5	Eurex has broad powers to take any action or amend the rulebook following a market disorder event, impossibility event or force majeure event and to pass emergency resolutions in the event of extraordinary market conditions. This means that Eurex could in practice adopt any of the measures outlined above which are not specifically provided for explicitly in the Rulebook.
Service Closure	✓	Chapter I, Part 1, Condition 13.3.1(3).	Eurex may suspend clearing services following a market disruption event, force majeure event or impossibility event.

Appendix to FIA Template CCPR Client Notification – Euronext Clearing

Version 1.0

March 2023

This Appendix sets out the recovery and default tools available to, or that may be applied to, Cassa di Compensazione e Garanzia S.p.A. (“CC&G”), trading under the name Euronext Clearing, in a recovery and resolution scenario as set out in the Cassa di Compensazione e Garanzia Regulations dated 12 February 2023 (the “**Rulebook**”) and certain other documentation published by CC&G referred to in this Appendix.

Measure	Contemplated in Rulebook	Rulebook Reference	Additional Comments
Tear-up	x	n/a	n/a
Invoicing Back	x	n/a	n/a
Forced Allocation	✓	Article B.6.2.1 of the Rulebook.	Forced allocation is only applicable in respect of agricultural commodity derivatives (and, in the case of severe market illiquidity, single stock dividend futures and futures on the FTSE MIB dividend index).
Variation Margin Gains Haircutting (VMGH)	✓	Article B.7.1.1(2)(iii) of the Rulebook.	This power is only available after CC&G has determined to close a clearing service.
Assessments	✓	Articles B.4.2.5 and B.6.2.3.1 of the Rulebook.	There is a cap on the amount of assessments that may be called.
Changes to Margin Criteria	✓	Articles B.4.1.3 and B.4.1.1.7 of the Rulebook and Condition 7.3 of General Conditions I.	Urgent changes to the margin criteria may be made on 5 calendar days’ notice.
Contingent Variation Margin	x	n/a	n/a
Emergency Powers	✓	Condition 7.3 of the General Conditions I. A.1.1.3.5, Regulations	In an emergency situation, CC&G has broad powers to amend its rules or take action on little or no notice. This means that CC&G could in practice adopt any

			of the measures outlined above which are not specifically provided for explicitly in the Rulebook.
Service Closure	✓	Article B.7.1.1 of the Rulebook.	

Appendix to FIA Template CCPR Client Notification – KDPW_CCP S.A. Version

1.0

December 2024

Disclaimer: The Futures Industry Association (“FIA”) has published this appendix (this “Appendix”) for use by FIA subscribing firms in conjunction with the FIA Template CCPR Client Notification (the “Template”). This Appendix is provided by FIA subject to the disclaimer set out in the Template and members must have regard to such disclaimer and the information contained therein when using this Appendix.

This Appendix sets out the recovery and default tools available to, or that may be applied to, KDPW_CCP S.A. (“KDPW”) in a recovery and resolution scenario as set out in:

- (i) the Rules of Transaction Clearing (Organised Trading), valid as of 16 July 2024 (the “**Organised Trading Rulebook**”); and
- (ii) the Rules of Transaction Clearing (non-organised trading) valid as of 16 July 2024 (the “**Non-Organised Trading Rulebook**”),

(together, the “**Rulebooks**”).¹

* indicates that while this measure is not specifically contemplated in one or more of the Rulebooks, it is likely to be available to KDPW by virtue of its general powers.

Measure	Contemplated in Rulebooks	Rulebook Reference ²	Additional Comments
Tear-up	✓	Article 65(1)(2) of the Organised Trading Rulebook	KDPW may only effect a tearup (in whole or in part) of the positions held by nondefaulting clearing members: (i) after three auctions have been held; and (ii) subject to the consent of clearing members party to at least two thirds of the value of the positions recorded in the clearing system that are affected by such tear-up.
		Article 108b(1)(2) of the Non-Organised Trading Rulebook	
Invoicing Back	x*	n/a	n/a

¹ KDPW has also published Rules of clearing and settlement of EUA/EUAA sale transactions. As this document does not include recovery and default tools of the type described in this Annex it has not been included in the table.

² **Note to members:** This column has been included for reference, but firms may wish to delete from the final version sent to clients.

Forced Allocation	x*	n/a	n/a
Variation Margin Gains Haircutting (VMGH)	✓	Articles 65(1)(1) and 65a of the Organised Trading Rulebook	VMGH may only be effected with the consent of clearing members party to at least two thirds of the value of the positions recorded in the clearing system that are affected by such VMGH. Under the Organised Trading Rulebook, VMGH may reduce the financial benefits or interest coupons payable to a clearing member by KDPW. Under the Non-Organised Trading Rulebook, VMGH may reduce the variation margin or settlement amount payable to a clearing member by KDPW.
		Article 108b(1)(1) and 108c of the Non-Organised Trading Rulebook	
Assessments	✓	Article 66 of the Organised Trading Rulebook	There is a cap on the amount of assessments that may be called. Under the Rulebooks, ³⁶ clearing members may not be called for greater than 100% of their existing maximum contributions.
		Articles 108 and 108a of the Non-Organised Trading Rulebook	
Changes to Margin Criteria	✓	Articles 2 and 47 of the Organised Trading Rulebook	-
		Articles 3 and 79 of the Non-Organised Trading Rulebook	
Contingent Variation Margin	x*	n/a	n/a

³⁶ The Non-Organised Trading Rulebook specifies two limits on the amount of assessment that may be called. One is set at 100% of the existing maximum contributions of a clearing member and one at 50%. It is unclear from the Non-Organised Trading Rulebook which applies, so the prudent approach would be to assume it is 100% in line with the Organised Trading Rulebook.

Emergency Powers	x*	n/a	n/a
Service Closure	x*	n/a	n/a

**Disclosure pursuant to Article 39 (7) EMIR with
respect to the FCM Clearing Conditions of
Eurex Clearing AG**

July 2025

Disclosure pursuant to Article 39 (7) of Regulation (EU) No 648/2012 of the European Parliament and the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories ("EMIR") with respect to the FCM Clearing Conditions of Eurex Clearing AG

Purpose and Scope

Eurex Clearing AG ("**Eurex Clearing**") as a central counterparty ("**CCP**") is required pursuant to Article 39 (7) EMIR to publicly disclose certain information on the levels of protection and segregation which it provides under its client clearing models.

This document (the "**FCM Clearing Conditions Disclosure Document**") sets out the information required to be disclosed under Article 39 (7) EMIR. It provides a summary description of the client clearing models offered by Eurex Clearing under the FCM Clearing Conditions of Eurex Clearing (the "**FCM Clearing Conditions**"), including information on the main legal implications of the clearing models and applicable insolvency law.

Capitalised terms not defined in this FCM Clearing Conditions Disclosure Document shall have the meaning ascribed to them in the FCM Clearing Conditions.

The information in this FCM Clearing Conditions Disclosure Document is subject to change and is qualified in its entirety by the FCM Clearing Conditions. The content of this FCM Clearing Conditions Disclosure Document is restricted to a descriptive summary of certain provisions of the FCM Clearing Conditions as they apply to each of the LSOC-Models and only provides a general overview on the levels of protection and segregation under the relevant LSOC-Models. In particular, it does not provide any guidance on any restrictions or limitations which may arise from the applicable laws of the jurisdictions in which the FCM Clearing Members and/or their FCM Clients have their registered seat. Further, this FCM Clearing Conditions Disclosure Document does not provide (and does not intend to provide) any analysis of, or advice regarding any legal, accounting, regulatory or other effects of the FCM Clearing Conditions. Accordingly, this FCM Clearing Conditions Disclosure Document is not a substitute for an own legal and economic analysis of the FCM Clearing Conditions and the LSOC Models described herein, and Eurex Clearing does not assume any liability for the content of this FCM Clearing Conditions Disclosure Document or any omissions therefrom.

For a summary description of the client clearing models offered by Eurex Clearing under the Clearing Conditions of Eurex Clearing governed by German law (the "Clearing Conditions"), please refer to the document setting out the information required to be disclosed under Article 39 (7) EMIR with respect to the Clearing Conditions ("Clearing Conditions Disclosure Document") on the website <https://www.eurex.com/ec-en/services/risk-management/client-asset-protection-emir>.

The Clearing Models

Eurex Clearing currently offers the following client clearing models under the Clearing Conditions and the FCM Clearing Conditions that provide for different levels of client segregation:

- the Elementary Clearing Model ("**ECM**");
- the Individual Segregated Account ("**ISA**");
- the "**LSOC Without Excess Model**"; and
- the "**LSOC With Excess Model**".

The ECM and the ISA are regulated under the Clearing Conditions. An overview on the levels of protection and segregation under such clearing models is provided in a separate disclosure document ("**Clearing Conditions Disclosure Document**").

The LSOC Without Excess Model and the LSOC With Excess Model (together, the "**LSOC-Models**") are regulated in the FCM Clearing Conditions, which consist of two parts: (i) the FCM Regulations and (ii) the FCM Default Rules. The FCM Clearing Conditions will be partly governed by U.S. and German law and will only be available in the English language. The FCM Regulations comprise general and LSOC model-specific rules in Chapter I as well as product-specific provisions for swaps in Chapter II. Separate FCM Default Rules governed by German law contain rules relating to the default of FCM Clearing Members.

The LSOC-Models will only be offered to FCM Clearing Members which are registered as Future Commission Merchants ("**FCM**") with the U.S. Commodity Futures Trading Commission ("**CFTC**"). The Clearing under the LSOC-Models covers all transactions resulting from the novation of any interest rate derivatives transaction falling under Chapter II Part 2 of the FCM Regulations (each an "**Interest Rate Derivative Transaction**").

The FCM Clearing Member has the choice to provide clearing services to FCM Clients under the LSOC Without Excess Model and the LSOC With Excess Model:

- (i) The LSOC Without Excess Model is the basic LSOC-Model, under which the portion of the FCM Client Margin Account reserved for a particular client (legally segregated value - "**LSV**") is equal to the FCM Client Margin Requirement and the legally segregated value cannot exceed the FCM Client Margin Requirement on a day-to-day basis.
- (ii) The LSOC With Excess Model provides the FCM Clearing Member the option to assign specific portions of the FCM Client Margin Account to specific FCM Clients including excess margin. This requires the FCM Clearing Member to deliver a collateral value report ("**CVR**") to Eurex Clearing in which the LSVs for all FCM Clients are determined. The choice under which LSOC-Model the FCM Clearing Member wants to clear FCM Client Transactions needs to be performed in the systems of Eurex Clearing when setting up the FCM Client Margin Account.

Both LSOC-Models operate as a so-called “agency clearing model”. The FCM Clearing Member will act in its capacity as an agent (for purposes of CFTC Regulation 39.12 (b) (6)) and on behalf and for the account of its FCM Clients and the entire clearing relationship shall be administered and settled through the FCM Clearing Member, so that the FCM Clearing Member is directly bound by the FCM Clearing Conditions and responsible for all payment and delivery obligations in relation to all its FCM Clients. Eurex Clearing treats the FCM Clearing Member as principal for purposes of the rights and obligations arising from all FCM Client

Transaction. The FCM Client does not have any direct contractual relationship with Eurex Clearing with the consequence that there are no direct rights and obligations between Eurex Clearing and the FCM Client.

The LSOC-Models are regulated in the FCM Regulations as follows:

□ Chapter I Numbers 6.3 and 6.4 of the FCM Regulations contain the provisions for the LSOC Without Excess Model; and

□ Chapter I Numbers 6.3 and 6.5 of the FCM Regulations contain the provisions for the LSOC With Excess Model.

Eurex Clearing does not charge separate fees for the use of a specific LSOC-Model. Costs related to clearing are set out in the price list of Eurex Clearing.

The LSOC Without Excess Model

The LSOC Without Excess Model complies with the requirements stipulated by Part 22 of the CFTC Regulations and only covers the clearing of customer related transactions (the "**FCM Client Transactions**").

The LSOC Without Excess Model is set up as a LSOC-compliant (legally segregated operationally commingled) clearing model. The primary objective of Part 22 of the CFTC Regulations is to minimize the “fellow customer risk” for FCM Clients in case of the default or insolvency of the FCM Clearing Member.

Such rules require that a derivatives clearing organisation (“**DCO**”) is restricted from utilizing the value of margin assets allocated to one FCM Client to meet the obligations arising from Own Transactions of the FCM Clearing Member and from FCM Client Transactions of another FCM Client. The LSOC Without Excess Model provides for the segregation of transactions and margin assets of an FCM Clearing Member from the positions and assets of its FCM Clients and it also provides segregation of transactions and margin assets on a value basis from the positions and margin assets of any other FCM Client of such FCM Clearing Member. The margin assets of all FCM Clients are commingled in the same FCM Client Margin Account, however, the portion of value of the FCM Client Margin Account which is reserved for the relevant FCM Client (LSV) is segregated from the LSV of each other FCM Client. FCM Clients do not bear the risk of losses arising from the Own Transactions of their

FCM Clearing Member or from FCM Client Transactions of other FCM Clients of such FCM Clearing Member.

Structure

In addition to the LSOC-Models, the FCM Regulations also provide the FCM Clearing Member with the optionality to clear proprietary transaction ("**Own Transaction**").

Eurex Clearing establishes and maintains with respect to each FCM Clearing Member one or more transaction accounts for Own Transactions of the FCM Clearing Member (each account an "**FCM Clearing Member Own Transaction Account**") and with respect to FCM Client Transactions, a separate account for each FCM Client (each, an "**FCM Client Transaction Account**").

The legal segregation of the contractual rights and obligations arising from Own Transactions and FCM Client Transactions and the segregation of the contractual rights and obligations arising from FCM Client Transactions of one FCM Client and the FCM Client Transactions of any other FCM Client is achieved via the legal combination of certain transactions into separate netting sets. In case of a default or insolvency with respect to the FCM Clearing Member, each netting set is the legal basis for a close-out netting and the determination of a net claim resulting therefrom and/or porting (the latter only applies to FCM Client Transactions). All Own Transactions in all FCM Clearing Member Own Transaction Accounts form a single Netting Set ("**FCM Clearing Member Netting Set**") and all FCM Client Transactions of each FCM Client booked into the relevant FCM Client Transaction Account of such FCM Client form a separate Netting Set (each a "**FCM Client Netting Set**").

Further, Eurex Clearing establishes and maintains for each FCM Clearing Member one internal proprietary margin account (the "**FCM Clearing Member Proprietary Margin Account**") to which the collateral value with respect to all Own Transactions of the FCM Clearing Member shall be booked and one or more internal margin accounts for FCM Client Transactions (each an "**FCM Client Margin Account**") to which the collateral value with respect to the relevant FCM Client Transactions shall be booked.

