

***Futures and Options on Futures
And Cleared Derivatives Transactions
Risk Disclosures***

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RISK DISCLOSURE STATEMENT

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:

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 Commission for the purpose of such investments. Permitted investments are listed in Commission Regulation 1.25 and include: U.S. government securities; municipal securities; money market mutual funds; and certain corporate notes and bonds. 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 of 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, <https://www.morganstanley.com/institutional-sales/CFTC-CAP-rules-Firm-Disclosures-and-Financial-Data>

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:

13. 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.
14. 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.

SUPPLEMENTAL RISK DISCLOSURE STATEMENT

This brief statement does not disclose all of the risks and other significant aspects of trading in futures and options. In light of the risks, you should undertake such transactions only if you understand the nature of the contracts (and contractual relationships) into which you are entering and the extent of your exposure to risk. Trading in futures and options is not suitable for many members of the public. You should carefully consider whether trading is appropriate for you in light of your experience, objectives, financial resources and other relevant circumstances.

FUTURES

1. Effect of 'Leverage' or 'Gearing'

Transactions in futures carry a high degree of risk. The amount of initial margin is small relative to the value of the futures contract so that transactions are 'leveraged' or 'geared.' A relatively small market movement will have a proportionately larger impact on the funds you have deposited or will have to deposit: this may work against you as well as for you. You may sustain a total loss of initial margin funds and any additional funds deposited with the firm to maintain your position. If the market moves against your position or margin levels are increased, you may be called upon to pay substantial additional funds on short notice to maintain your position. If you fail to comply with a request for additional funds within the time prescribed, your position may be liquidated at a loss and you will be liable for any resulting deficit.

2. Risk-reducing orders or strategies

The placing of certain orders (e.g., 'stop-loss' orders, where permitted under local law, or 'stop-limit' orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as 'spread' and 'straddle' positions, may be as risky as taking simple 'long' or 'short' positions.

OPTIONS

3. Variable degree of risk

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.

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 ordinarily is remote.

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.

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

4. Terms and conditions of contracts

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.

5. Suspension or restriction of trading and pricing relationships

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.

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.

6. Deposited cash and property

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 had 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.

7. Commission and other charges

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

8. Transactions in other jurisdictions

Transactions on markets in other jurisdictions, including markets formally linked to a domestic market, may expose you to additional risk. Such markets may be subject to regulation which may offer different or diminished investor protection. Before you trade, you should inquire about any rules relevant to your particular transactions. Your local regulatory authority will be unable to compel the enforcement of the rules of regulatory authorities or markets in other jurisdictions where your transactions have been effected. You should ask the firm with which you deal for details about the types of redress available in both your home jurisdiction and other relevant jurisdictions before you start to trade.

9. Currency risks

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.

10. Trading facilities

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.

11. Electronic trading

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.

12. Off-exchange transactions

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.

CROSS TRADE CONSENT

Morgan Stanley & Co. LLC, its officers, directors employees or affiliates or other customers of Morgan Stanley & Co. LLC 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.

ELECTRONIC TRADING AND ORDER ROUTING SYSTEMS DISCLOSURE STATEMENT^{*/}

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.

^{*/} 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 on the exchange's internet home page.

NOTICE REGARDING AVERAGE PRICE SYSTEM ("APS")

You should be aware that certain US and non-US exchanges, including the CME and CBOT, may now or in the future allow a futures commission merchant ("FCM") such as Morgan Stanley & Co. LLC 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 your FCM. In either case, trades that are confirmed to you at average prices will be designated as such on your daily 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. 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.

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

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 or rounded 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 pre-existing allocation procedures to determine the proportions in which each account will share in the partial fill.

Upon receipt of an execution at multiple prices for an order with an APS indicator, an average will be computed by multiplying the execution prices by the quantities at those prices divided by the total quantities. 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 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 Morgan Stanley & Co. LLC Listed Derivatives Operations or your client service representative.

DIRECT ORDER TRANSMITTAL CLIENT DISCLOSURE STATEMENT

This statement applies to the ability of authorized customers of Morgan Stanley & Co. LLC (“**MSCO**”) to place orders for foreign futures and options transactions directly with non-US entities (each, an “Executing Firm”) that execute transactions on behalf of MSCO’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 MSCO’s customer omnibus account maintained with a foreign clearing firm. Consequently, MSCO 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 MSCO. MSCO 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 MSCO. 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, MSCO will assume your consent to the aforementioned conditions.

FOREIGN TRADER DISCLOSURE STATEMENT

Dear Customer:

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 Morgan Stanley & Co. LLC. 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.

Very truly yours,

Morgan Stanley & Co. LLC

NOTICE TO CLIENTS

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 “**Rules**”) made by the Securities and Futures Commission (“**SFC**”) under the Securities and Futures Ordinance. The Rules impose monitoring and reporting obligations with regard to large open positions. Where you are holding a reportable position for your client, you must disclose the identity of the client. For the purposes of the 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 Rules and what they require is set out in the SFC’s Guidance Note on Position Limits and Large Open Position Reporting Requirements. Copies of the Rules and Guidance Note can be downloaded from the SFC’s website (www.sfc.hk).

Purpose of the Rules

The purpose of the 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 Rules and Guidance Note are summarised below. However, you should review the 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 Rules make you responsible for ensuring that you comply with the Rules. Section 8 of the Rules makes it a criminal offence not to comply (subject to a maximum fine of HK\$100,000 and imprisonment for up to 2 years).

In 2004, the SFC investigated 6 breaches of the Rules, including a breach by a non-Hong Kong fund manager which was referred to the fund manager’s overseas regulator. 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 action).

Position Limits

The 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, the prescribed limit for Hang Seng Index futures and options contracts and Mini-Hang Seng Index futures and options contracts is 10,000 long or short position delta limit for all contract months combined, provided the position delta for the Mini-Hang Seng Index futures contracts or Mini-Hang Seng Index options contracts shall not at any time exceed 2,000 long or short for all contract months combined. For many futures contracts and stock options contracts, the position limit is set at 5,000 contracts for any one contract/expiry month.

The prescribed limit for each contract traded on the Hong Kong exchanges is set out in the Rules.

Reportable Positions

If you hold or control an open position in futures contracts or stock options contracts in excess of the specified level, the Rules require you to report that position in writing to the relevant Hong Kong exchange (i) within one day (ignoring Hong Kong public holidays and Saturdays) of first holding or controlling that position, and (ii) on each succeeding day on which you continue to hold or control that position.