Within each FCM Client Margin Account, Eurex Clearing establishes the following separate sub-accounts:

- (i) separate margin sub-account linked to each FCM Client Transaction Account (each an "**FCM Client Margin Sub-Account**");
- (ii) one sub-account linked to the FCM Buffer (the "**FCM Client Buffer Sub-Account**"); and
- (iii) one sub-account linked to the Unallocated Excess (the "**FCM Client Unallocated Excess Sub-Account**").

Each FCM Client Margin Sub-Account represents the LSV of all Eligible Margin Assets booked into the FCM Client Margin Account which is reserved for the relevant FCM Client. The collateral in each FCM Client Margin Sub-Account is only allocated to the relevant FCM Client on a value basis; no specific Eligible Margin Assets are allocated to the FCM Clients. Each FCM Client Margin Sub-Account is linked to the FCM Client Transaction Account of the relevant FCM Client.

The FCM Client Buffer Sub-Account represents the value of the Eligible Margin Assets booked into the FCM Client Margin Account which is reserved for the FCM Buffer. The "**FCM Client Buffer**" provides an additional layer of collateral for each FCM Client Margin Account in accordance with CFTC regulation § 22.13. The FCM Buffer is also value-based and consists of Eligible Margin Assets owned by the FCM Clearing Member, but provided to Eurex Clearing to serve as cover for any collateral shortfall arising from any FCM Client Margin Sub-Account due to entering into new FCM Client Transactions or intraday portfolio shifts. Before issuing intraday margin calls, Eurex Clearing takes into account the value of the FCM Client Buffer. In case of the occurrence of a default or insolvency with respect to the FCM Clearing Member, the FCM Client Buffer can be used to cover any margin shortfall under any FCM Client Margin Sub-Account. But, as the FCM Client Buffer consists of the FCM Clearing Members own assets, the FCM Client Buffer cannot be ported.

The FCM Client Unallocated Excess Sub-Account represents any margin excess arising from any FCM Client Margin Sub-Account due to intraday portfolio shifts of any FCM Client, which are booked from the relevant FCM Client Margin Sub-Accounts into the FCM Client Unallocated Excess Sub-Account once a day at the end of each business day (the "**Unallocated Excess**"). As an FCM Clearing Member is not allowed to hold excess margin on a FCM Client Margin Sub-Account on a day-to-day basis under the LSOC Without Excess Model, all excess margin on the FCM Client Unallocated Excess Sub-Account is returned to the FCM Clearing Member at the end of each business day. Further, the Unallocated Excess cannot be used to cover any (intraday or end-of day) margin shortfall with respect to an FCM Client. In case of the occurrence of a default or an insolvency with respect to a FCM Clearing Member, the Unallocated Excess needs to be returned to the FCM Clearing Member for the benefit of the FCM Clients of the FCM Clearing Member.

Set-off

If any amounts are payable on the same date, the same currency and to or from the same FCM Clearing Member Client Cash Account between Eurex Clearing and an FCM Clearing Member in both directions in respect of a FCM Client Transaction Accounts, Eurex Clearing will aggregate the payments owed by Eurex Clearing into a single aggregated payment amount and will aggregate the payments owed by the FCM Clearing Member into a single aggregated payment amount, separately in respect of the FCM Client Margin Requirement and any Variation Settlement amounts owed (each a separate "**Accumulation Amount**").

The Accumulation Amounts owed by Eurex Clearing to the FCM Clearing Member and by the FCM Clearing Member to Eurex Clearing in respect to the FCM Client Margin Requirement will not be netted against one another.

The Accumulation Amounts owed by Eurex Clearing AG to the FCM Clearing Member and by the FCM Clearing Member to Eurex Clearing for Variation Settlement will be netted against one another.

Margin Requirements and Margin Calls

Eurex Clearing determines a separate net margin requirement for each FCM Client Transaction Account (each a "**FCM Client Margin Requirement**") and requests the FCM Clearing Member to deliver separate cover with respect to each FCM Client Margin Requirement.

Under the LSOC Without Excess Model, it is not permitted that the LSV for an FCM Client exceeds the FCM Client Margin Requirement on a day-to-day basis, but a LSV may exceed the FCM Client Margin Requirement on an intraday basis (excess margin). If any excess margin is attributable to an FCM Client following a close of the end-of-day clearing cycle, Eurex Clearing transfers any excess margin to the FCM Client Unallocated Excess Sub Account of the FCM Client Margin Account, whereupon such excess margin becomes FCM Client Unallocated Excess.

If the Margin Requirement with respect to an FCM Client exceeds the LSV intraday, Eurex Clearing is permitted to apply any portion of the FCM Client Buffer booked in the FCM Client Buffer Sub-Account to satisfy the margin shortfall for such FCM Client (the "**Encumbered FCM Client Buffer**"). Eurex Clearing will issue a Margin Call with respect to an FCM Client only if the FCM Client Margin Requirement exceeds the sum of the LSV and any Encumbered FCM Client Buffer.

In the end-of day settlement cycle, Eurex Clearing will calculate the Margin Requirement for each FCM Client without regarding any Unencumbered FCM Client Buffer. However, the FCM Clearing Member may elect to use the Encumbered FCM Client Buffer to meet the Margin Call. In such case, the Encumbered FCM Client Buffer becomes part of the LSV and no longer constitutes Encumbered FCM Client Buffer.

Eurex Clearing submits the Margin Call with respect to the relevant FCM Client to the FCM Clearing Member which is required to provide cover to Eurex Clearing on behalf of the relevant FCM Client in an amount not less than the Margin Call.

FCM Client Margin can be provided in the form of cash or in the form of securities. Eligible Margin Assets in the form of cash are transferred to Eurex Clearing via full title transfer. In order to provide Eligible Margin Assets in the form of securities, the FCM Clearing Member shall transfer the securities to the relevant FCM Client Pledged Securities Account with the consequence that all securities credited to such account are pledged in favour of Eurex Clearing.

Collateral Value Decrease

If Eurex Clearing determines that the value of all Eligible Margin Assets recorded in an FCM Client Margin Account has decreased, e.g. due to changes in the market value of the Eligible Margin Assets or to changes in foreign exchange rates used to calculate the value ("**Collateral Value Decrease**"), Eurex Clearing AG shall be entitled to demand that an FCM Clearing Member furnish additional Eligible Margin Assets to Eurex Clearing AG up to the amount of the Collateral Value Decrease ("**Collateral Call**").

In case of the occurrence of a Termination Event with respect to the FCM Clearing Member and a Collateral Value Decrease occurs after such Termination Event, Eurex Clearing shall reduce pro rata the legally segregated value of Eligible Margin Assets recorded in each FCM Client Margin Sub-Account, the FCM Client Unallocated Excess Sub-Account, and the FCM Client Buffer Sub-Account.

Transfer of FCM Client Transactions (porting) and Close-out

If a Termination Event occurs with respect to a FCM Clearing Member and Eurex Clearing has issued a Declaration of Termination with respect to the Own Transactions to the FCM Clearing Agreement, Eurex Clearing is entitled to exercise the following rights separately for each FCM Client Netting Set:

- (i) either its right to treat FCM Client Transactions under the relevant Netting Set as if they are terminated by issuing an FCM Client Declaration of Termination and shall calculate the Difference Claim with respect to such Netting Set, or
- (ii) its right to transfer all FCM Client Transactions under the relevant FCM Client Netting Set (including the relevant Eligible Margin Assets) to one or more other FCM Clearing Members (each a "**Replacement FCM Clearing Member**").

Before treating the relevant FCM Client Transactions as if they are terminated, Eurex Clearing will use reasonable efforts to transfer FCM Client Transactions (including Eligible Margin Assets) to one or more Replacement FCM Clearing Members by initiating a porting process with respect to all FCM Clients of the terminated FCM Clearing Member. Each FCM Client can be ported individually to a separate Replacement FCM Clearing Member.

The porting process is initiated by Eurex Clearing by giving notice to all other FCM Clearing Members, all FCM Clients of the defaulted FCM Clearing Member, and to all Non-FCM Clearing Members of the occurrence of the Termination Event with respect to the FCM Clearing Member and that Eurex Clearing AG is initiating the porting process with respect to the FCM Client Transactions (the "**Replacement Notice**").

- (i) Transfer of FCM Client Transactions (porting): If a potential Replacement FCM Clearing

Member is willing to accept the transfer of FCM Client Transactions in one or more FCM Client Transaction Accounts, and all FCM Clearing Member Replacement Requirements in respect of the relevant FCM Client Transactions are fulfilled until 13:00 p.m. CET on the Business Day following the date on which the FCM Clearing Member Termination Time occurs (the "**Replacement Cut-Off Time**"), the FCM Client Transactions, and all rights and obligations of the Affected FCM Clearing Member arising from such FCM Client Transactions, shall be transferred to the new FCM Clearing Member. As a result of such transfer, the terminated FCM Clearing Member will be released from all its obligations in relation to the transferred FCM Client Transactions and the Replacement FCM Clearing Member shall have assumed such obligations in relation to such FCM Client Transactions.

In addition to the transferred FCM Client Transactions, Eurex Clearing will also transfer a portion of the value of Eligible Margin Assets booked on the FCM Client Margin Account equal to the LSV of the relevant FCM Client to the Replacement FCM Clearing Member.

(ii) Close-out: As stated above, Eurex Clearing always remains entitled to exercise its termination right with respect to each FCM Client Netting Set by issuing a declaration of termination with respect to the relevant FCM Client (the "**FCM Client Declaration of Termination**"). All FCM Client Transactions forming an FCM Client Netting Set shall be treated as if they are terminated. This may in particular apply, if no Replacement FCM Clearing Member can be identified or if a potential Replacement FCM Clearing Member does not fulfil the FCM Clearing Member Replacement Requirements with respect to an FCM Client Netting Set until the Replacement Cut-Off Time.

Eurex Clearing AG may extend the Replacement Cut-Off Time to facilitate porting of FCM Client Transactions by giving notice to the Affected FCM Clearing Member and all FCM Clients to the Affected FCM Clearing Member, and all other FCM Clearing Members, and to all Non-FCM Clearing Members, in accordance with Number 15.1 Clause (ii) of the FCM Regulations of Eurex Clearing AG.

Eurex Clearing will liquidate such FCM Client Transactions in accordance with the FCM Default Rules and calculates a separate close-out amount (each a "**Difference Claim**") for each FCM Client Netting Set by way of combining the values of all FCM Client Transactions combined in the relevant FCM Client Netting Set. The final amount of the Difference Claim shall (i) if it is a positive figure, be owed by Eurex Clearing to the FCM Clearing Member on behalf of the relevant FCM Client, or (ii) if it is a negative figure, be owed by the FCM Clearing Member on behalf of the relevant FCM Client to Eurex Clearing.

In case Eurex Clearing is the creditor of the Difference Claim, Eurex Clearing is entitled to realize its security interests in the Eligible Margin Assets. Eurex Clearing will realize security interests with a value amounting to the sum of the relevant LSV reserved for the FCM Client and any Encumbered FCM Buffer. In case of a remaining FCM Client Margin shortfall, Eurex Clearing will apply FCM Client Buffer (other than Encumbered FCM Client Buffer) to satisfy an

FCM Client Margin shortfall. If the available FCM Client Buffer is insufficient to satisfy in full all

FCM Client Margin shortfalls of all FCM Clients linked to the FCM Client Margin Account, Eurex Clearing will apply the available FCM Client Buffer on a pro rata basis to each FCM Client with an FCM Client Margin shortfall.

In the case of Eligible Margin Assets in the form of cash, Eurex Clearing will use such cash and, in the case of Eligible Margin Assets in the form of securities, Eurex Clearing will realize its security interest granted by the defaulted FCM Clearing Member in accordance with the Pledge Agreement.

In case Eurex Clearing is the debtor of the Difference Claim, the Difference Claim shall be discharged by payment of the relevant amount to the defaulted FCM Clearing Member and such payment shall constitute a return to the FCM Clearing Member for the account of the relevant FCM Client. Any remaining pledges in respect of Eligible Margin Assets in the form of securities booked into the FCM Client Margin Account shall expire and the pledged securities shall be released by Eurex Clearing. Any remaining Eligible Margin Assets in the form of cash booked into the FCM Client Margin Account shall be returned to the defaulted FCM Clearing Member for the benefit of its FCM Clients.

Insolvency Law

In case of the occurrence of an Insolvency Termination Event with respect to the FCM Clearing Member, generally, the same will apply as described under item 2.1.5 above.

However, in case of the occurrence of an Insolvency Termination Event, the FCM Clearing Member would be subject to an insolvency proceeding pursuant to the applicable U.S. laws. As a consequence, Eurex Clearing will seek to coordinate with the CFTC and the bankruptcy trustee (or a comparable person responsible for administering the proceeding) with respect to the transfer of FCM Client Transactions and Eligible Margin Assets allocated to the relevant FCM Client. Eurex Clearing may deviate from the provisions and processes described above, if so required by the CFTC and the bankruptcy trustee (or a comparable person responsible for administering the proceeding).

Further, the bankruptcy trustee (or a comparable person responsible for administering the proceeding) may require Eurex Clearing that less than all of the LSV reserved for the particular FCM Client is transferred or realized in order for the Bankruptcy Trustee to comply with the pro rata loss sharing provisions under U.S. insolvency law. The FCM Client Margin that is not subject to the transfer or the realization will be held at the direction of or delivered to the bankruptcy trustee by Eurex Clearing.

The LSOC With Excess Model

The main difference between the LSOC Without Excess and the LSOC With Excess Model is that, under the LSOC With Excess Model, the LSV reserved for a specific FCM Client is not (necessarily) equal to the FCM Client Margin Requirement for such FCM Client. Rather, the FCM Clearing Member has the option to assign specific (value) portions of the FCM Client Margin Account to specific FCM Clients going beyond the actual FCM Client Margin Requirement (excess margin). Such assignment is done by the FCM Clearing Member by submitting a CVR to Eurex Clearing at least once per Business Day in which the value of the LSVs for all FCM Clients and the FCM Client Buffer are determined.

In addition, please refer to the statements made with respect to the LSOC Without Excess Model under item 2.1. above, which shall apply to the LSOC With Excess Model accordingly.

Structure

Please refer to the statements made with respect to the LSOC Without Excess Model under item 2.1.1. above, which shall apply to the LSOC With Excess Model accordingly.