The specified reporting level for each contract traded on the Hong Kong exchanges is set out in the Rules. The report must state:

- (a) the number of contracts held or controlled in respect of the position in each relevant contract month; and
- (b) if the position is held or controlled for a client, the identity of the client, and the number of contracts held or controlled for such person in respect of the reportable position in each relevant contract month.

Scope of the Rules

You should note:

- The prescribed limits and reportable position requirements 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 Rules and Para. 2.6 of the Guidance Note)
- If a person holds or controls positions in accounts at more than one intermediary, the Rules require him to aggregate the positions for the purposes of applying the prescribed limits and reportable position requirements. (Para. 6.1 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. Alternatively, the person should ask all of his intermediaries to report the positions in each of the accounts separately to the exchange, even if the positions in the individual accounts do not reach the reportable level. (Paras. 4.6 and 6.2 of the Guidance Note)
- Where you are holding a reportable position for your client, the Rules say that you must disclose the identity of the client. The SFC's view is that, for the purposes of the Rules, a client is the person who is ultimately responsible for originating the transaction instructions - i.e., the transaction originator. (Para. 6.4 of the Guidance Note)
- The 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. 6.8 of the Guidance Note)

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 the applicable exchange, and is not within the public domain. Such Market Data may only be used for your firm’s internal use. You may not, without the written authorization of the applicable 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 the applicable exchange, use Exchange 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 Exchange 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 Exchange 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 request of the broker through which your firm has obtained access to Market Data, or the applicable exchange, information demonstrating your firm’s use of the Market Data in accordance with this Notification. Each applicable 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 and permit an exchange reasonable access to your premises should an exchange wish to conduct an audit or review connected to the distribution of Market Data.

NEITHER AN EXCHANGE, NOR ANY 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 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 AN EXCHANGE, NOR 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 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 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.

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.

**NOTICE TO ALL CUSTOMERS TRANSACTING IN CONTRACTS LISTED ON THE
LONDON METAL EXCHANGE**

Customers transacting in contracts listed on the London Metal Exchange (LME) should consult the LME's GUIDE TO THE STRUCTURE, MARKET TERMINOLOGY AND ORDER EXECUTION OF THE LONDON METAL EXCHANGE, which is available here:

<https://www.lme.com/-/media/Files/News/Notices/2018/04/18-111-A-Guide-to-the-Structure,-Market-Terminology-and-Order-Execution-of-The-London-Metal-Exchange.pdf>

DISCLOSURE STATEMENT ON FUTURES EXCHANGE OWNERSHIP INTERESTS AND INCENTIVE PROGRAMS

You should be aware that your Futures Commission Merchant (“FCM”) or one or more of its affiliates may own stock of, or has 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 your FCM or its affiliate might receive financial benefits related to its 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 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 exchange. Your FCM, or one or more of its affiliates, may participate in and obtain financial benefits from such an incentive program.

You should contact your FCM directly if you would like to know whether it has an ownership interest in a particular exchange or clearing house, or whether it participates 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.

NOTICE REQUIRED PURSUANT TO CFTC REGULATION 1.55(p)

THIS STATEMENT IS FURNISHED TO YOU BECAUSE REGULATION 1.55(p) OF THE COMMODITY FUTURES TRADING COMMISSION REQUIRES IT FOR REASONS OF FAIR NOTICE UNRELATED TO MORGAN STANLEY'S CURRENT FINANCIAL CONDITION.

YOU SHOULD KNOW THAT IN THE UNLIKELY EVENT OF MORGAN STANLEY'S BANKRUPTCY, PROPERTY, INCLUDING PROPERTY SPECIFICALLY TRACEABLE TO YOU, WILL BE RETURNED, TRANSFERRED OR DISTRIBUTED TO YOU, OR ON YOUR BEHALF, ONLY TO THE EXTENT OF YOUR PRO RATA SHARE OF ALL PROPERTY AVAILABLE FOR DISTRIBUTION TO CUSTOMERS.

THE COMMODITY FUTURES TRADING COMMISSION'S REGULATIONS CONCERNING BANKRUPTCIES OF COMMODITY BROKERS CAN BE FOUND AT 17 CODE OF FEDERAL REGULATIONS PART 190.

DISCLOSURE TO AUSTRALIAN CLIENTS TRADING ICE FUTURES EUROPE PRODUCTS ON THE ICE PLATFORM

All ICE Futures Europe members, including Morgan Stanley & Co. LLC, are required, prior to such members accepting the first order from a client domiciled or resident in Australia to deal on the ICE Platform, to disclose to the client the significant differences between trading derivatives on the ICE Platform and trading derivatives on an Australian-based market.

The ICE Platform is operated by ICE Futures Europe, a private company which is incorporated and has its principal place of business in the United Kingdom (“UK”). ICE Futures Europe is a holder of an Australian market licence (“AML”) granted by the Minister under the Corporations Act 2001 (Cwlth) (“Corporations Act”). It is registered as a foreign company with the Australian Securities and Investments Commission (ARBN 128 341 293).

ICE Futures Europe is a Recognised Investment Exchange in the United Kingdom. As such, the ICE Platform is regulated primarily under the regulatory regime of the United Kingdom. As a holder of an AML (as an overseas market operator) and a registered foreign company, ICE Futures Europe is also subject to certain requirements under the Corporations Act. ICE Futures Europe does not hold an Australian financial services licence.

The rights and remedies of, and compensation arrangements for, investors who acquire products offered on the ICE Platform may differ from the rights and remedies of, and compensation arrangements for, investors who acquire products offered on an Australian-based market. In addition, while the operating rules of ICE Platform generally deal with same kind of matters that the operating rules of an Australian-based market are required to deal with, ICE’s rules may not contain all the specific matters that rules of Australian-based markets are required to contain.

Australian investors who acquire products offered on the market may be subject to the effects of changes in currency exchange rates. All trades in ICE Futures Europe contracts are settled and cleared through ICE Clear Europe Limited (“ICE Clear”). ICE Clear is UK-based and recognised by the UK Financial Services Authority as a Recognised Clearing House. ICE Clear is regulated under the regulatory regime of the UK and is subject to UK laws. ICE Clear does not hold an Australian CS facility licence.