In addition, the following shall apply:

Under the LSOC With Excess Model, Eurex Clearing establishes within each FCM Client Margin Account in addition to

- (i) one separate FCM Client Margin Sub-Account for each FCM Client,
- (ii) one FCM Client Buffer Sub-Account, and

- (iii) one FCM Client Unallocated Excess Sub-Account,

the following sub-accounts:

- (iv) a separate margin sub-account for each FCM Client for margin assets provided to Eurex Clearing intra-day or end-of-day upon a Margin Call before a new CVR is submitted (each an "**FCM Client Assumed Allocation Sub-Account**").

The FCM Client Assumed Allocation Sub-Account represents the Assumed Allocation which has been allocated by Eurex Clearing to the relevant FCM Client. When an FCM Clearing Member delivers Eligible Margin Assets to Eurex Clearing to satisfy a Margin Call and prior to the delivery of a CVR, Eurex Clearing shall automatically allocate such Eligible Margin Assets among each of the FCM Client Margin Sub-Accounts with respect to which Eurex Clearing determined an FCM Client Margin shortfall (the "**Assumed Allocation**"). Eurex Clearing will consider any Assumed Allocation when determining whether a Margin Call shall be issued with respect to the relevant FCM Client. Once a FCM Clearing Member submits a new CVR to Eurex Clearing allocating all Eligible Margin Assets booked into the FCM Client Margin Account, each FCM Client Assumed Allocation Sub-Account is reduced to zero. In case of the default or insolvency with respect to the FCM Clearing Member, Eurex

Clearing shall treat any Assumed Allocation as part of the FCM Client Margin of the relevant FCM Client. Further, the Assumed Allocation can also be used in case of a transfer of the FCM Client Transactions (porting).

Set-off

Please refer to the statements made with respect to the LSOC Without Excess Model under item 2.1.2. above, which shall apply to the LSOC With Excess Model accordingly.

Margin Requirements and Margin Calls

Eurex Clearing determines a separate FCM Client Margin Requirement for each FCM Client.

Under the LSOC With Excess Model, the FCM Clearing Member has the option to assign specific portions of the value of Eligible Margin Assets booked in the FCM Client Margin Account to specific FCM Clients including excess margin.

If the Margin Requirement with respect to an FCM Client exceeds the sum of the LSV and any Assumed Allocation allocated to such FCM Client intraday, Eurex Clearing is permitted to apply any portion of the FCM Client Buffer booked in the FCM Client Buffer Sub-Account to satisfy the margin shortfall for such FCM Client (Encumbered FCM Client Buffer). Eurex Clearing will issue a Margin Call with respect to an FCM Client only, if the FCM Client Margin Requirement exceeds the sum of the LSV, any Assumed Allocation allocated to such FCM Client and any Encumbered FCM Client Buffer allocated to such FCM Client.

In the end-of day settlement cycle, Eurex Clearing will calculate the Margin Requirement for each FCM Client with regarding any Assumed Allocation, but without regarding any Unencumbered FCM Client Buffer. However, the FCM Clearing Member may elect to use the

Encumbered FCM Client Buffer to meet the Margin Call. In such case, the Encumbered FCM Client Buffer becomes part of the LSV and no longer constitutes Encumbered FCM Client Buffer.

Eurex Clearing submits the Margin Call with respect to the relevant FCM Client to the FCM Clearing Member which is required to provide cover to Eurex Clearing on behalf of the relevant FCM Client in an amount not less than the Margin Call.

FCM Client Margin can be provided in the form of cash or in the form of securities. Eligible Margin Assets in the form of cash are transferred to Eurex Clearing via full title transfer. In order to provide Eligible Margin Assets in the form of securities, the FCM Clearing Member shall transfer the securities to the relevant FCM Client Pledged Securities Account with the consequence that all securities credited to such account are pledged in favour of Eurex Clearing.

Collateral Value Decrease

If Eurex Clearing determines that Collateral Value Decrease has occurred with respect to a FCM Client Margin Account, Eurex Clearing AG shall be entitled to issue a Collateral Call.

In case of the occurrence of a Termination Event or Insolvency Termination Event with respect to the FCM Clearing Member and the occurrence of a Collateral Value Decrease, Eurex Clearing shall reduce pro rata the legally segregated value of Eligible Margin Assets recorded in each FCM Client Margin Sub-Account, the FCM Client Unallocated Excess Sub-Account, the FCM Client Buffer Sub-Account and any FCM Client Assumed Allocation Sub-Account.

Transfer of FCM Client Transactions (porting) and Close-out

If a Termination Event occurs with respect to a FCM Clearing Member and Eurex Clearing has issued a Declaration of Termination with respect to the Own Transactions to the FCM Clearing Agreement, Eurex Clearing is entitled to exercise the following rights separately for each FCM Client Netting Set:

- (i) either its right to treat FCM Client Transactions under the relevant Netting Set as if they are terminated by issuing an FCM Client Declaration of Termination and shall calculate the Difference Claim with respect to such Netting Set, or
- (ii) its right to transfer all FCM Client Transactions under the relevant FCM Client Netting Set to one or more other Replacement FCM Clearing Member(s).

Before treating the relevant FCM Client Transactions as if they are terminated, Eurex Clearing will use reasonable efforts to transfer FCM Client Transactions (including Eligible Margin Assets) to one or more Replacement FCM Clearing Members by initiating a porting process with respect to all FCM Clients of the terminated FCM Clearing Member. Each FCM Client can be ported individually to a separate Replacement FCM Clearing Member.

The porting process is initiated by Eurex Clearing by giving notice to all other FCM Clearing Members, all FCM Clients of the defaulted FCM Clearing Member, and to all Non-FCM

Clearing Members of the occurrence of the Termination Event with respect to the FCM Clearing Member and that Eurex Clearing AG is initiating the porting process with respect to the FCM Client Transactions (the “**Replacement Notice**”).

(i) Transfer of FCM Client Transactions (porting): If a potential Replacement FCM Clearing Member is willing to accept the transfer of FCM Client Transactions in one or more FCM Client Transaction Accounts, and all FCM Clearing Member Replacement Requirements in respect of the relevant FCM Client Transactions are fulfilled by the end of the Replacement Cut-Off Time, the FCM Client Transactions, and all rights and obligations of the Affected FCM Clearing Member arising from such FCM Client Transactions, shall be transferred to the new FCM Clearing Member. As a result of such transfer, the terminated FCM Clearing Member will be released from all its obligations in relation to the transferred FCM Client Transactions and the Replacement FCM Clearing Member shall have assumed such obligations in relation to such FCM Client Transactions.

In addition to the transferred FCM Client Transactions, Eurex Clearing will also transfer a portion of the value of Eligible Margin Assets booked on the FCM Client Margin Account equal to the LSV of the relevant FCM Client (including any Assumed Allocation with respect to such FCM Client) to the Replacement FCM Clearing Member.

(ii) Close-out: As stated above, Eurex Clearing always remains entitled to exercise its termination right with respect to each FCM Client Netting Set by issuing a FCM Client Declaration of Termination. All FCM Client Transactions forming an FCM Client Netting Set shall be treated as if they are terminated. This may in particular apply, if no Replacement FCM Clearing Member can be identified or if a potential Replacement FCM Clearing Member does not fulfil the FCM Clearing Member Replacement Requirements with respect to an FCM Client Netting Set until the Replacement Cut-Off Time.

Eurex Clearing AG may extend the Replacement Cut-Off Time to facilitate porting of FCM Client Transactions by giving notice to the Affected FCM Clearing Member and all FCM Clients to the Affected FCM Clearing Member, and all other FCM Clearing Members, and to all Non-FCM Clearing Members, in accordance with Number 15.1 Clause (ii) of the FCM Regulations of Eurex Clearing AG.

Eurex Clearing will liquidate such FCM Client Transactions in accordance with the FCM Default Rules and calculates a separate Difference Claim for each FCM Client Netting Set by way of combining the values of all FCM Client Transactions combined in the relevant FCM Client Netting Set. The final amount of the Difference Claim shall

- (i) if it is a positive figure, be owed by Eurex Clearing to the FCM Clearing Member on behalf of the relevant FCM Client, or
- (ii) if it is a negative figure, be owed by the FCM Clearing Member on behalf of the relevant FCM Client to Eurex Clearing.

In case Eurex Clearing is the creditor of the Difference Claim, Eurex Clearing is entitled to realize its security interests in the Eligible Margin Assets. Eurex Clearing will realize security interests with a value amounting to the sum of the relevant LSV reserved for the FCM Client (including any Assumed Allocation with respect to such FCM Client) and any En-Cumbered FCM Buffer. In case of a remaining FCM Client Margin shortfall, Eurex Clearing will apply any

remaining FCM Client Buffer (other than Encumbered FCM Client Buffer) to satisfy an FCM Client Margin shortfall. If the available FCM Client Buffer is insufficient to satisfy in full all FCM

Client Margin shortfalls of all FCM Clients linked to the FCM Client Margin Account, Eurex Clearing will apply the available FCM Client Buffer on a pro rata basis to each FCM Client with an FCM Client Margin shortfall.

In the case of Eligible Margin Assets in the form of cash, Eurex Clearing will use such cash and, in the case of Eligible Margin Assets in the form of securities, Eurex Clearing will realize its security interest granted by the defaulted FCM Clearing Member in accordance with the Pledge Agreement.

In case Eurex Clearing is the debtor of the Difference Claim, the Difference Claim shall be discharged by payment of the relevant amount to the defaulted FCM Clearing Member and such payment shall constitute a return to the FCM Clearing Member for the account of the relevant FCM Client. Any remaining pledges in respect of Eligible Margin Assets in the form of securities booked into the FCM Client Margin Account shall expire and the pledged securities shall be released by Eurex Clearing. Any remaining Eligible Margin Assets in the form of cash booked into the FCM Client Margin Account shall be returned to the defaulted FCM Clearing Member for the benefit of its FCM Clients.

Insolvency Law

In case of the occurrence of an Insolvency Termination Event with respect to the FCM Clearing Member, generally, the same will apply as described under item 2.2.5 above.

However, in case of the occurrence of an Insolvency Termination Event, the FCM would be subject to an insolvency proceeding pursuant to the applicable U.S. laws. As a consequence, Eurex Clearing will seek to coordinate with the CFTC and the bankruptcy trustee (or a comparable person responsible for administering the proceeding) with respect to the transfer of FCM Client Transactions and Eligible Margin Assets allocated to the relevant FCM Client. Eurex Clearing may deviate from the provisions and processes described above, if so required by the CFTC and the bankruptcy trustee (or a comparable person responsible for administering the proceeding).

Further, the bankruptcy trustee (or a comparable person responsible for administering the proceeding) may require Eurex Clearing that less than all of the LSV reserved for the particular FCM Client (including any Assumed Allocation with respect to such FCM Client) is transferred or realized in order for the Bankruptcy Trustee to comply with the pro rata loss sharing provisions under U.S. insolvency law. The FCM Client Margin that is not subject to the transfer or the realization will be held by Eurex Clearing at the direction of or delivered to the bankruptcy trustee.

Cross-Product Margining

Eurex Clearing provides its FCM Clearing Members and their FCM Clients with the ability to receive same commingling and cross-margining efficiencies by commingling positions in

specific CFTC-approved foreign interest rate futures contracts and money market futures contracts listed for trading on Eurex Deutschland (the “**Foreign Futures**”) with specific cleared swaps (“**Cross-Product Margining**”).

All commingled Foreign Futures and swaps share similar risk characteristics and are substantially and accurately correlated. Eurex Clearing uses its Prisma risk methodology, which provides for risk netting between the commingled Foreign Futures and swaps by utilizing cross-product scenarios.

To be permitted to commingle and engage in cross-margining, the FCM Clearing Member is required to obtain two clearing memberships from Eurex Clearing: (i) a membership for the clearing of the Foreign Futures under the German-law-governed Clearing Conditions (“**Futures Membership**”) and (ii) a membership for the clearing of the swaps under the U.S. law-governed FCM Regulations (“**Swaps Membership**”).

If the FCM Clearing Member wishes to use Cross-Product Margining, the relevant Foreign Futures entered into under the Futures Membership must be transferred to the Swaps Membership and *vice versa*, if the relevant Foreign Futures are not needed anymore for Cross Product Margining. Such transfers (and potential re-transfers) are performed fully automatically on the basis of a margin optimization tool.

As a consequence of a transfer, the transferred Foreign Futures no longer form part of the Futures Membership and are no longer subject to EMIR. Instead, the relevant Foreign Futures positions form part of the Swaps Membership and are subject to the protection and segregation requirements established by the CEA and the CFTC Regulations, including Parts 22 and 190 of the CFTC Regulations.

Conversely, in case of a re-transfer, the re-transferred Foreign Futures no longer form part of the Swaps Membership and are no longer subject to the protection and segregation requirements established by the CEA and CFTC Regulations. Instead, the relevant Foreign Futures form part of the Futures Membership again and are subject to EMIR.

In accordance with the provisions of Article 5(1) of the Indirect Clearing RTS,¹, this Direct Client Disclosure Statement is being made available to our clients that may be entitled to the protections of the Indirect Clearing RTS.

CITIGROUP GLOBAL MARKETS INC.
DIRECT CLIENT DISCLOSURE STATEMENT²
INDIRECT CLEARING

I. Introduction

A. The purpose of this document.³

We are providing this Direct Client Disclosure Statement (**Statement**) to you because you have elected to enter into derivatives transactions that may be cleared by a clearing organization that is authorized as a central counterparty in accordance with EMIR⁴ (**CCP**).⁵

To enable us to comply with our obligations as a direct client under the Indirect Clearing RTS, which require that, where we are providing indirect clearing services to you that involve us clearing derivatives through a clearing member on a CCP, we must:

- (i) offer you a choice of a basic omnibus indirect client account or a gross omnibus indirect client account (as described in further detail in Annex I);
- (ii) publicly disclose the levels of protection and costs associated with different levels of segregation;
- (iii) publicly disclose the general terms and conditions under which we provide services to you (as described in further detail in Annex II); and
- (iv) describe the main legal implications of different levels of segregation.

We have entered into relationships with one or more clearing members of one or more CCPs that are authorized by EMIR and located in the European Union (**EU**) and/or in the United Kingdom (**UK**) and which may also be registered with the Commodity Futures Trading Commission (**CFTC**) as a derivatives clearing organization (**DCO**) in order to provide clearing services in connection with certain

¹ Commission Delegated Regulation (EU) No 2017/2154 supplementing Regulation (EU) No 600/2014 with regard to regulatory technical standards on indirect clearing arrangements or the MiFIR Indirect Clearing RTS (as they are defined in the rules established by the Financial Conduct Authority and the Prudential Regulation Authority (**UK Regulatory Rules**)), as applicable.