**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 Morgan Stanley & Co. LLC (“FCM” or “we”) in connection with FCM 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 FCM has an economic or other incentive to act, or persuade you to act, in a way that favors FCM 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 FCM 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 FCM may not be a member of, or may not otherwise be able to submit your swap to, the Clearing House of your choice. FCM consequently has an incentive to persuade you to use a Clearing House of which FCM or its affiliate is a member.

You also should be aware that FCM 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, FCM 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 FCM 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 FCM 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 incentives or arrangements that are intended to encourage market participants to trade on or direct trades to that Trading Facility or Clearing House. FCM 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 FCM 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), FCM, 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 FCM or a person affiliated with FCM has a direct or indirect interest, or may effect any such order with a counterparty that provides FCM 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 FCM as agent or with FCM or its affiliate acting as counterparty, FCM or its affiliate may be doing so because of the enhanced profit potential resulting from acting as executing broker or counterparty.

FCM 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, FCM, 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 FCM 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 FCM or its affiliate access to information relating to markets, investments and products. As a result, FCM 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. FCM 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.

Derivatives Client Clearing Policy

FCM's derivatives clearing business is highly competitive. The OTC Derivative Client Clearing department decides whether to accept a prospective client for derivatives clearing based on various factors which may include, among others: (1) the credit worthiness of the prospective client; (2) the prospective client's market activities, including without limitation the expected volume of trades for clearing and the risk to FCM associated with those trades; (3) the availability of resources to clear trades for clients; (4) the nature of the prospective client's current relationship with FCM; and (5) the completion of appropriate account documentation.

FCM sets price levels for derivatives clearing based on a variety of factors including without limitation the credit worthiness of the prospective client and the expected volume of the trades for clearing. FCM may also consider the prospective client's overall trading relationship with Morgan Stanley, including without limitation its existing or potential contribution to the firm's overall revenue.

DISCLOSURE FOR CLEARED SWAPS CUSTOMERS

Default of a Non-Clearing Futures Commission Merchant

Morgan Stanley & Co. LLC (“Morgan Stanley”) may not be a clearing member of the registered derivatives clearing organization (“DCO”) that you select to clear the Cleared Swaps (as defined under CFTC Rule 22.1) that you may enter into. In such circumstances, Morgan Stanley, in the capacity of a “Depositing Futures Commission Merchant” (as defined under CFTC Rule 22.1), will enter into an agreement with a clearing member (in the capacity of a “Collecting Futures Commission Merchant,” as defined under CFTC Rule 22.1) of such DCO that is registered with the CFTC as a futures commission merchant (the “Collecting FCM”), pursuant to which Morgan Stanley will maintain an omnibus account of behalf of all of its Cleared Swaps Customers (“Omnibus Account”).

In the event that Morgan Stanley ever enters into such an arrangement, you have the right under CFTC Rule 22.16 to require Morgan Stanley to disclose the provisions of the customer agreement between the Collecting FCM and Morgan Stanley, on the basis of which Morgan Stanley would intermediate Cleared Swaps for you through such an Omnibus Account. Specifically, you have the right to require that Morgan Stanley disclose the provisions of any such agreement relating to the use of Cleared Swaps Customer Collateral (as defined under CFTC Rule 22.1), transfer, neutralization of the risks, or liquidation of Cleared Swaps in the event of a default by either Morgan Stanley or the Collecting FCM. Please contact your Morgan Stanley representative for additional information relating to clearing arrangements in respect of your Cleared Swaps Customer Account at Morgan Stanley.

Default of a Clearing Futures Commission Merchant

Each DCO 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, 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 Morgan Stanley Representative for an updated URL link.

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

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

http://www.lch.com/rules_and_regulations/ltd/default.asp

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 MORGAN STANLEY REPRESENTATIVE.

DISCLOSURE TO CUSTOMERS INTENDING TO CLEAR SWAPS ON LCH.CLEARNET LTD.

Morgan Stanley hereby directs Customer to Regulation 10 of the FCM Regulations of LCH.Clearnet Limited (“LCH”), “Acknowledgements and Agreements of FCM Clients,” available here:

<http://www.lchclearnet.com/rules-regulations/rulebooks/ltc>

REQUIRED DISCLOSURE TO CUSTOMERS CLEARING SWAPS AND SECURITY-BASED SWAPS UNDER AN APPROVED PORTFOLIO MARGIN PROGRAM

The following disclosure is provided in accordance with certain requirements applicable to Morgan Stanley & Co. LLC (“Morgan Stanley”), in its capacity as a jointly registered broker-dealer and futures commission merchant, under the terms of an Order of the Securities and Exchange Commission, set forth in SEC Release No. 34-68433, dated December 14, 2012, entitled Order Granting Conditional Exemptions under the Securities Exchange Act of 1934 (“Exchange Act”) in Connection with Portfolio Margining of Swaps and Security-Based Swaps, granting conditional exemptive relief from compliance with certain provisions of the Exchange Act in connection with a program to commingle and portfolio margin customer positions in cleared credit default swaps (“CDS”), which include both swaps and security-based swaps (any such portfolio margined CDS, “PM CDS”), in a segregated account established and maintained in accordance with Section 4d(f) of the Commodity Exchange Act (“CEA”).

Customer acknowledges and understands that Customer’s money, securities, and property held by Morgan Stanley in connection with Customer’s transactions in CDS or PM CDS (i) will be held in an account maintained in accordance with the segregation requirements of Section 4d(f) of the CEA; (ii) will be subject to protections set forth under Subchapter IV of Chapter 7 of Title 11 of the United States Code and the rules and regulations promulgated thereunder as Part 190 of the rules of the Commodity Futures Trading Commission; and (iii) will not be subject to the broker-dealer segregation requirements of Section 15(c)(3) and Section 3E of the Exchange Act and the rules thereunder, or to any customer protections under the Securities Investor Protection Act of 1970 and the stockbroker liquidation provisions of the U.S. Bankruptcy Code.

Morgan Stanley & Co. LLC Clearing Member Disclosure in relation to Futures and Cleared Swaps Customer Clearing Services under the European Market Infrastructure Regulation

Morgan Stanley

Who should read this document and why?

This document should be reviewed by clients who are domiciled in a European Union (“EU”) jurisdiction whose futures or cleared swaps are cleared by Morgan Stanley & Co. LLC (“MS&Co.”) on an EU-domiciled central counterparty (an “EU CCP”) authorised under the European Market Infrastructure Regulation (“EMIR”). This document contains important information for clients entitled to choose between what EMIR refers to as omnibus and individual segregation for each such EU CCP, and should be reviewed by clients prior to making any election in that regard. Clients should also review information provided by such EU CCPs regarding their segregation offerings, which include further information on the legal and other implications of relevant segregation models and applicable insolvency laws – links to such information have been included below.

What are the segregation requirements of EMIR?

As a registered futures commission merchant (“FCM”), MS&Co. is subject to the customer asset protection regime established under the Commodity Exchange Act, as amended (“CEA”), and the rules promulgated thereunder by the US Commodity Futures Trading Commission (“CFTC”) (collectively, “US Law”). As a clearing member of LCH.Clearnet Ltd. and ICE Clear Europe, both EU CCPs that are or in due course will be authorised under EMIR, MS&Co. is also subject to the customer asset protection regime established in the EU pursuant to EMIR.

In order to comply with its obligations as a clearing member under EMIR, MS&Co. is required to:

- offer you a choice of an individual customer account or an omnibus customer account; and
- publicly disclose the levels of protection, the costs, and the main legal implications associated with different levels of segregation.

As described in more detail below, MS&Co. intends to satisfy its obligations under EMIR by:

- offering you a choice between individual client segregation with its affiliate, Morgan Stanley & Co. International plc (“MSIP”), and omnibus client segregation, in accordance with the requirements of US Law, with MS&Co;
- disclosing the level of protection and the main legal implications associated with omnibus client segregation under US Law and referring you in turn to MSIP’s EMIR disclosure for (i) a description of the level of protection and the main legal implications associated with individual client segregation established with MSIP; and (ii) an overview of the main implications of the different levels of segregation available through MSIP; and
- disclosing the factors relating to costs associated with the different levels of segregation.

Individual and Omnibus segregated accounts under EMIR and US Law

EMIR requires that a CCP offer to its clearing members, and that each clearing member offer to its EU-domiciled clients, the option of keeping records and accounts at the CCP that either distinguish the assets and positions of the clearing member from such clearing member’s clients (omnibus client segregation) or that distinguish the assets and positions held for the account of a client from those held for the account of other clients, as well as the accounts of the clearing member (individual client segregation). If a client

elects individual client segregation, EMIR also provides that such client's positions and assets (i) must be recorded in an account separate from other client accounts, (ii) may not be netted with any positions in any other house or client account, and (iii) may not be exposed to losses attributable to any other house or client account. **MS&Co. may not, consistent with its obligations as a registered FCM under US Law, offer to establish individual client segregation on its books and records; accordingly, the offer made herein to establish such an account is an introduction to its UK affiliate MSIP and to the offering made by MSIP of a choice between omnibus or individual segregated accounts for derivatives cleared by MSIP on the EU CCPs of which it is a clearing member.**

MS&Co.'s offer to introduce its EU-domiciled clients to MSIP, and MSIP's segregation offering constitute an ongoing offer in respect of any EU CCPs on which MS&Co. clears derivatives transactions for EU-domiciled clients, subject to EMIR. Currently the offer extends to MS&Co.'s clearing arrangements on LCH.Clearnet Ltd. and ICE Clear Europe, but may extend as well to any EU CCP of which MS&Co. becomes a clearing member in the future. By accessing the link below, clients will continue to have access to relevant information regarding this ongoing offer, and EU CCPs for which MS&Co. and MSIP provide derivatives clearing services.

If you wish to be introduced to a representative of MSIP in order further to discuss MSIP's segregation offerings under EMIR, please speak to your usual Morgan Stanley contact. MSIP's individual client segregation offering is further described at this link: <https://www.morganstanley.com/institutional-sales/derivatives-clearing-disclosures>

Please note the following important qualification relating to MSIP's ability to offer individual client segregation for certain energy contracts listed for trading on ICE Futures US (which clear on ICE Clear Europe) and Nodal Exchange (which clear on LCH.Clearnet Ltd.). Both ICE Futures US and Nodal Exchange are CFTC-registered designated contract markets ("DCM"). Currently under US Law a direct offering of clearing services for DCM-executed futures contracts must be made through a registered FCM, which, as noted, is not permitted to offer or maintain individual client segregation. Accordingly, under the current constraints of US Law (and subject to any regulatory developments that may change those constraints), MSIP's offering of individual client segregation to clients introduced by MS&Co. to MSIP hereunder would not extend to DCM-executed contracts listed on ICE Futures US or Nodal Exchange. To the extent those constraints change in the future, this offer will extend to those DCM's, as well.

Omnibus Client Segregation under US Law

As a registered FCM MS&Co. must keep customer cash, securities, and other property ("customer funds") provided to MS&Co. to margin or guarantee futures and cleared swap client transactions segregated from MS&Co.'s own funds. Depending on the purpose for which such funds are received, customer funds deposited with MS&Co. are allocated to (i) customer segregated accounts for U.S. futures and options on futures; (ii) customer cleared swaps accounts; or (iii) customer foreign futures and options on futures "secured amount" accounts (each, and collectively, "customer segregated accounts"). Customer funds required to be held in one type of customer segregated account may not be commingled with funds required to be held in another type of customer segregated account (except as specifically authorized under applicable law or by the CFTC). Customer segregated accounts under US Law are a form of omnibus client segregation that complies the requirements of EMIR. But under US Law, such omnibus client segregation is the only form of client segregation available from a registered FCM. **Accordingly, the only way permissible under the current constraints of US Law that a registered FCM can offer an alternative to such omnibus client segregation pursuant to EMIR is by way of an introduction to an EU-regulated dealer that is not a registered FCM.**

Following is a general description of omnibus client segregation under US Law, for futures traded on US futures exchanges, as well as cleared swaps cleared on derivatives clearing organizations registered with the CFTC.