² Although care has been taken to assure that the information herein is accurate, this Statement is not intended to constitute legal advice. Recipients of this Statement should not act, or refrain from acting, on the basis of the analysis herein without seeking appropriate advice from their own counsel.

³ As used throughout this Statement, the terms “we”, “our” and “us” refer to the direct client; the terms “you” and “your” refer to the indirect client.

⁴ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (**EU EMIR**) or EU EMIR as it forms part of domestic law of the United Kingdom by virtue of section 3 of the European Union (Withdrawal) Act 2018 (**UK EMIR**), as applicable.

derivatives to US persons.⁶ Because we are registered with the CFTC as a futures commission merchant (**FCM**), we must comply with the provisions of the US Commodity Exchange Act (**CEA**) and the CFTC's rules governing the protection of customer assets and positions, as well as EMIR, MiFIR⁷ and the Indirect Clearing RTS. Where we provide clearing services in respect of non-US equity options, we are also registered with the Securities and Exchange Commission (**SEC**) as a broker-dealer (**BD**) and we must comply with the provisions of the US Securities Exchange Act of 1934, as amended (**Exchange Act**) and the SEC's rules governing the protection of customer assets and positions in respect of such services (the Exchange Act and SEC's rules together with the CEA and the CFTC's rules, the **US Customer Protection Regime**).

Article 30 of MiFIR and the Indirect Clearing RTS set out specific compliance requirements for entities that participate in indirect clearing arrangements in connection with exchange-traded derivatives (**ETDs**).⁸ In particular, Article 30(1) of MiFIR requires that indirect clearing arrangements should not increase counterparty risk and ensure protections that are of "equivalent effect" to that provided for under EMIR. The term "indirect clearing arrangement" refers to a set of relationships – also called a "chain" – where at least two intermediaries are interposed between an end-client and the relevant CCP. The most basic indirect clearing chain therefore involves the following four entities: the CCP; a clearing member of the CCP; a direct client, *i.e.*, the client of the clearing member that is itself an intermediary; and an indirect client, *i.e.*, the client of the direct client. Longer chains are permitted in certain circumstances.

As a direct client, we may not be able to provide you with the forms of indirect client segregated accounts that comply with the Indirect Clearing RTS in certain circumstances. **Specifically, if the clearing member is also an FCM (or, in respect of Non-US Listed Equity Options, is also a BD), the US Customer Protection Regime applicable to us and to the clearing member will preclude us from providing you with a form of client segregation required under the Indirect Clearing RTS in the event of our or their insolvency. In these circumstances, you will therefore receive client segregation in compliance with the US Customer Protection Regime.**

By contrast, if the clearing member is not an FCM (or, in respect of Non-US Listed Equity Options, is not a BD), we may determine, based on an assessment of the relevant facts and circumstances, that we are able to facilitate the opening of a form of segregated accounts that comply with the Indirect Clearing RTS at the clearing member level. Basic details regarding these forms of segregated accounts are provided in Annex I. **Please note that the forms of protection associated with these segregated accounts will not be available in the event of our insolvency, where the US Customer Protection Regime shall apply.** You will only receive the protections associated with these forms of account in the event of the clearing member's insolvency.

⁶ The terms "CCP" and "DCO" will be used interchangeably throughout this Statement.

⁷ Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (**EU MiFIR**) or EU MiFIR as it forms part of domestic law of the United Kingdom by virtue of section 3 of the European Union (Withdrawal) Act 2018 (**UK EMIR**), as applicable.

⁸ "Exchange-traded derivative" is defined in Article 2(1)(32) of MiFIR to include any derivative traded on, as appropriate, (i) an EU regulated market or on any third-country trading venue determined to be "equivalent" to an EU regulated market for purposes of discharging MiFIR's mandatory trade execution obligations, or (ii) a UK regulated market or on any third-country trading venue determined to be "equivalent" to a UK regulated market for purposes of discharging MiFIR's mandatory trade execution obligations. Where applicable, when used herein this term also includes equity options listed for trading on an EU regulated market or a UK regulated market (**Non-US Listed Equity Options**).

This Statement describes at a high level the US Customer Protection Regime with respect to exchange-traded derivatives. In respect of the treatment of margin and collateral at the CCP level, you should refer to the CCP disclosures that the CCPs are required to prepare.

B. Organization of this Statement

This Statement is set out as follows:

- Part II highlights certain significant differences between EMIR and the Indirect Clearing RTS, on the one hand, and the US Customer Protection Regime on the other.
- Part III describes the US Customer Protection Regime.
- Part IV summarizes the rights of a customer to transfer, or port, assets or positions in a business-as-usual context and in the event we default in our obligations to a CCP.
- Part V considers factors to consider in the event of the insolvency of a CCP or other third party.

C. What you are required to do.

You are required to review the information provided in this Statement and, as applicable, the separate clearing member disclosure statements⁹ and the disclosure statement provided by the CCP through which you may clear ETDs. Where we offer to facilitate the opening of segregated accounts at the clearing member level that comply with the Indirect Clearing RTS, you will also need to confirm to us your choice of indirect client accounts in accordance with our instructions.¹⁰

D. Important

Although this Statement will be helpful to you, this Statement does not constitute legal or any other form of advice and must not be relied on as such. This Statement provides a high level analysis of several complex and/or new areas of law, whose effect will vary depending on the specific facts of any particular case, some of which have not been tested in the courts. It does not provide all the information you may need to make your decision on which account type or level of segregation is suitable. It is your responsibility to review and conduct your own due diligence on the relevant rules, legal documentation and any other information provided to you on each of our client account offerings and those of the various clearing members and CCPs on which we clear derivatives for you. You may wish to appoint your own professional advisors to assist you with this.

We will not in any circumstances be liable, whether in contract, tort, breach of statutory duty or otherwise for any losses or damages that may be suffered as a result of using this Statement. Such losses or damages include (a) any loss of profit or revenue, damage to reputation or loss of any contract or other business opportunity or goodwill, and (b) any indirect loss or consequential loss. No responsibility or liability is accepted for any differences of interpretation of legislative provisions and related guidance on which it is based. This paragraph does not extend to an exclusion of liability for, or remedy in respect of, fraudulent misrepresentation.

⁹ You may obtain relevant clearing member disclosure statements from our EU clearing members Citigroup Global Markets Ltd. at <https://www.citibank.com/mss/solutions/citi-futures/global-markets-ltd/>, and Citigroup Global Markets Europe AG at: <https://www.citibank.com/mss/solutions/citi-futures/global-markets-europe-ag>.

¹⁰ If you are or will become our indirect client as described herein, you should contact your Citi sales representative or other Citi contact in order to make your election. If you do not affirmatively elect to establish a gross omnibus indirect client account, we will provide you with a basic omnibus indirect client account. Please see Section II and Annex 1 below for more information on the distinctions between these account types

Please note that this disclosure has been prepared on the basis of US law except as otherwise stated. However, issues under other laws may be relevant to your due diligence, including for example, the law governing the CCP rules or related agreements; the law governing the clearing arrangement between the clearing member and us; the law governing our insolvency; the law of the jurisdiction of incorporation of the CCP and of the clearing member; and the law of the location of any assets.

II. Significant Differences Between EU/UK Rules and the US Customer Protection Regime

As noted above, the primary focus of this Statement is the US Customer Protection Regime. Nonetheless, throughout this Statement, we identify certain differences and similarities between the manner in which derivatives transactions generally are cleared in the EU and in the UK, including as required by EMIR and the Indirect Clearing RTS, and in which they are cleared under the US Customer Protection Regime.

Before turning to a discussion of the US Customer Protection Regime for exchange-traded futures and the separate US Customer Protection Regime for equity options, we highlight the following key differences between EU/UK rules and the US Customer Protection Regime applicable to exchange-traded futures:

- In the EU and the UK, cleared derivatives transactions are generally entered into using the “principal model.” That is, the clearing member enters into two separate but related transactions: (i) a principal transaction with its client; and (ii) an equal and opposite principal transaction with the CCP; and the direct client also enters into two separate but related transactions: (i) a principal transaction with the clearing member; and (ii) an equal and opposite principal transaction with its indirect client. Under the US Customer Protection Regime applicable to exchange-traded futures, transactions are entered into using the “agency model.” That is, the direct client FCM, as agent for its customer, enters into one transaction with the clearing member. The direct client FCM does not enter into a separate transaction with its customer.
- In the EU and the UK, customer assets may be transferred to a clearing member on either a title transfer basis or a security interest basis. Under the US Customer Protection Regime applicable to exchange-traded futures regulatory regime, customer assets may only be transferred on a security interest basis.
- Under the Indirect Clearing RTS, clearing members and direct clients must offer indirect clients a choice between a basic omnibus indirect client account and a gross omnibus indirect client account (as described in further detail in Annex I). Under the US Customer Protection Regime applicable to exchange-traded futures, direct client FCMs may provide only US omnibus client segregation to their indirect clients. The forms of omnibus client segregation permitted under the US Customer Protection Regime applicable to exchange-traded futures differ in certain respects from the forms of indirect client segregation that comply with the Indirect Client RTS. The US Customer Protection Regime applicable to exchange-traded futures may not necessarily preclude a direct client FCM from facilitating the opening of segregated accounts at the clearing member level in accordance with the Indirect Client RTS, provided that such clearing member is not also an FCM. **However, the protections associated with these forms of segregated accounts will only be given effect in the event of the default of the non-FCM clearing member.**
- Under EMIR and the Indirect Clearing RTS, affiliates are treated as customers and may be part of the same omnibus client account as all other customers. Under the US Customer Protection Regime applicable to exchange-traded futures, the accounts of FCMs and their affiliates must be treated as proprietary accounts and may not be commingled with customer accounts. This

reflects the CFTC's view that accounts that are subject to common control with the FCM may pose the same risk to customer funds as an FCM's own accounts.

III. US Customer Protection Regime

A. Exchange-Traded Futures

We may receive assets from you to margin: (i) exchange-traded derivatives executed on a designated contract market (**DCM**) registered with the CFTC;¹¹ or (ii) exchange-traded derivatives executed on a regulated market.¹² We are required to post assets with the clearing member as margin to support your open positions within the time prescribed by the clearing member and/or CCP.¹³

Under CFTC rules, customer collateral received to margin exchange-traded derivatives executed on a DCM may not be commingled with funds received to margin exchange-traded derivatives on a regulated market.¹⁴ As discussed below under *Transfer, or porting, of customer assets and positions*, the prohibition on commingling assures that customer assets are better protected in the event of an FCM clearing member bankruptcy.

1. US Derivatives Exchanges. The provisions of the CEA that provide for the segregation of customer funds held to margin, guarantee or secure futures and options on futures contracts traded on or subject to the rules of a US derivatives exchange require an FCM to "treat and deal with all money, securities and property received by such FCM to margin, guarantee or secure the trades or contracts of any customer of such FCM or accruing to such customer as a result of such trades, as belonging to such customer."¹⁵ Exchange-traded derivatives customer funds: (i) must be separately accounted for and may not be commingled with our funds or be used to margin, guarantee, or secure any trades or contracts of any other customer or person; and (ii) may be commingled in an omnibus account with a bank or trust company or with the DCO that clears exchange-traded derivatives on our behalf.

In addition, FCMs are required to create and maintain books and records concerning: (i) the identity of their customers; (ii) the positions held on behalf of each such customer; and (iii) the collateral deposited by each customer to margin such positions.

At the clearing member level, however, the direct client FCM is not required to provide the clearing member with information to identify the positions of, and the market value of the collateral posted by,

¹¹ Certain UK CCPs also clear futures and options on futures contracts listed for trading on US designated contract markets.

¹² In the EU, Eurex Clearing AG and LCH SA, and in the UK, ICE Clear Europe and LCH Limited, each clear futures and options on futures contracts listed for trading on one or more regulated markets.

¹³ In practice, such margin is generally required to be paid early in the morning, although additional margin may be called during any trading day. Consequently, we will frequently meet a margin requirement using our own funds and then call you for margin. In the ordinary course, we will expect you to meet any call for margin by the end of the day on which the call is made. If you provide margin in a form that is not accepted by the clearing member and/or CCP, we may transform it. The arrangements between you and us relating to how margin calls will be funded will be set out in our customer agreement with you.

¹⁴ In addition, any customer collateral we receive to margin cleared swaps may not be commingled with funds received to margin exchange-traded derivatives executed on either a DCM or a regulated market.

¹⁵ The obligation to treat customer collateral as belonging to the customer requires that all such collateral be received on a security interest basis. Customer collateral may not be received on a title-transfer basis.

each customer, and the clearing member is not required to create and maintain such books and records. Rather, the clearing member is entitled to treat the omnibus account as a single customer.

As discussed below under *Transfer, or porting, of customer assets and positions*, because the clearing member is entitled to treat the omnibus account as a single customer, a customer's ability to transfer the customer's positions and related margin upon the default of a direct client FCM may be limited. Moreover, in the event a direct client FCM defaults in its obligations to a clearing member and there is a shortfall in the customer funds required to be held in the customer omnibus account, the clearing member may, but is not required to, liquidate all positions held in the omnibus account and apply the proceeds thereof to meet the FCM's obligations to the clearing member with respect to the customer omnibus account.¹⁶

2. Non-US Derivatives Exchanges. We may have established a relationship with a clearing member of a CCP for the purpose of clearing transactions executed on a non-US derivatives exchange. The CEA does not specifically provide for the segregation of customer funds held to margin, guarantee or secure futures and options on futures contracts traded on or subject to the rules of a non-US derivatives exchange. Nonetheless, at the FCM level, the CFTC's rules establish a regulatory regime that is comparable to the provisions governing US exchange-traded derivatives customer funds. Customer funds held for the purpose of trading non-US exchange-traded derivatives: (i) must be separately accounted for and may not be commingled with our funds or be used to margin, guarantee, or secure any trades or contracts of any other customer or person; and (ii) may be commingled in an omnibus account with a bank or trust company or with the CCP that clears exchange-traded derivatives on our behalf. In addition, we are required to maintain books and records concerning: (i) the identity of our customers; (ii) the positions held on behalf of each such customer; and (iii) the collateral deposited by each customer to margin such positions.

At the clearing member and CCP level, however, the rules of the jurisdiction otherwise governing the treatment of customer funds would ordinarily apply. Specifically, in the case of an EMIR-authorized CCP and a non-FCM clearing member, indirect client funds would ordinarily be held by the CCP and the clearing member in accordance with the Indirect Clearing RTS.

3. Excess Customer Funds. CFTC rules do not expressly authorize a CCP to adopt (or prohibit a CCP from adopting) rules permitting an FCM to maintain its excess customer funds with the clearing member or the CCP. If a CCP were to adopt such rules, the clearing member or the CCP would not be required to identify such funds to particular customers within the customer omnibus account. In the event a direct client FCM defaults in its obligations to the clearing member and there is a shortfall in the customer funds required to be held in the customer omnibus account, the clearing member may apply the excess customer funds that it is holding to meet the FCM's obligations to the clearing member with respect to the customer omnibus account.

B. Non-US Listed Equity Options

We may have established a relationship with a clearing member of a CCP for the purpose of clearing transactions in Non-US Listed Equity Options. The US Customer Protection Regime for Non-US Listed Equity Options is set out in the Exchange Act and SEC rules and is summarized below.

¹⁶ As further discussed below, the assets held in the customer omnibus account may not be used to meet any other obligations of the FCM to the clearing member.

1. Customer Protection Rule. Under the SEC’s customer protection rule, a BD is required to promptly obtain and maintain physical possession and control of all “fully paid”¹⁷ securities and “excess margin securities”¹⁸ carried for customers, which may not be used by the BD and must be segregated in a lien-free environment. In addition, a credit balance in a customer’s account (*i.e.*, the BD’s liabilities to customers) is considered a “free credit balance” subject to immediate cash payment to customers on demand. Any amount of such free credit balances not used to finance customer-related debits must be deposited in the Reserve Account described below.

2. Reserve Account. A BD is required to add a number of different credits (*e.g.*, cash balances in customer accounts and funds obtained through the use of customer securities) as well as corresponding debits (*e.g.*, monies owed by customers from margin loans, securities borrowed-in by the BD to cover customer short sales, and margin posted to cover customer clearing activities) across the BD’s entire set of customers. If aggregate customer credits exceed aggregate customer debits, the BD must maintain cash or qualifying securities in the amount of the excess in a special Reserve Account, which must be segregated from the BD’s other bank accounts. Although these calculations are performed in the aggregate, a BD is required to prepare and maintain current ledger accounts that itemise separately each cash and margin account of every customer as well as a stock record that reflects the positions of each customer.

3. Hypothecation Rules. SEC rules prohibit a BD from commingling customer securities with its own proprietary securities. They further require a BD to obtain each customer’s written consent in order to hypothecate securities under circumstances that would permit the commingling of that customer’s securities with those of the BD. In addition, the BD must give written notice to a pledgee that, among other things, a security pledged is carried for the account of its customer.

C. Indirect Clearing

If we facilitate clearing of derivatives at a CCP through a clearing member that is also an FCM (or, in respect of Non-US Listed Equity Options, that is also a BD), then the US Customer Protection Regime described in the remainder of this section III shall apply in all cases to the clearing services we offer you.

Where we do so through a clearing member that is not an FCM (or, in respect of Non-US Listed Equity Options, that is not a BD), then we may determine that we are able to open and maintain segregated accounts for you at the clearing member level in a form that complies with the Indirect Clearing RTS. A basic description of the indirect client account structures under the Indirect Clearing RTS is provided in Annex I. Any such accounts may give you additional protections in the event of the clearing member’s insolvency.

However, in the event of our insolvency, the mandatory liquidation provisions of: (i) the US Bankruptcy Code; (ii) the CFTC’s rules (in respect of exchange-traded futures); and/or (iii) the US Securities Investor Protection Act (SIPA) (in respect of Non-US Listed Equity Options), described in section IV below will apply. In other words, in the event of our insolvency, the positions in any accounts that we may open at the clearing member level that comply with the Indirect Clearing RTS, and the related assets, will be ported or liquidated pursuant to the

¹⁷ “Fully-paid” securities are securities that a customer has fully paid for and that are held in “cash accounts” as defined in US Federal Reserve Regulation T.

¹⁸ “Margin securities” are those securities carried for a customer in a margin account, with market value equal to (or less than) 140% of the account’s debit balance; the BD has access to these securities to finance the debit balance and for use as collateral for bank loans or stock loans or repurchase agreements. “Excess” margin securities are those securities that have a market value in excess of 140% of the aggregate debit balance in that customer’s account.

requirements of the US Bankruptcy Code and the CFTC's rules and/or SIPA rather than in accordance with the Indirect Clearing RTS.

IV. Transfer, or porting, of customer assets and positions

A. Transfers to another FCM in a business-as-usual context

The rights and obligations of FCMs and their customers with respect to the transfer of customer assets and positions to another FCM in a business-as-usual context are the same whether the customer is trading (i) exchange-traded derivatives executed on a DCM, or (ii) exchange-traded derivatives executed on a regulated market. In particular, CFTC rules prohibit us from transferring your assets and positions to another FCM without your consent.

In a business-as-usual context, *i.e.*, we are not in default, you may request at any time that all or a portion of your assets and positions be transferred to another FCM clearing member that has agreed to accept your account. National Futures Association (NFA) Compliance Rule 2-27 provides that, within two business days after receiving a customer's request to transfer the customer's account, or within such further time as may be necessary in the exercise of due diligence, the FCM clearing member carrying the account must confirm to the FCM clearing member receiving the account all balances in the account and all open positions. Within three business days of the day such confirmation is due, or within such further time as may be necessary in the exercise of due diligence, the FCM clearing member carrying the account must effect the transfer of the balances and positions to the receiving FCM clearing member.

NFA Compliance Rule 2-27 is applicable to all FCMs and each type of customer account.

B. Treatment of exchange-traded derivatives customer assets and positions when an FCM is placed in bankruptcy

1. In general. If an FCM is placed in bankruptcy, the FCM is liquidated in accordance with the commodity broker liquidation provisions of the US Bankruptcy Code and the CFTC's rules.

2. Transfer of customer assets and positions. Once a direct client FCM has filed for, or is otherwise placed in bankruptcy, a clearing member may not transfer, or port, the positions and assets of non-defaulting customers to another FCM except as directed by the trustee and confirmed by the Bankruptcy Court. In addition, the trustee in bankruptcy, in coordination with the clearing member, will attempt to effectuate the transfer of all customer positions together with the money, securities, or other property held to margin the commodity contracts.

In the event customer accounts cannot be transferred, however, or only a partial transfer is accomplished, the trustee is further instructed to liquidate all remaining open positions. The Bankruptcy Code requires that losses arising in any account class of a defaulting FCM must be shared ratably among the members of that account class. Therefore, in the event that losses in the customer omnibus account are so great that the direct client FCM is unable to meet the shortfall with its own assets and consequently defaults to the clearing member, a customer may be exposed to losses of other customers.¹⁹

3. Authority of the clearing member in the event of a shortfall in the exchange-traded derivatives customer omnibus account. If, upon the bankruptcy of a direct client FCM, there is a shortfall in the exchange-traded derivatives customer omnibus account caused by the default of one or

¹⁹ Consequently, even if an FCM were able to provide its customers segregated accounts in a form that complied with the Indirect Clearing RTS, such accounts would not provide any additional protection to customers in the event of the bankruptcy of the FCM.

more customers, CFTC rules permit, but do not require, the clearing member to net and liquidate the positions held in the customer omnibus account and to use the proceeds of such liquidation to meet the defaulting direct client FCM's obligations to the clearing member with respect to the omnibus account.²⁰ The proceeds from the liquidation of the exchange-traded derivatives customer omnibus account may not be used to meet any other obligations of the direct client FCM to the clearing member.

C. Treatment of customer assets and positions when a BD is placed in bankruptcy

Upon the insolvency of a BD a bankruptcy trustee will be appointed, or the Securities Investor Protection Corporation (SIPC) may file an application and complaint under SIPA, which will automatically halt any pending bankruptcy proceeding and the BD will be liquidated pursuant to SIPA at the direction of a SIPA trustee who is subject to oversight by SIPC. A SIPA proceeding is conducted in accordance with Chapter 7 of the US Bankruptcy Code except to the extent any such provisions are inconsistent with the provisions of SIPA. It is the SIPA trustee, rather than the clearing member, who has the authority to port the positions of such insolvent BD's customers (including, as relevant here, indirect clients). In particular, a SIPA trustee has the authority, subject to the prior approval of SIPC, to sell or otherwise transfer to another member of SIPC, without consent of any customer, all or any part of the account of a customer of the debtor.²¹ In the context of a liquidation in bankruptcy, as opposed to under SIPA, the bankruptcy trustee is required to promptly liquidate securities held by the bankruptcy estate except for securities registered in a customer's name and that is not in a form transferable by delivery on the date of the BD's insolvency.

Where the trustee is not able to effect or otherwise elects not to effect the transfer of all customer positions, the trustee distributes property to customers to satisfy their claims against the BD. "Customer property" is viewed as fungible under SIPA and the US Bankruptcy Code and as such, all customers share ratably in the BD's pool of such property according to the customer's net equity claim.²² Generally, "customer property" is defined as cash, securities, or other property received by or acquired from the securities account of a customer that is being held by or for the account of the BD. For example, shares held on behalf of a customer in street name and customer cash constitute customer property. If the customer property fund is insufficient to cover the customers' claims, customers receive distributions from other property of the estate on a *pari passu* basis with general creditors.

D. Rights and Obligations of CCPs and Clearing Members Under EMIR and the Indirect Clearing RTS

The clearing member disclosure statement, referenced above, describes in greater detail the rights and obligations of clearing members, their clients and CCPs under EMIR and the Indirect Clearing RTS in the event of a clearing member default. These rights and obligations differ in certain respects from the rights and obligations available under the US Customer Protection Regime. We note immediately below three significant differences.

1. Where porting is available under EMIR and the Indirect Clearing RTS, it is generally required for the client of a defaulting clearing member or the indirect client of a defaulting direct client to have

²⁰ The clearing member is authorized to net and liquidate such positions even if the Bankruptcy Court has appointed a trustee in bankruptcy.

²¹ In the event the insolvent BD is also a registered FCM, the SIPA trustee will, in respect of the insolvent firm's FCM business, be subject to the same duties and requirements as a trustee under the commodity broker liquidation provisions of the Code as would apply to an insolvent FCM that is not also a registered BD.

²² In a SIPA proceeding, customer property is first allocated to SIPC in repayment of certain expenses incurred in freeing customer securities from liens and security interests before ratable distribution to customers.

designated a replacement clearing member or direct client, and for such replacement to consent to the transfer. Under the US Customer Protection Regime, the CCP or the clearing member, in coordination with the CFTC, would identify one or more non-defaulting FCMs that would be willing to accept the omnibus account. In a SIPA proceeding, the SIPA trustee would attempt to transfer the insolvent BD's customer account to a non-defaulting BD. Once the relevant accounts are transferred, each customer would be able to request that the customer's account be transferred to an FCM or BD that the customer selects.

2. Under EMIR Article 48(5), a CCP or clearing member must commit to transfer the assets and positions held by a defaulting clearing member in an omnibus client segregated account or a gross omnibus indirect client account for a predefined period of time after the clearing member or direct client becomes insolvent. Under the US Bankruptcy Code, once an FCM or BD has filed for bankruptcy, no transfers of client assets and positions may occur without the consent of the bankruptcy trustee or, in the event of a SIPA proceeding, without the consent of SIPC and the SIPA trustee.

3. EMIR Article 48(7) provides that, where a balance is owed by the CCP in respect of a client segregated account of a defaulting clearing member, such amount must be readily returned directly to the relevant client, where such client's identity is known to the CCP, or otherwise to the defaulting clearing member for the account of its clients. These "leapfrog" payment provisions also apply to the return of proceeds in respect of an indirect client segregated account by the CCP to the direct client for the account of its indirect clients, where the identity of the relevant client is known. Finally, the Indirect Clearing RTS establish an obligation on a clearing member to return liquidation assets directly to the indirect client of a defaulting direct client, where the indirect client has opted for a gross omnibus indirect client account. By contrast, under the US Customer Protection Regime and the US Bankruptcy Code, the bankruptcy trustee (or, in a SIPA proceeding, the SIPA trustee) is responsible for liquidating the positions of non-porting customers of an insolvent FCM or BD and distributing the liquidation proceeds ratably to customers.

4. In the EU, EMIR Article 39(11) provides that Member States' national insolvency laws shall not prevent a CCP from acting in accordance with Article 48(5), (6) and (7) with regard to the assets and positions recorded in the accounts discussed above.

V. Insolvency of CCPs and others

Except as set out in this section, this Statement deals only with our insolvency. You may also not receive all of your assets back or retain the benefit of your positions, if other parties in the clearing structure default – e.g., the CCP itself, a custodian or a settlement agent.

In relation to CCP insolvency, broadly speaking our (and therefore your) rights will depend on the law of the country in which the CCP is incorporated and the specific protections that the CCP has put in place.²³ You should review the relevant CCP disclosures carefully in this respect and take legal advice to fully understand the risks in this scenario.

In addition, please note the following:

- We expect that an insolvency official will be appointed to manage the CCP. Our rights against the CCP will depend on the relevant insolvency law and/or that official.

²³ The CCPs with respect to which we provide indirect clearing services and the clearing members that we use may change over time. You may obtain additional information about our CCP memberships and intermediaries we use for customer clearing at: <https://www.citibank.com/mss/solutions/citi-futures/global-markets-155k/>.

- It will be difficult or impossible to port positions and related margin, so it would be reasonable to expect that they will be terminated at CCP level. The steps, timing, level of control and risks relating to that process will depend on the CCP, its rules and the relevant insolvency law. However, it is likely that there will be material delay and uncertainty around when and how much assets or cash we will receive back from the CCP. Subject to the bullet points below, it is likely that we will only receive back only a percentage of assets available depending on the overall assets and liabilities of the CCP.
- It is unlikely that you will have a direct claim against the CCP.
- Under the terms of our customer agreement, we are not liable to you in the event of the default of a CCP or other third party not under our control.
- If recovery of margin in this scenario is important, then you should explore “bankruptcy remote” or “physical segregation” structures offered by some CCPs. However, these tend to be offered only in relation to accounts subject to individual client segregation.

It is beyond the scope of this disclosure to analyse such options but your due diligence on them should include analysis of matters such as whether other creditors will have priority claims to margin; whether margin or positions on one account could be applied against margin or positions on another account (notwithstanding the contractual agreement in the CCP’s rules); the likely time needed to recover margin; whether the margin will be recovered as assets or cash equivalent; and any likely challenges to the legal effectiveness of the structure (especially as a result of the CCP’s insolvency).