Omnibus Client Segregation for DCM-Executed Futures

- Customer funds provided to MS&Co. to margin or guarantee futures or options on futures traded on US futures exchanges must be deposited by MS&Co. in a customer segregated account held at a U.S bank or trust company, a clearing organization, or another FCM. Funds attributable to multiple customers may be commingled in a single account at a bank or trust company or other permitted custodian; however, customer funds attributable to one customer may not be used to meet the obligations of MS&Co. or of any other person, including another customer.
- Customer funds held to margin US futures must be held in an account with a name that clearly identifies the funds as customer funds and shows that the funds are segregated as required under US Law. An FCM is required to obtain written acknowledgements from each depository with which it custodies customer funds that the depository was informed that such customer funds belong to customers. The depository must acknowledge that it cannot use any portion of such customer funds to satisfy any obligations that the FCM may owe the depository. A copy of the letter must be filed with the CFTC and the FCM's designated self-regulatory organization ("DSRO"). The depository must agree that that it will reply promptly and directly to any request for confirmation of account balances or any other information regarding or related to the customer segregated account from authorized members of the CFTC staff, or an appropriate representative of the FCM's DSRO. In addition, the depository will provide the CFTC with the technological capability to obtain direct, read-only access to account and transaction information. Separately, DSRO rules require each FCM to instruct each depository that holds customer funds, whether located in the US or outside the US, to confirm to the DSRO all account balances daily.
- MS&Co. is required, on each business day, to calculate its segregation requirement for each segregated customer account and to submit (on the next following business day) to the CFTC and to CME (as its DSRO) a report that sets out (i) the total amount of customer funds required to be held in each segregated customer account origin, (ii) the amount of such customer funds actually held in each segregated customer account origin, and (iii) its residual interest in each segregated customer account origin. In the event that the total amount of funds in a customer segregated account origin is less than the required amounts, MS&Co. would be required to give immediate notice of that fact to the CFTC, NFA, CME (as its DSRO) and other exchanges and clearing houses on which MS&Co. transacts as a member.
- To ensure that it is continuously in compliance with its segregation requirements, an FCM is required to deposit a portion of its own funds in each customer segregated account as a buffer. These excess funds represent MS&Co.'s "residual interest" in each segregated account. Residual interest funds are held for the exclusive benefit of MS&Co.'s customers while held in a segregated customer account. MS&Co. is required to have written policies and procedures regarding the establishment and maintenance of a targeted residual interest in each of the three segregated customer account origins. In establishing that targeted amount, the MS&Co. senior management have taken into consideration a number factors, including: (i) the nature of MS&Co.'s customers, their general creditworthiness, and their trading activity; (ii) the type of markets and products traded by those customers, as well as by MS&Co. for its own account; (iii) the general volatility and liquidity of those markets and products; (iv) MS&Co.'s own liquidity and capital needs; and (v) historical trends in balances and customer debits in each customer segregated account.
- An FCM is required to notify the CFTC and its DSRO immediately whenever the amount of residual interest in any segregated customer account falls below the FCM's targeted residual interest for such customer account. In addition, certain restrictions and conditions apply to an FCM's ability to withdraw funds comprising its residual interest from any segregated customer account. Specifically, an FCM must file a regulatory report of any withdrawal of funds from a customer segregated account that exceeds 25 percent of the FCM's residual interest in that account, and any such withdrawal must be pre-approved in writing by a senior financial officer of the FCM.

Omnibus Segregation for Cleared Swaps

Under US Law, customer funds are subject to differing regimes depending on the type of product traded. The regulatory regime for the protection of cleared swaps collateral held for cleared swaps customers, commonly referred to as “LSOC” (an acronym for “legally segregated, operationally commingled”) is set out in Part 22 of the CFTC’s rules. For purposes of EMIR, the regime established under Part 22 is an omnibus segregated account regime.

Part 22 implements section 4d(f) of the CEA, which provides that an FCM treat and deal with the money, securities and property of any swaps customer received to margin a swap cleared by or through a DCO as belonging to such customer. Such cleared swaps customer collateral must be separately accounted for and not commingled with the funds of the FCM or be used to margin contracts of any person other than the person for whom the same are held.

Section 4d(f) further provides that an FCM’s cleared swaps customers collateral may be commingled and deposited in the same account or accounts, i.e., an omnibus account, with a bank or trust company or a DCO that clears cleared swaps customers positions on behalf of the FCM. It is unlawful for any person, including a bank or trust company or a DCO receiving cleared swaps customer collateral to hold such collateral as belonging to the depositing FCM or any person other than the swaps customer of the FCM.

Although cleared swap customer positions and collateral may be held in the same omnibus account, Part 22 requires each FCM and DCO to 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.

Risk Disclosure Relating to Omnibus Client Segregation Under US Law

Under US Law a defaulting clearing member FCM is liquidated in accordance with the commodity broker liquidation provisions of the Bankruptcy Code and Part 190 of the CFTC’s rules. Among other requirements, the Part 190 rules instruct the trustee in bankruptcy to attempt to effect a transfer of customer accounts holding commodity contracts (futures and cleared swaps), together with the customer funds margining such commodity contracts. The Part 190 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. The Code also sets forth special priority rules for distribution of property to futures customers and exceptions to the automatic stay and voidability provisions of the Code. The Code affords claims of public customers of the FCM (that is, customers of the FCM that are not affiliates of the FCM) the highest priority, subject only to the payment of claims relating to the administration of the FCM estate. However, where there is a shortfall in customer funds, customers participating in the relevant account class would be subject to a haircut based on a pro-rata distribution of customer property available in such account class, in accordance with the requirements of section 766 of the Code.

Under the LSOC model of segregation that applies under US Law to customer cleared swaps, FCMs and DCOs must segregate in its books and records the cleared swaps of each individual customer and relevant collateral. FCMs and DCOs must ensure that such entries are separate from entries indicating (i) FCM or DCO obligations, or (ii) the obligations of non-cleared swaps customers. Operationally, however, each FCM and DCO is permitted to commingle cleared swap customer collateral in a single account. FCMs and DCOs must further ensure that any such commingled account is separate from any account holding FCM or DCO property or holding property belonging to non-cleared swaps customers.

LSOC is intended to ensure that neither FCM nor DCO ever uses the collateral of one cleared swaps customer to support the obligations of another customer, by ensuring that the value of the cleared swaps customer collateral

that the DCO holds equals or exceeds the value of all cleared swaps customer collateral that it has received to secure the contracts of the FCM's customers. Following an FCM clearing member's default, the DCO would be permitted to access the collateral of any defaulting cleared swaps customers, but not the collateral of non-defaulting cleared swaps customers. Nevertheless, even under LSOC, Section 766(h) of the Code requires the pro rata distribution of customer property. Accordingly, in the event that losses among cleared swaps customers were so great that the FCM was unable to meet the shortfall with its own assets and defaulted, a cleared swaps customer could be exposed to losses of other customers.