ANNEX I

Forms of Indirect Client Segregated Account

Under the Indirect Clearing RTS, there are two basic types of indirect client accounts available at the CCP level: the Basic Omnibus Indirect Client Accounts and Gross Omnibus Indirect Client Accounts. Clearing members then open and maintain accounts corresponding to the relevant indirect clearing accounts at the CCP level as described in more detail below.

Please see Part Two of the clearing member disclosure statement for an overview of the risks in relation to a Basic Omnibus Indirect Client Account and a Gross Omnibus Indirect Client Accounts. We also refer you to the CCP disclosures which CCPs are required to prepare and which set out the treatment of margin and collateral at the CCP level.

1. Basic Omnibus Indirect Client Account²⁴

Under this account type, at the level of the clearing member, your transactions (including corresponding assets in the clearing member's accounts) are segregated from:

- the clearing member's proprietary transactions and any of its assets;
- any transactions (including corresponding assets in the clearing member's accounts) relating to our own account or that of one of the clearing member's other clients;
- any transactions (including corresponding assets in the clearing member's accounts) relating to any clients of the clearing member's other clients that have also opted for a Basic Omnibus Indirect Client Account and which are recorded in a different Basic Omnibus Indirect Client Account; and
- any transactions (including corresponding assets in the clearing member's accounts) relating to any of our clients or any clients of the clearing member's other clients that have opted for a Gross Omnibus Indirect Client Account.

However, your transactions (including corresponding assets in the clearing member's accounts) will be commingled with the transactions (including corresponding assets in the clearing member's accounts) relating to any of our other clients that have also opted for a Basic Omnibus Indirect Client Account and which are recorded in the same Basic Omnibus Indirect Client Account.

Can your transactions and related collateral be netted with the clearing member's proprietary transactions and assets?	No
Can your transactions and related assets be netted with those relating to us or the clearing member's other clients?	No
Can your transactions and related collateral be netted with those relating to our other clients?	Yes (provided the transactions and assets of our other clients are recorded in the

²⁴ This description is based on Articles 4(2)(a) and 4(4)(a) of the Indirect Clearing RTS. Please note that we have based our analysis on the minimum requirements as set out in the Indirect Clearing RTS. Therefore, we have assumed that positions in a Basic Omnibus Indirect Client Account would be held on a net basis and margin would also be collected on a net basis.

	same Basic Omnibus Indirect Client Account)
Can your transactions and related collateral be netted with those relating to the clearing member's other clients?	No

The clearing member will not net your transactions with its proprietary transactions or any transactions not recorded in the same Basic Omnibus Indirect Client Account, nor use the assets relating to such transactions with respect to any of its proprietary transactions or transaction recorded in any other client account.

However, the clearing member may net the transactions that are recorded in the same Basic Omnibus Indirect Client Account. The assets provided in relation to the transaction credited to that Basic Omnibus Indirect Client Account can be used in relation to any transaction credited to that Account. In addition, upon the default of a non-FCM clearing member (or, in relation to Non-US Listed Equity Options, the default of a non-BD clearing member), the rules of the CCP may permit some netting of transactions and use of assets between the Basic Omnibus Indirect Client Account and the other client omnibus accounts maintained by that non-FCM clearing member.

2. Gross Omnibus Indirect Client Account²⁵

Under this account type, at the level of the clearing member, your transactions (including the corresponding assets in our accounts) are segregated from:

- the clearing member's proprietary transactions and any of its assets;
- any transactions (including corresponding assets in the clearing member's accounts) relating to our own account or that of one of the clearing member's other clients;
- any transactions (including corresponding assets in the clearing member's accounts) relating to any of our clients or any clients of the clearing member's other clients that have also opted for a Basic Omnibus Indirect Client Account; and
- any transactions (including corresponding assets in the clearing member's accounts) relating to any clients of the clearing member's other clients that have opted for a Gross Omnibus Indirect Client Account and which are recorded in a different Gross Omnibus Indirect Client Account.

However, your transactions (including corresponding assets in the clearing member's accounts) will be commingled with the transactions (including corresponding assets in our accounts) relating to any of our other clients that have also opted for a Gross Omnibus Indirect Client Account and which are recorded in the same Gross Omnibus Indirect Client Account.

Can your transactions and related collateral be netted with the clearing member's proprietary transactions and assets?	No
Can your transactions and related assets be netted with those relating to us or the clearing member's other clients?	No

²⁵ This description is based on Articles 4(2)(b) and 4(4)(b) of the Indirect Clearing RTS.

Can your transactions and related collateral be netted with those relating to our other clients?	Your transactions will not be netted with the transactions relating to any of our other clients. However, the collateral relating to you may be used to cover transactions of our other clients to the extent it is recorded in the same Gross Omnibus Indirect Client Account.
Can your transactions and related collateral be netted with those relating to clients of the clearing member's other clients?	No

The clearing member will not net your transactions with its proprietary transactions, our transactions, the transactions relating to the clearing member's other clients, the client of the clearing members' other clients, or any transactions relating to our other clients (regardless of whether they are recorded in the same Gross Omnibus Indirect Client Account).

The clearing member will also agree not to use the assets relating to your transactions with respect to any of its proprietary transactions or client transactions recorded to any other account. However, the clearing member may use the assets provided in relation to your transactions in relation to any transaction relating to our other clients which are credited to the same Gross Omnibus Indirect Client Account. In addition, upon the default of a non-FCM clearing member (or, in relation to Non-US Listed Equity Options, the default of a non-BD clearing member), the rules of the CCP may permit some netting of transactions and use of assets between the Gross Omnibus Indirect Client Account and the other client omnibus accounts maintained by that non-FCM clearing member.

ANNEX II

Terms and Conditions

Indirect Clearing Arrangements

In accordance with the provisions of the Regulatory Technical Standards on Indirect Clearing Arrangements under MiFIR²⁶ and EMIR²⁷, we are required to disclose the general terms and conditions pursuant to which we provide our clients indirect clearing services with respect to exchange-traded derivatives contracts that are cleared by a central counterparty authorized in the European Union and/or the United Kingdom (“**CCP**”).²⁸ Such terms and conditions are set out in detail in the agreement, including all schedules and appendices thereto, that we enter into with you (the “**Agreement**”).

The term “**indirect clearing services**” refers to the circumstances where: (i) we access a CCP through a clearing member of that CCP; and/or (ii) we are a clearing member of a CCP and you are an intermediary with clients of your own.²⁹

In significant part, the terms and conditions identified below are required in order for us to comply with relevant provisions of the Commodity Exchange Act and the rules of the Commodity Futures Trading Commission (“**CFTC**”) and the self-regulatory organizations with jurisdiction over our futures-related activities. If we facilitate clearing in respect of Non-US Listed Equity Options at a CCP, we must also comply with relevant provisions of the Securities Exchange Act of 1934 and the rules of the Securities and Exchange Commission (“**SEC**”) and the self-regulatory organizations with jurisdiction over our securities-related activities. (All such laws and rules, as applicable, are collectively referred to herein as the “**rules**”). For example, the rules require that we must:

- take reasonable steps to know our clients in accordance with applicable law, including Anti-Money Laundering and “know your customer” rules;

²⁶ Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012 (“**EU MiFIR**”) or EU MiFIR as it forms part of domestic law of the United Kingdom by virtue of section 3 of the European Union (Withdrawal) Act 2018 (“**UK EMIR**”), as applicable.

²⁷ Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives central counterparties and trade repositories (“**EU EMIR**”) or EU EMIR as it forms part of domestic law of the United Kingdom by virtue of section 3 of the European Union (Withdrawal) Act 2018 (“**UK EMIR**”), as applicable.

²⁸ “**Exchange-traded derivative**” is defined in Article 2(1)(32) of MiFIR to include any derivative traded on, as appropriate, (i) an EU regulated market or on any third-country trading venue determined to be “equivalent” to an EU regulated market for purposes of discharging MiFIR’s mandatory trade execution obligations, or (ii) a UK regulated market or on any third-country trading venue determined to be “equivalent” to a UK regulated market for purposes of discharging MiFIR’s mandatory trade execution obligations. Where applicable, when used herein this term also includes equity options listed for trading on an EU regulated market or a UK regulated market (“**Non-US Listed Equity Options**”).

²⁹ Article 5(6) of the Indirect Clearing RTS requires a direct client to “provide its indirect clients with sufficient information to allow those indirect clients to identify the CCP and the clearing member used to clear their positions.” The Indirect Clearing RTS does not require that such information be included in the same document with the above terms and conditions. An FCM, for example, could direct its clients to the firm-specific disclosure statement under Commission Rule 1.55(k), which requires an FCM to provide information regarding its business on behalf of its customers, “including types of customers, markets traded, international businesses, and clearinghouses and carrying brokers used.”

- establish risk-based limits on each client's orders;
- conduct business only with or through an intermediary that is registered with the CFTC or SEC, as applicable (or not required to be registered);
- obtain a first priority security interest in all exchange-traded derivatives contracts and all cash and securities deposited to margin such contracts; and
- confirm that our clients have received and understood certain prescribed disclosures.

A general description of the principal terms and conditions governing our relationship with our clients is set out below. The actual provisions of the Agreement are more detailed. Moreover, please note that the specific terms and conditions of the Agreement that we enter into with any client may differ depending on our analysis of the risks that such client's trading activities may present.

Before providing indirect client services to you, we will generally require, subject to the terms and conditions contained in the Agreement, that you:

- provide us with such information that we may request in order to verify your identity as required by law or as we may otherwise require for account opening purposes.
- confirm to our satisfaction that you meet our minimum financial and operational requirements appropriate for your business, experience and the nature of the trading in which you intend to engage; you must agree to provide us with such financial information, including a current financial statement, as we may request from time to time and to notify us promptly of any material change in your financial condition.
- confirm to our satisfaction that you have full power and authority to enter into the Agreement and to enter into the transactions contemplated thereby for your account or on your behalf.
- confirm to our satisfaction that you have obtained all registrations or licenses, if any, that you may require to conduct business and that you remain in good standing with all relevant regulatory and self-regulatory authorities.
- acknowledge that you have read and understood all disclosure statements with respect to your trading activities that we have provided you, including the appropriate Disclosure Statement on Indirect Clearing.
- acknowledge that all exchange-traded derivatives transactions effected for your account or on your behalf are subject to "**Applicable Law**", including exchange and clearing organization rules that require your consent to be subject to the jurisdiction of the markets on which you trade, and that you will conduct all activities subject to the Agreement in accordance with such Applicable Law.
- agree that we may, in our sole discretion, limit the size of your positions, refuse to accept any order or transaction, or require you to transfer your account to another firm.
- agree to meet all margin calls with respect to exchange-traded derivatives contracts that we clear for your account or on your behalf in such form and amounts and within such time as we may determine, consistent with Applicable Law.
- grant us a lien and first priority security interest and right of set-off in all exchange-traded derivatives contracts and all cash, securities and other property ("**collateral**") that you deposit with us to margin, guarantee or secure all exchange-traded derivatives contracts that we clear

for your account or on your behalf. You must grant us the right to borrow, pledge, repledge, hypothecate, rehypothecate, loan or invest any such collateral.

- acknowledge that, upon an event of default, as that term is defined in the Agreement, we will have certain rights as set out in the Agreement, including the right, in addition to any remedy otherwise available in law or equity, to liquidate any or all exchange-traded derivatives contracts held in your name or on your behalf by any lawful means and to apply any collateral to meet any amounts you owe us.
- acknowledge that we will not be liable to you for any losses that may be incurred except insofar as such losses are a direct result of our negligence, willful misconduct or fraud and, further, that in no event will we be liable for any consequential, indirect or punitive damages.
- agree that the Agreement will be interpreted in accordance with the laws of the State of New York and submit to the jurisdiction of the courts in the State of New York and the federal courts in the Southern District of New York. You must waive any right to a jury trial.

In accordance with the provisions of Article 39 of EMIR,¹ this Clearing Member Disclosure Statement is being made available to our clients that are entitled to the protections of EMIR.

CITIGROUP GLOBAL MARKETS INC.
CLEARING MEMBER DISCLOSURE STATEMENT²
PROTECTION OF CUSTOMER FUNDS
UNDER THE COMMODITY EXCHANGE ACT AND
COMMODITY FUTURES TRADING COMMISSION RULES

I. Introduction

A. The purpose of this document.³

We are providing this Clearing Member Disclosure Statement (**Statement**) to you because you have elected to enter into derivatives transactions that may be cleared by a clearing organization that is authorized as a central counterparty in accordance with EMIR (**CCP**). Article 39 of EMIR provides that we must:⁴

- (i) offer you a choice of an individual client segregation account or an omnibus client segregation account;

¹ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (**EU EMIR**) or EU EMIR as it forms part of domestic law of the United Kingdom by virtue of section 3 of the European Union (Withdrawal) Act 2018 (**UK EMIR**), as applicable.

² Although care has been taken to assure that the information herein is accurate as of the date of publication, this Statement is not intended to constitute legal or regulatory advice. Recipients of this Statement should not act, or refrain from acting, on the basis of the analysis herein without seeking appropriate advice from their own counsel. FIA specifically disclaims any legal responsibility for any errors or omissions and disclaims any liability for losses or damages incurred through the use of this Statement. FIA undertakes no obligations to update this document following the date of publication.

³ As used throughout this Statement, the terms “we”, “our” and “us” refer to the clearing member; the terms “you” and “your” refer to the client.

⁴ The European Securities and Markets Authority (**ESMA**) has clarified that all clearing members of EU CCPs are required to comply with EMIR Article 39. See ESMA CCP Question 8(i) (https://www.esma.europa.eu/sites/default/files/library/2016-1176_qa_xix_emir.pdf). The Financial Conduct Authority (**FCA**) has confirmed in their "Brexit: our approach to EU non-legislative materials" document that it considers that references to pre-Brexit EU non-legislative materials (such as ESMA Questions and Answers) may continue to be relevant and that it will continue to have regard to these as appropriate. The FCA also highlighted that, as a result of Brexit, the relevant material may include references which no longer have their intended effect and that firms should interpret such references sensibly and purposefully.

- (ii) publicly disclose the levels of protection and the costs associated with the different levels of protection they provide; and
- (iii) describe the main legal implications of the respective levels of segregation offered including information on the applicable insolvency law.

We are a clearing member of one or more CCPs that are authorized by EMIR and located in the European Union (EU) and/or in the United Kingdom (UK) and which may also be registered with the Commodity Futures Trading Commission (Commission) as a derivatives clearing organization (DCO) in order to provide clearing services to US persons in connection with swaps.⁵ Because we are registered with the Commission as a futures commission merchant (FCM), we must comply with the provisions of the US Commodity Exchange Act (CEA) and the Commission's rules governing the protection of customer assets and positions, as well as EMIR.

Under the Commission's regulatory regime, FCM clearing members are unable to provide their clients forms of client segregation, either individual client segregation or omnibus client segregation, that comply with EMIR. The forms of client segregation that FCMs may provide differ in certain respects from the forms provided under EMIR.⁶ We have made available separately the costs associated with providing client segregation in compliance with the Commission's regulations.

You are entitled to elect to have your assets and positions held in accordance with a client segregation regime under EMIR and, if you elect to do so, we will facilitate the transfer of the assets and positions that we currently hold on your behalf to our EU or UK clearing member affiliate, as appropriate, or another clearing member licensed in the relevant jurisdiction that is willing to accept your account.

If you (i) are a "US person" under the Commission's regulatory regime, or (ii) trade derivatives listed for trading on an exchange, *i.e.*, futures and options on futures contracts, that is registered with the Commission as a designated contract market (DCM) (*e.g.*, ICE Futures US) and elect to have your assets and positions held in accordance with a client segregation regime under EMIR, you will no longer be allowed to clear swaps through a CCP that has been authorized in accordance with EMIR or enter into derivatives listed for trading on a DCM and cleared through such CCP.

This Statement describes at a high level the statutory and regulatory regime under the CEA and applicable Commission rules governing the protection of customer assets and positions with respect to (i) cleared swaps,⁷ and (ii) exchange-traded derivatives.

⁵ The terms "CCP" and "DCO" will be used interchangeably throughout this Statement. In the EU, Eurex Clearing AG and LCH SA, and in the UK, ICE Clear Europe and LCH Limited, are each registered with the Commission as DCOs and are permitted to clear one or more classes of swaps for cleared swaps customers.

⁶ As explained below under *Customer protection regime*, the rules governing the protection of cleared swaps customer collateral differ from the rules governing the protection of customer funds held in connection with exchange-traded derivatives.

⁷ The CEA defines a "cleared swap" to mean any swap that is, directly or indirectly, submitted to and cleared by a DCO registered with the Commission. A "swap", in turn, is broadly defined and includes "an agreement, contract, or transaction that is, or in the future becomes, commonly known to the trade as a swap."

Before making a decision, we encourage you to carefully review this Statement as well the separate disclosure statement made available by our EU or UK clearing member affiliate, as appropriate, that describes the levels of protection afforded under, and the main legal implications of, client segregation under EMIR. This latter disclosure statement, and our affiliate Citigroup Global Markets Limited's pricing disclosure statement, are available on the Citi Institutional Clients Group website at: http://icg.citi.com/icg/global_markets/product_solutions/citi_futures.jsp.

B. Organization of this Statement

This Statement is set out as follows:

- Part II highlights certain significant differences between EMIR and Commission rules.
- Part III describes the agency clearing model.
- Part IV describes the Commission's regulatory regime for the protection of customer funds.
- Part V summarizes the rights of a customer to transfer, or port, assets or positions in a business-as-usual context and in the event we default in our obligations to a CCP.
- Part VI considers factors to consider in the event of the insolvency of a CCP or other third party.

C. What you are required to do.

You are required to review the information provided in this Statement and, as applicable, the separate disclosure statement provided by our affiliate, Citigroup Global Markets Limited, and the disclosure statement provided by the CCP through which you may clear derivatives transactions. You must confirm to us in writing whether you intend to continue to maintain an account with us to clear derivatives or to transfer your account to our affiliate, Citigroup Global Markets Limited, or other clearing member willing to accept your account that is licensed in the relevant jurisdiction.

We will explain how we would like you to make this confirmation and by when. If you do not confirm within the requested timeframe, we may have to take action with respect to your account. In the meantime, we will continue to clear your swaps and exchange-traded derivatives using the existing omnibus account structure.

D. Important

Although this Statement will be helpful to you when making this decision, this Statement does not constitute legal or any other form of advice and must not be relied on as such. This Statement provides a high level analysis of several complex and/or new areas of law, whose effect will vary depending on the specific facts of any particular case, some of which have not been tested in the courts. It does not provide all the information you may need to make your decision on which account type or level of segregation is suitable for you. It is your responsibility to review and conduct your own due diligence on the relevant rules, legal documentation and any other information provided to you on each of our client account

offerings and those of the various CCPs on which we clear derivatives for you. You may wish to appoint your own professional advisors to assist you with this.

We will not in any circumstances be liable, whether in contract, tort, breach of statutory duty or otherwise for any losses or damages that may be suffered as a result of using this Statement. Such losses or damages include (a) any loss of profit or revenue, damage to reputation or loss of any contract or other business opportunity or goodwill, and (b) any indirect loss or consequential loss. No responsibility or liability is accepted for any differences of interpretation of legislative provisions and related guidance on which it is based. This paragraph does not extend to an exclusion of liability for, or remedy in respect of, fraudulent misrepresentation.

Please note that this disclosure has been prepared on the basis of US law except as otherwise stated. However, issues under other laws may be relevant to your due diligence, including for example, the law governing the CCP rules or related agreements; the law governing our insolvency; the law of the jurisdiction of incorporation of the CCP; and the law of the location of any assets.

II. Significant Differences Between EMIR and Commission Rules

As noted above, the primary focus of this Statement is the Commission's regulatory regime for the protection of customer funds. Nonetheless, throughout this Statement, we identify certain differences and similarities between the manner in which derivatives transactions generally are cleared in the EU and in the UK, including as required by EMIR, and in which they are cleared under the Commission's regulatory regime. At the outset, we highlight the following:

- In the EU and the UK, cleared derivatives transactions are generally entered into using the "principal model." That is, the clearing member enters into two separate but related transactions: (i) a principal transaction with its client; and (ii) an equal and opposite principal transaction with the CCP. Under the Commission's regulatory regime, transactions are entered into using the "agency model." That is, the FCM clearing member, as agent for its customer, enters into one transaction with the CCP. The clearing member FCM does not enter into a separate transaction with its customer.
- In the EU and the UK, customer assets may be transferred to a clearing member on either a title transfer basis or a security interest basis. Under the Commission's regulatory regime, customer assets may only be transferred on a security interest basis.
- Under EMIR, clearing members must offer customers a choice between EMIR individual client segregation and EMIR omnibus client segregation. Under the Commission's regulatory regime, FCM clearing members may provide only US omnibus client segregation. The forms of omnibus client segregation permitted under Commission rules differ in certain respects from the forms of omnibus client segregation that comply with EMIR.
- Under EMIR, clearing member affiliates are treated as customers and may be part of the same omnibus client account as all other customers. Under the Commission's regulatory regime, the accounts of clearing member affiliates must be treated as proprietary accounts and may not be commingled with customer accounts. This reflects the Commission's view that accounts that are subject to common control with the FCM may pose the same risk to customer funds as an FCM's own accounts.

III. Agency Clearing Model

Derivatives transactions cleared through a CCP in the EU or in the UK are generally entered into using the “principal model.” That is, the clearing member enters into two separate but related transactions: (i) a principal transaction with its customer; and (ii) an equal and opposite principal transaction with the CCP.

Under the Commission’s regulatory regime, transactions are entered into using the “agency model.” That is, the FCM clearing member enters into one transaction, and posts margin, with the CCP, as agent for and on behalf of its customer. The FCM clearing member does not enter into a separate transaction with its customer.

As the clearing member of the CCP, we are required to post assets with the CCP as margin to support your open positions within the time prescribed by the CCP. Such margin is generally required to be paid to the CCP early in the morning, although the CCP may call for additional margin during any trading day. Consequently, we will frequently meet a CCP’s margin requirements using our own funds and then call you for margin. In the ordinary course, we will expect you to meet any call for margin by the end of the day on which the call is made. If you provide margin in a form that is not accepted by the CCP, we may transform it. The arrangements between you and us relating to how margin calls will be funded will be set out in our customer agreement with you.

IV. Customer protection regime

We may receive assets from you to margin: (i) cleared swaps executed bilaterally, either over-the-counter or through a trading facility such as (a) regulated market or a multilateral trading facility operated by an authorized investment firm (**Market**), or (b) a swap execution facility registered with the Commission;⁸ (ii) exchange-traded derivatives executed on a designated contract market (**DCM**) registered with the Commission;⁹ or (iii) exchange-traded derivatives executed on a regulated market.¹⁰

Under Commission rules, customer collateral received to margin cleared swaps may not be commingled with funds received to margin exchange-traded derivatives executed on either a DCM or a regulated market. Similarly, customer funds received to margin exchange-traded derivatives executed on a DCM may not be commingled with funds received to margin exchange-traded derivatives on a regulated market. As discussed below under *Transfer, or porting, of customer assets and positions*, the prohibition on commingling assures that customer assets are better protected in the event of an FCM clearing member bankruptcy.

The rules governing the protection of cleared swaps customer collateral differ from the rules governing the protection of customer funds held in connection with exchange-traded derivatives. We discuss first the regulatory regime for cleared swaps customer collateral,

⁸ As noted above, in the EU, Eurex Clearing AG and LCH SA, and in the UK, ICE Clear Europe and LCH Limited, are each registered with the Commission as DCOs and are permitted to clear one or more classes of swaps for cleared swaps customers.

⁹ Certain UK CCPs also clear futures and options on futures contracts listed for trading on US designated contract markets.

¹⁰ In the EU, Eurex Clearing AG and LCH SA, and in the UK, ICE Clear Europe and LCH Limited, each clear futures and options on futures contracts listed for trading on one or more Markets.

followed by a discussion of the regime for customer funds held in connection with derivatives traded on a DCM or a regulated market.

A. Cleared Swaps Customer Collateral¹¹

The Commission's regulatory regime for the protection of cleared swaps collateral held for cleared swaps customers is commonly referred to as "LSOC", an acronym for "legally segregated, operationally commingled." LSOC implements the provisions of the CEA that require us to "treat and deal with all money, securities and property of any swaps customer received to margin, guarantee or secure a swap cleared by or through a DCO as belonging to such customer."¹² Cleared swaps customer collateral must be separately accounted for and may not be commingled with our funds or be used to margin, guarantee, or secure any trades or contracts of any other swaps customer or person.

1. Required records. Notwithstanding the foregoing, the CEA and Commission rules permit us to commingle cleared swaps customer collateral in the same account or accounts with a bank or trust company or a CCP that clears cleared swaps customers positions on our behalf. Although cleared swaps customer positions and collateral may be held in the same commingled account, each FCM and CCP must maintain books and records that identify the positions of, and the market value of the collateral posted by, each customer in order that, in the event of a customer default, the collateral of a non-defaulting customer is not exposed to losses attributable to the defaulting customer.

These recordkeeping requirements achieve several goals:

- The required records assure that we conduct the daily analysis to confirm that we are not using the funds of one customer to meet the obligations of another at the CCP.
- As discussed below under *Transfer, or porting, of customer assets and positions*, the required records assure that, in the event we are placed in bankruptcy, the CCP does not use the collateral of non-defaulting customers to meet the margin obligations of one or more defaulting customers.
- The required records should facilitate the transfer of cleared swaps customer positions and related margin, whether at the request of the customer in a business-as-usual context or upon our default.

¹¹ **Cleared swaps customer collateral** is broadly defined to mean all money, securities, or other property received by an FCM or by a DCO from, for, or on behalf of a cleared swaps customer, that: (i) is intended to or does margin, guarantee, or secure a cleared swap; or (ii) constitutes, if a cleared swap is in the form or nature of an option, the settlement value of such option. This term also includes accruals, *i.e.*, all money, securities, or other property that an FCM or DCO receives, directly or indirectly, which is incident to or results from a cleared swap that an FCM intermediates for a cleared swaps customer.

A **cleared swaps customer** is any person entering into a cleared swap, except (i) any owner or holder of a cleared swaps proprietary account with respect to the cleared swaps in such account, and (ii) a clearing member of a DCO with respect to swaps cleared on that DCO. Commission rules provide that accounts of clearing member affiliates must be treated as proprietary accounts and may not be commingled with customer accounts.

¹² The obligation to treat cleared swaps customer collateral as belonging to the customer requires that all such collateral be received on a security interest basis. Customer collateral may not be received on a title-transfer basis.

2. Excess customer collateral. LSOC permits, but does not require, an FCM clearing member to maintain its cleared swaps customers' excess collateral with a CCP if: (1) the rules of the DCO expressly permit the FCM to transmit collateral in excess of the amount required by the DCO; and (2) the CCP provides a mechanism by which the FCM is able to, and maintains rules pursuant to which the FCM is required to, identify each business day, for each cleared swaps customer, the amount of collateral posted in excess of the amount required by the CCP.¹³

By electing to hold its cleared swaps customers' excess collateral with a CCP, an FCM clearing member may assure its customers that their collateral will not be subject to inadvertent or intentional misuse by the FCM. Moreover, the transfer of cleared swaps customer positions and related margin, whether at the request of the customer in a business-as-usual context or upon the default of the customer's FCM clearing member, should be facilitated.

However, the transfer of a cleared swaps customer's collateral between CCPs to meet margin requirements will be more difficult.¹⁴ Importantly, excess customer collateral held at a CCP will not necessarily receive greater protection in the event of the bankruptcy of the FCM clearing member. As discussed below under *Transfer, or porting, of customer assets and positions*, customers have a priority over other creditors of a bankrupt FCM, and the funds held for the benefit of customers will not be subject to the claims of other creditors. Nonetheless, in the unlikely event of a shortfall of assets available to meet the claims of cleared swaps customers, all cleared swaps customers will share in the shortfall ratably.

B. Exchange-traded derivatives

1. US derivatives exchanges. The provisions of the CEA that provide for the segregation of customer funds held to margin, guarantee or secure futures and options on futures contracts traded on or subject to the rules of a US derivatives exchange are essentially identical to the provisions governing cleared swaps customer collateral. Exchange-traded derivatives customer funds: (i) must be separately accounted for and may not be commingled with our funds or be used to margin, guarantee, or secure any trades or contracts of any other customer or person; and (ii) may be commingled in an omnibus account with a bank or trust company or with the DCO that clears exchange-traded derivatives on our behalf. Nonetheless, there are differences, in particular with respect to the books and records that the DCO must create and maintain.

At the FCM level, the differences between the exchange-traded customer omnibus model and LSOC are slight. In each instance, FCMs are required to create and maintain books and records concerning: (i) the identity of their customers; (ii) the positions held on behalf of each such customer; and (iii) the collateral deposited by each customer to margin such positions.

At the CCP level, however, the FCM clearing member is not required to provide the CCP with information to identify the positions of, and the market value of the collateral posted by, each customer, and the CCP is not required to create and maintain such books and records. Rather, the CCP is entitled to treat the omnibus account as a single customer.