It is important to note that the CFTC has emphasized its intent that any defaulting FCM carrying cleared swaps customer collateral must be liquidated in accordance with the US Bankruptcy Code and the CFTC's rules. This is the case even if the DCO is located outside of the US and also subject to the laws of another jurisdiction. Consequently, even if individual client segregated accounts were available, such accounts would not provide any additional protection in the event of the bankruptcy of a clearing FCM.

Disclosure relating to Costs

Article 38(1) of EMIR requires that CCPs and their clearing members disclose the prices and fees associated with the services they offer. Information relating to the factors which affect fees and prices for clearing derivatives through MSIP, and the costs associated with an offering of omnibus client segregation and individual client segregation through MSIP, is available at this link:

<https://www.morganstanley.com/institutional-sales/derivatives-clearing-disclosures>

Other information

A summary setting forth the EU CCPs on which MSIP offers to its clients the clearing of swaps or listed derivatives, and the types of account which MSIP will offer from the date of the relevant CCP's EMIR authorization, is available at this link:

<https://www.morganstanley.com/institutional-sales/derivatives-clearing-disclosures>

Set forth below are links to additional information relating to EU CCP segregation models, and the segregation choices offered by MSIP.

Please note that these links have been included for convenience only. If any of them do not work, you should contact the relevant EU CCP directly. Some EU CCPs have not yet published their disclosure documents but will be required to do so from the time of authorisation under EMIR. This document will be updated when those disclosures are published.

We are not responsible for, and do not accept any liability whatsoever for, any content or omissions or inaccuracies contained in the information produced by any EU CCP.

Nasdaq OMX:

<http://www.nasdaqomx.com/europeanclearing/accounts>

Eurex Clearing AG:

<http://www.eurexclearing.com/clearing-en/risk-management/client-assetprotection/143894/>

LCH Clearent Limited:

http://www.lchclearnet.com/about_us/corporate_governance/ltd_account_structures_und_er_emir.asp

LCH Clearnet SA:

http://www.lchclearnet.com/about_us/corporate_governance/sa_account_structures_und_er_emir.asp

ICE Clear Europe:

https://www.theice.com/clear_europe.jhtml

CC&G:

<http://www.ccg.it/jportal/pcontroller/NavigatorHandler?nodo=124594>

European Commodity Clearing AG:

<http://www.ecc.de/en/risk-management/emir>

NOTICE TO CUSTOMERS REGARDING EXCHANGE FOR RELATED POSITIONS TRANSACTIONS

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 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.

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.
- 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 that 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.
- 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.
- 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.
- An EFRP may incorporate multiple exchange components, provided the related components incur material market risk. An EFRP may incorporate multiple related position components, provided that 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, a designated contract market (“**DCM**”) or a swap execution facility (“**SEF**”) is ineligible to be the related position component of an EFR or EOO transaction. This exclusion does not apply to swaps that are bilaterally negotiated and submitted for clearing-only to a DCO, provided such swaps have a reasonable degree of correlation to the underlying exchange product.

DISCLOSURE TO SINGAPORE CUSTOMERS

Morgan Stanley hereby directs any Customer residing, based or domiciled in Singapore, or organized under Singapore law or operating through a Singaporean branch to the following risk disclosure notices:

https://www.lch.com/system/files/media_root/singapore%20client%20disclosure.pdf

<http://www.cmegroup.com/notices/clearing/2016/09/frb-16-03.html>

**MORGAN STANLEY & CO. LLC DIRECT CLIENT
DISCLOSURE STATEMENT REGARDING INDIRECT CLEARING**

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 customers in accordance with applicable requirements of the Indirect Clearing RTS.

I. Introduction

A. The purpose of this document.²

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 (**CCP**) in accordance with European Market Infrastructure Regulation (**EMIR**).³

Additionally, we are providing this Statement to you in compliance with our obligations as a direct client under the Indirect Clearing RTS, which requires 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, where and to the extent available under applicable CCP rules, a gross omnibus indirect client account (as described in further detail in the Annex);
- (ii) publicly disclose the levels of protection and costs associated with different levels of segregation; and
- (iii) 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 located in the European Union (**EU**) that are authorized by EMIR 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 our customers in connection with their transactions in exchange-traded derivatives (**ETDs**) cleared on EU CCPs (which include both futures and options on futures, and listed equity options).⁴ Because we are registered with the Commission as a futures commission merchant (**FCM**), and with the Securities and Exchange Commission (**SEC**) as a broker-dealer, we must comply with the provisions of the US Commodity Exchange Act (**CEA**), the Commission's rules governing the protection of futures, foreign futures and cleared swaps customer assets and positions, the SEC's rules governing the protection of securities customer assets and positions, as well as EMIR and the Indirect Clearing RTS.

1 Commission Delegated Regulation (EU) 2017/2154 of 22 September 2017 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards on indirect clearing arrangements (hereinafter, the "**Indirect Clearing RTS**").

2 As used throughout this Statement, the terms "we", "our" and "us" refer to the direct client, Morgan Stanley & Co. LLC ("**MS&Co.**"), a broker-dealer registered with the Securities and Exchange Commission and an FCM registered with the CFTC; the terms "you" and "your" refer to the customers of the direct client, or in the parlance of the Indirect Clearing RTS, the indirect client.

3 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.

4 The terms "CCP" and "DCO" are used interchangeably throughout this Statement.

Article 30 of MiFIR⁵ and the Indirect Clearing RTS set out specific compliance requirements for entities that participate in indirect clearing arrangements in connection with ETDs.⁶ 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 FCM, 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. In any such circumstance, you will therefore receive client segregation in compliance with the Commission’s regulatory regime. To the extent that we are able, consistent with applicable U.S. law, to facilitate the opening of a form of segregated accounts that comply with the Indirect Clearing RTS at the clearing member level we will do so, either through operational facilities provided through the FCM, or by means of an introduction to our affiliate, Morgan Stanley & Co. International plc. Details regarding the forms of segregated accounts mandated under the Indirect Clearing RTS are provided in the Annex to this Statement.

B. How to use this Statement.

You should review the information provided in this Statement alongside the Risk Disclosure provided to you at the time you entered into a futures or listed options agreement with us (including the Clearing Member Disclosure in relation to Futures and Cleared Swaps Customer Clearing Services under EMIR contained therein or the Options Disclosure Document, as applicable). The MS&Co. Clearing Member Disclosure is available here: <http://www.morganstanley.com/institutional-sales/pdf/msco/FIA-Risk-Disclosure-Document.pdf?v=1>; the Options Disclosure Document is available here: <https://www.theocc.com/components/docs/riskstoc.pdf>; and the MS&Co. Firm-Specific Disclosure Documents provided in accordance with the requirements of CFTC Rule 1.55 is available here: <http://www.morganstanley.com/institutional-sales/pdf/msco/MSCO-FCM-Disclosures-2017.pdf?v=2>.

C. Important Disclaimer

Although this Statement is intended to assist you in choosing the appropriate account structure for your business, this Statement does not constitute legal or any other form of advice and must not be relied on as such. The Statement does not provide all the information you may need to make your decision on which account structure 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 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

⁵ 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.

⁶ “Exchange-traded derivative” is defined in Article 2(1)(32) of MiFIR to include any derivative traded on 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. No such equivalence determinations have yet been made.

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. A Significant Difference Between EU Rules and Commission Rules Governing Clearing of ETDs

We wish to highlight a significant difference between the manner in which ETDs are cleared in the EU, including as required by EMIR and the Indirect Clearing RTS, and in which they are cleared under the Commission's regulatory regime. 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 the Annex).⁷ Under the Commission's regulatory regime, direct client FCMs may provide only US omnibus client segregation to their indirect clients. The Commission's regulatory regime does not, however, preclude a direct client FCM from facilitating the opening of segregated accounts at the clearing member level in accordance with the Indirect Client RTS – for example, by means of an introduction to an EU CCP clearing member that is not registered as an FCM. However the protections associated with the Indirect clearing RTS will only be given effect for an indirect client of an FCM direct client in the event of the default of the non-FCM clearing member (which is not accompanied by the simultaneous default of the FCM direct client).

III. FCM Customer protection regime

We may receive assets from you to margin: (i) futures executed on a designated contract market (**DCM**) registered with the Commission;⁸ or (ii) ETDs executed on a regulated market that is a foreign board of trade.⁹

Under Commission rules, customer collateral received to margin futures executed on a DCM may not be commingled with funds received to margin ETDs on a regulated market that is a foreign board of trade.¹⁰

A. US Derivatives Exchanges

⁷ Essentially, the Indirect Clearing RTS requires EU CCP clearing members to offer to their direct clients – and also requires those direct clients to offer to their indirect clients – a choice between two types of accounts: (i) a “net omnibus” segregated account in which with the assets and positions of all indirect clients of the direct client would be commingled separately from all other client accounts of both the EU clearing member and of the direct client, margined in accordance with a “net omnibus” methodology approved under applicable EMIR regulation; and (ii) a gross omnibus segregated account holding the assets and positions of indirect clients of the direct client and margined on a “gross omnibus” basis (and again, booked to separate indirect clearing accounts, not commingled with the collateral and positions of direct clients).

⁸ Certain CCPs also clear futures and options on futures contracts listed for trading on US designated contract markets. For example, ICE Clear Europe clears futures and options on futures contracts listed for trading on ICE Futures US. LCH Limited is permitted by the scope of its DCO registration to – but does not currently – clear futures and options on futures contracts listed for trading on DCMs.

⁹ Each of Eurex Clearing AG, ICE Clear Europe, LCH Limited and LCH SA clears futures and options on futures contracts listed for trading on one or more regulated markets.

¹⁰ 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.

The provisions of the Commodity Exchange Act 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 the FCM to margin the trades of any customer as belonging to such customer. Futures customer funds: (i) must be separately accounted for and may not be commingled with the FCM's 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 futures on the behalf of the FCM's customers.

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.

B. Non-US Derivatives Exchanges

The Commission's rules establish a regulatory regime for futures listed on foreign boards of trade which is comparable to the provisions governing US futures customer funds. The SEC's customer protection rules, and SEC staff guidance on transactions in options listed on non-US securities exchanges, govern customer transactions in non-US listed equity options. Generally, customer funds held for the purpose of trading non-US ETDs: (i) must be separately accounted for and may not be commingled with the FCM's 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 the FCM's behalf. In addition, an FCM is 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.

C. Foreign Options

SEC staff has issued no-action letters permitting members of non-US option exchanges to intermediate US institutional investors and qualified institutional buyers concerning options traded on non-US exchanges. (The letters are available on the SEC's website, here, under the heading Foreign Market Communications with QIBs: <https://www.sec.gov/divisions/marketreg/mr-noaction.shtml#market>.)

D. Indirect Clearing

Where we facilitate clearing of ETDs at an EU CCP through a clearing member that is not an FCM, we will facilitate the opening and maintenance of 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 are provided in the Annex.

However, in the event of our insolvency, the mandatory commodity broker liquidation provisions of the US Bankruptcy Code and Part 190 of the Commission's rules 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 requirements of the US Bankruptcy Code and the Commission's rules rather than in accordance with the Indirect Clearing RTS.

IV. Transfer, or porting, of customer assets and positions when an FCM is placed in bankruptcy

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 Part 190 of the Commission's rules. Customer securities positions of the FCM/broker-dealer would be liquidated in accordance with the provisions of the Securities Investor Protection Act and the rules thereunder (**SIPA**).

A. 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 on behalf of the FCM's estate and confirmed by the Bankruptcy Court. The trustee in bankruptcy, in coordination with the clearing member, will attempt to effect the transfer of all customer positions together with the money, securities, or other property held to margin the commodity contracts. But there can be no guarantee as a matter of U.S. law that such efforts will be availing.

In the event customer accounts cannot be transferred, or only a partial transfer is accomplished, the trustee is further instructed to liquidate all remaining open positions. The Bankruptcy Code, SIPA and Part 190 of the Commission's rules require that losses arising in any account class of a defaulting FCM must be shared ratably among the members of that account class (where the three main account classes for futures customers are: customers holding positions traded on a DCM – i.e., U.S. futures; customers holding positions traded on a foreign board of trade – i.e., foreign futures; and customers holding cleared swap positions). Therefore, in the event that losses in any account class are so great that the FCM is unable to meet the shortfall with its own assets, a customer may be exposed to losses of other customers.¹¹

B. Authority of a CCP 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 ETD customer omnibus account caused by the default of one or more customers, the clearing member would be permitted 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.