¹³ For example, Eurex Clearing AG, ICE Clear Europe and LCH Limited have adopted rules permitting FCM clearing members to maintain a cleared swaps customer's excess collateral with the DCO.

¹⁴ For example, excess funds held at a CCP must be transferred back to the clearing member before they may be transferred to another CCP.

As discussed below under *Transfer, or porting, of customer assets and positions*, because the CCP is entitled to treat the omnibus account as a single customer, a customer's ability to transfer the customer's positions and related margin upon the default of the FCM clearing member may be limited. Moreover, in the event an FCM clearing member defaults in its obligations to a CCP and there is a shortfall in the customer funds required to be held in the customer omnibus account, the CCP may, but is not required to, liquidate all positions held in the omnibus account and apply the proceeds thereof to meet the FCM's obligations to the CCP with respect to the customer omnibus account.¹⁵

2. Non-US derivatives exchanges. We may be a clearing member of a CCP for the purpose of clearing transactions executed on a non-US derivatives exchange.¹⁶ The CEA does not specifically provide for the segregation of customer funds held to margin, guarantee or secure futures and options on futures contracts traded on or subject to the rules of a non-US derivatives exchange. Nonetheless, at the FCM level, the Commission's rules establish a regulatory regime that is comparable to the provisions governing US exchange-traded derivatives customer funds. Customer funds held for the purpose of trading non-US exchange-traded derivatives: (i) must be separately accounted for and may not be commingled with our funds or be used to margin, guarantee, or secure any trades or contracts of any other customer or person; and (ii) may be commingled in an omnibus account with a bank or trust company or with the CCP that clears exchange-traded derivatives on our behalf. In addition, we are required to maintain books and records concerning: (i) the identity of our customers; (ii) the positions held on behalf of each such customer; and (iii) the collateral deposited by each customer to margin such positions.

At the CCP level, however, the rules of the jurisdiction otherwise governing the treatment of customer funds apply. In the case of an EMIR-authorized CCP, customer funds would be held in an omnibus client account.

3. Excess customer funds. Commission rules do not expressly authorize a CCP to adopt (or prohibit a CCP from adopting) rules permitting an FCM clearing member to maintain its excess customer funds with the CCP. If a CCP were to adopt such rules, the CCP would not be required to identify such funds to particular customers within the customer omnibus account. In the event an FCM clearing member defaults in its obligations to the CCP and there is a shortfall in the customer funds required to be held in the customer omnibus account, the CCP may apply the excess customer funds that it is holding to meet the FCM's obligations to the CCP with respect to the customer omnibus account.

¹⁵ As further discussed below, the assets held in the customer omnibus account may not be used to meet any other obligations of the FCM clearing member to the CCP.

¹⁶ For example, as noted above, in the EU, Eurex Clearing AG and LCH SA, and in the UK, ICE Clear Europe and LCH Limited, each clear futures and options on futures contracts listed for trading on non-US derivatives exchanges. Certain FCMs that are clearing members of ICE Clear Europe are authorized to clear derivatives transactions executed on ICE Futures Europe and ICE Endex. Pursuant to Commission Order, certain of the positions executed on behalf of customers on ICE Futures Europe and ICE Endex and the related margin are permitted to be held in the same account as US exchange-traded derivatives in order to allow portfolio margining between derivatives traded on those exchanges and derivatives traded on ICE Futures US. Such positions and margin receive the same protections provided for US exchange-traded derivatives.

V. Transfer, or porting, of customer assets and positions

A. Transfers to another FCM in a business-as-usual context

The rights and obligations of FCMs and their customers with respect to the transfer of customer assets and positions to another FCM in a business-as-usual context are the same whether the customer is trading (i) cleared swaps, (ii) exchange-traded derivatives executed on a DCM, or (iii) exchange-traded derivatives executed on a regulated market. In particular, Commission rules prohibit us from transferring your assets and positions to another FCM without your consent.

In a business-as-usual context, *i.e.*, we are not in default, you may request at any time that all or a portion of your assets and positions be transferred to another FCM clearing member that has agreed to accept your account. National Futures Association (NFA) Compliance Rule 2-27 provides that, within two business days after receiving a customer's request to transfer the customer's account, or within such further time as may be necessary in the exercise of due diligence, the FCM clearing member carrying the account must confirm to the FCM clearing member receiving the account all balances in the account and all open positions. Within three business days of the day such confirmation is due, or within such further time as may be necessary in the exercise of due diligence, the FCM clearing member carrying the account must effect the transfer of the balances and positions to the receiving FCM clearing member.

NFA Compliance Rule 2-27 is applicable to all FCMs and each type of customer account.

B. Transfers when the FCM clearing member is in default under DCO rules but not in bankruptcy.

1. Cleared swaps. If an FCM clearing member that clears swaps on behalf of its customers is deemed to be in default under the rules of the relevant CCP but has not been placed in bankruptcy, the CCP will undertake to facilitate the transfer of the defaulting FCM's customers to one or more non-defaulting FCM clearing members that are willing and able to accept the accounts.

Because a CCP will have information regarding the identity of each cleared swaps customer of the defaulting FCM clearing member, the positions carried on behalf of each such customer and the value of the collateral margining such positions, a cleared swaps customer may be able to request the CCP to transfer the customer's positions and related margin to an FCM clearing member that the cleared swaps customer selects.

The defaulting FCM is required to cooperate with the CCP in effecting such transfer and, therefore, the FCM should transfer any excess cleared swaps collateral it may hold. Nonetheless, the transfer of customer assets and positions will be facilitated if excess cleared swaps customer collateral is held by the CCP that has declared the FCM clearing member in default.

2. Exchange-traded derivatives. Because a CCP will not have information with respect to value of the assets and positions on behalf of an FCM clearing member's exchange-traded derivatives customers, such customers will not have an opportunity to request that their positions and related margin be transferred to an FCM clearing member that the customer selects. In these circumstances, the CCP may attempt to transfer the assets and positions held in the customer omnibus account to one or more non-defaulting FCMs.

In this regard, EMIR Article 48(5) instructs a CCP to “commit itself to trigger the procedures for the transfer of the assets and positions held by the defaulting clearing member for the account of its clients to another clearing member designated by all of those clients, on their request and without the consent of the defaulting clearing member.” However, that other clearing member is required to accept those assets and positions “only where it has previously entered into a contractual relationship with the clients by which it has committed itself to do so.” Once transferred to a non-defaulting FCM clearing member, the customer will be able to request that the customer’s account be transferred to an FCM clearing member that the customer selects.

C. Treatment of cleared swaps customer assets and positions when the FCM clearing member is placed in bankruptcy

1. In general. If an FCM clearing member is placed in bankruptcy, the FCM is liquidated in accordance with the commodity broker liquidation provisions of the US Bankruptcy Code and the Commission’s rules.¹⁷

2. Authority of a CCP in the event of a shortfall in the cleared swaps customer omnibus account. If, upon the bankruptcy of an FCM clearing member, there is a shortfall in the required margin for the cleared swaps customer omnibus account at a CCP, the Commission’s rules governing cleared swaps customer collateral specifically prohibit a CCP from netting the positions and collateral of non-defaulting customers with the positions and collateral of any other customer or the clearing member.¹⁸

3. Transfer of cleared swaps customer assets and positions. Once an FCM clearing member has filed for, or is otherwise placed in bankruptcy, a CCP may not transfer, or port, the positions and assets of non-defaulting customers to another clearing member except as directed by the trustee and confirmed by the Bankruptcy Court. However, the Commission’s rules instruct the trustee in bankruptcy to attempt to “effectuate the transfer of entire customer accounts wherein the commodity contracts are transferred together with the money, securities, or other property margining, guaranteeing, or securing the commodity contracts.”¹⁹ The rules further provide that, if the FCM’s customer accounts cannot be transferred in their entirety, the trustee may effect a partial transfer of all customer accounts or of an individual customer account.

In the event customer accounts cannot be transferred, however, or only a partial transfer is accomplished, the trustee is further instructed to liquidate all remaining open positions. The Bankruptcy Code requires that losses arising in any account class of a defaulting FCM must be shared ratably among the members of that account class.²⁰ Therefore, in the event that losses

¹⁷ It is important to note that the Commission’s rules specifically require each FCM clearing member or CCP holding cleared swaps customer collateral to designate the United States as the legal location of such collateral. The purpose of this requirement is to assure that cleared swaps customer collateral will be treated in accordance with the US Bankruptcy Code. This is the case even if the CCP is located outside of the US and also subject to the laws of another jurisdiction.

¹⁸ The CCP may use the value of the collateral posted on behalf of the defaulting customer. The Commission’s rules with regard to cleared swaps customer collateral are consistent with EMIR.

¹⁹ The trustee will coordinate with the CCP to effect a transfer of a defaulting FCM’s customer positions.

²⁰ Under the Bankruptcy Code, (i) cleared swaps customers, (ii) customers clearing exchange-traded derivatives executed on a DCM, and (iii) customers clearing exchange-traded derivatives executed on a regulated market each comprise a separate account class.

among cleared swaps customers are so great that the FCM is unable to meet the shortfall with its own assets and consequently defaults to the CCP, a cleared swaps customer may be exposed to losses of other customers.²¹

D. Treatment of exchange-traded derivatives customer assets and positions when the FCM clearing member is placed in bankruptcy

1. In general. With one critical exception discussed below, the law governing the treatment of exchange-traded derivatives customer assets and positions is similar to the treatment of cleared swaps customer assets and positions. In particular, when an FCM clearing member has filed for, or is otherwise placed in bankruptcy, a CCP may not transfer, or port, the positions and assets of non-defaulting customers to another clearing member except as directed by the trustee and confirmed by the Bankruptcy Court. In addition, the trustee in bankruptcy, in coordination with the CCP, will attempt to effectuate the transfer of all customer positions together with the money, securities, or other property held to margin the commodity contracts.

In the event customer accounts cannot be transferred, however, or only a partial transfer is accomplished, the trustee is further instructed to liquidate all remaining open positions. The Bankruptcy Code requires that losses arising in any account class of a defaulting FCM must be shared ratably among the members of that account class.

2. Authority of a CCP in the event of a shortfall in the exchange-traded derivatives customer omnibus account. In contrast to the treatment of the cleared swaps customer omnibus account, if, upon the bankruptcy of an FCM clearing member, there is a shortfall in the exchange-traded derivatives customer omnibus account at a CCP caused by the default of one or more customers, Commission rules permit, but do not require, the CCP to net and liquidate the positions held in the customer omnibus account and to use the proceeds of such liquidation to meet the defaulting FCM's obligations to the CCP with respect to the omnibus account.²² The proceeds from the liquidation of the exchange-traded derivatives customer omnibus account may not be used to meet any other obligations of the FCM clearing member to the CCP.

E. Rights and Obligations of CCPs Under EMIR

The disclosure statement made available by our EU or UK clearing member affiliate, referenced above, describes in greater detail the rights and obligations of clearing members, their clients and CCPs under EMIR in the event of a clearing member default. These rights and obligations differ in certain respects from the rights and obligations available under the CEA and the Commission's regulatory regime. We note immediately below two significant differences.

1. As noted earlier, under EMIR Article 48(5), a CCP may transfer the assets and positions held by a defaulting clearing member in an omnibus client segregated account only if all of the clients that comprise the omnibus client segregated account had previously designated another

²¹ Consequently, even if an FCM clearing member were able to provide its customers individual client segregated accounts, such accounts would not provide any additional protection to customers in the event of the bankruptcy of the FCM clearing member.

²² The CCP is authorized to net and liquidate such positions even if the Bankruptcy Court has appointed a trustee in bankruptcy.

clearing member. Under the Commission's regulatory regime, the consent of the clients would not be necessary. Rather, the CCP, in coordination with the Commission, would identify one or more non-defaulting clearing members that would be willing to accept the omnibus account. Once the omnibus account is transferred, each customer would be able to request that the customer's account be transferred to an FCM clearing member that the customer selects.

2. EMIR Article 48(5) also requires a CCP commit to transfer the assets and positions held by defaulting clearing member in an omnibus client segregated account for a predefined period of time after the clearing member becomes insolvent. Under the US Bankruptcy Code, however, once an FCM clearing member has filed for bankruptcy, a CCP may not transfer client assets and positions without the consent of the bankruptcy trustee.

3. In the EU, EMIR Article 39(11) provides that Member States' national insolvency laws shall not prevent a CCP from acting in accordance with Article 48(5), (6) and (7) with regard to the assets and positions recorded in the accounts discussed above.'

VI. Insolvency of CCPs and others

Except as set out in this section, this Statement deals only with our insolvency. You may also not receive all of your assets back or retain the benefit of your positions, if other parties in the clearing structure default – e.g., the CCP itself, a custodian or a settlement agent.

In relation to CCP insolvency, broadly speaking our (and therefore your) rights will depend on the law of the country in which the CCP is incorporated and the specific protections that the CCP has put in place.²³ You should review the relevant CCP disclosures carefully in this respect and take legal advice to fully understand the risks in this scenario.

In addition, please note the following:

- We expect that an insolvency official will be appointed to manage the CCP. Our rights against the CCP will depend on the relevant insolvency law and/or that official.
- It will be difficult or impossible to port positions and related margin, so it would be reasonable to expect that they will be terminated at CCP level. The steps, timing, level of control and risks relating to that process will depend on the CCP, its rules and the relevant insolvency law. However, it is likely that there will be material delay and uncertainty around when and how much assets or cash we will receive back from the CCP. Subject to the bullet points below, it is likely that we will only receive back only a percentage of assets available depending on the overall assets and liabilities of the CCP.
- It is unlikely that you will have a direct claim against the CCP.
- Under the terms of our customer agreement, we are not liable to you in the event of the default of a CCP or other third party not under our control.

²³ ICE Clear Europe and LCH Limited are organized under the laws of the England and Wales; Eurex Clearing AG is organized under the laws of Germany; and LCH SA is organized under the laws of France.

- If recovery of margin in this scenario is important, then you should explore “bankruptcy remote” or “physical segregation” structures offered by some CCPs. However, these tend to be offered only in relation to accounts subject to individual client segregation.

It is beyond the scope of this disclosure to analyse such options but your due diligence on them should include analysis of matters such as whether other creditors will have priority claims to margin; whether margin or positions on one account could be applied against margin or positions on another account (notwithstanding the contractual agreement in the CCP’s rules); the likely time needed to recover margin; whether the margin will be recovered as assets or cash equivalent; and any likely challenges to the legal effectiveness of the structure (especially as a result of the CCP’s insolvency).