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

The disclosure statement made available by our EU affiliate, Morgan Stanley & Co. International plc, 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 Commodity Exchange Act and the Commission's regulatory 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 designated a replacement clearing member or direct client, and for such replacement to consent to the transfer. Under the Commission's regulatory regime, the CCP or the clearing member, in coordination

¹¹ 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.

with the trustee for the insolvent FCM's estate, would attempt to identify non-defaulting FCMs that would be willing to accept the omnibus account. In the event such a transfer were effected, a customer might then be able to request that its account be transferred to another FCM or non-FCM clearing member.

2. Under EMIR Article 48(5), a CCP or clearing member must commit to transfer the assets and positions held by 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 has filed for bankruptcy, no transfers of client assets and positions may occur without the consent of the bankruptcy 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 establishes 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 Commission's regulatory regime and the US Bankruptcy Code, the bankruptcy trustee is responsible for liquidating the positions of non-porting customers of an insolvent FCM and distributing the liquidation proceeds ratably to customers.

ANNEX

Forms of Indirect Client Segregated Account

Under the Indirect Clearing RTS, there are generally two basic types of indirect client accounts available at the EU CCP level (subject to the applicable rules of each EU CCP): 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 the Indirect Clearing Disclosure provided by our affiliate, Morgan Stanley & Co. International plc, for an overview of the risks in relation to a Basic Omnibus Indirect Client Account and a Gross Omnibus Indirect Client Accounts as well as for details of the different levels of segregation that may be available at different CCPs.

1. Basic Omnibus Indirect Client Account¹²

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 the direct client's own account or that of one of the clearing member's other clients;

¹² 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.

- 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 other indirect clients of the direct client, 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. (Note that this is the structure in place today for the FCM's clearing of ETDs on foreign boards of trade.)

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.

2. Gross Omnibus Indirect Client Account¹³

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.

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

¹³ This description is based on Articles 4(2)(b) and 4(4)(b) of the Indirect Clearing RTS.

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.

The important difference between the two types of Indirect Client Account is the margin methodology under which each is collateralized at the CCP. The CCP and clearing member may use positional and risk netting (to the extent permitted under applicable EMIR-compliant CCP rules and procedures) to reduce the direct client's margin requirement in respect of a Basic Omnibus account. Such netting would not be applied in respect of a Gross Omnibus account. Accordingly, a direct client (and its indirect clients) would face higher margin requirements in order fully to collateralize positions held in a Gross Omnibus account than they would for a Basic Omnibus account.

Customers of MS&Co. who wish to clear their EU ETDs through a Gross Omnibus Indirect Client Account will be introduced to our affiliate, Morgan Stanley & Co. International plc, for that purpose. Should you wish to make any election relating to your indirect clearing arrangements please contact your Morgan Stanley representative. In the absence of such an election, your positions and collateral in respect of ETDs that are futures or options on futures and clearing on EU CCPs will be held by MS&Co. in a Basic Omnibus indirect clearing account at Morgan Stanley & Co. International plc and at each such EU CCP – at all times, in accordance with the Commission's rules relating to the safeguarding of foreign futures positions and collateral. Your positions and collateral in respect of ETDs that are listed equity options and clearing on EU CCPs will be held by MS&Co. in a separate Basic Omnibus indirect clearing account at Morgan Stanley & Co. International plc, at all times, in accordance with the SEC's rules relating to the safeguarding of customer security positions and collateral.

**NFA INVESTOR ADVISORY—FUTURES ON VIRTUAL
CURRENCIES INCLUDING BITCOIN**

<https://www.nfa.futures.org/investors/investor-advisory.html>

MORGAN STANLEY & CO. LLC IS A MEMBER OF NFA AND IS SUBJECT TO NFA'S REGULATORY OVERSIGHT AND EXAMINATIONS. HOWEVER, YOU SHOULD BE AWARE THAT NFA DOES NOT HAVE REGULATORY OVERSIGHT AUTHORITY OVER UNDERLYING OR SPOT VIRTUAL CURRENCY PRODUCTS OR TRANSACTIONS OR VIRTUAL CURRENCY EXCHANGES, CUSTODIANS OR MARKETS.

**CFTC CUSTOMER ADVISORY: UNDERSTAND THE RISKS OF VIRTUAL CURRENCY
TRADING**

https://www.cftc.gov/sites/default/files/idc/groups/public/@customerprotection/documents/file/customeradvisory_urvct121517.pdf

DISCLOSURES RELATING TO CFTC STAFF ADVISORY NO. 19-17

The following disclosures are made in accordance with the terms of Staff Advisory No. 19-17, dated July 10, 2019 (“Staff Advisory 19-17”), issued by the Division of Swap Intermediary Oversight and the Division of Clearing and Risk of the Commodity Futures Trading Commission.

Separate Margining of Certain Accounts. In accordance with and at all times subject to the conditions set forth in Staff Advisory 19-17, Morgan Stanley & Co. LLC (“Morgan Stanley”) permits the treatment of certain accounts of the same beneficial owner as accounts of separate entities for purposes of CFTC Regulation 39.13(g)(8)(iii).

Treatment of Separately Margined Accounts in the Event of an FCM Bankruptcy. In the event of an FCM bankruptcy under 17 C.F.R. §§ 190.01 through 190.10 (the “Part 190 Rules”), all accounts of a customer that are separately margined in accordance with the terms and conditions of Staff Advisory 19-17 will be combined, and any such customer’s rights and obligations with respect to such separate accounts will be determined in accordance with the U.S. Bankruptcy Code and the Part 190 Rules.

To the extent that any futures or cleared swaps customer maintains more than one separately managed futures or cleared swaps account with Morgan Stanley, Morgan Stanley may, consistent with applicable law as reflected in the interpretative guidance set forth in Staff Advisory 19-17, treat such separately managed accounts as accounts of separately margined entities for purposes of CFTC Regulation 39.13(g)(8)(iii), subject to the condition that Morgan Stanley may permit disbursements on a separately margined account basis only during the Ordinary Course of Business (as defined in the Staff Advisory 19-17) and shall cease such disbursements upon the occurrence of any event inconsistent with the Ordinary Course of Business.

NOTICE REQUIRED PURSUANT TO CFTC REGULATION 1.55(p)