

Asia Pacific Alternative Liquidity Pools Disclosure

UBS operates its own non-displayed crossing networks, UBS Price Improvement Network ("**UBS PIN**") in Hong Kong and Japan. Crossing Systems are automated services which match buy and sell orders electronically rather than executing orders on an exchange or market which displays a public quote. Crossing Systems do not publicly display orders or allow indications of interests (or "**IOIs**"). You can refer to our website [HERE](#) to access the most current information about our liquidity and crossing philosophy and execution venues.

User Access

Users must opt-in to participate in the Crossing Systems.

Under Japan regulations, margin orders are restricted from accessing the Crossing System in Japan.

Under the Hong Kong SFC Code of Conduct ("**Code**"), only orders placed or originated by "qualified investors" as defined under the Code may access the Crossing System in Hong Kong. If you are eligible and wish for your orders to be routed to the Crossing System, please contact your UBS sales representative or agent (as applicable) for further information. If you cease to qualify as a "qualified investor" under the Code, you must notify us immediately. Notwithstanding the above, UBS reserves its absolute discretion in permitting access to the Crossing Systems and orders will not be routed to the Crossing Systems unless we agree otherwise. All orders submitted to the Crossing Systems are subject to such controls determined by UBS as amended from time to time. Unless agreed otherwise, access to the Crossing Systems is granted subject to the UBS terms of business applicable to you and UBS reserves the right to suspend or withdraw access at its absolute discretion and without notice. See the market-specific schedule on page 4 for any other relevant information that may apply to you. You may discontinue or opt-out of access to all or any Crossing Systems by prior written notice to us.

"**Users**" of the Crossing System in Hong Kong shall have the same meaning as "user" as defined under paragraph 19.2(g) of the Code.

Crossing Systems

- **UBS PIN** contains orders which are considered as agency client orders in the relevant markets¹. UBS PIN can only be accessed by our algorithms and Smart Order Router. Neither direct orders nor directed low latency flow are permitted in UBS PIN. UBS PIN is not accessible by retail investors² and market makers.

Order Placing and Handling

Please note, this section should be read as being subject to any applicable market-specific schedule. You may choose to place an order with UBS electronically by FIX or other compatible order management systems or manually with a UBS Sales Desk.

UBS operates a smart order router ("**SOR**") enabled to transmit orders to exchanges and UBS crossing systems according to the users' election, with the aim to improve execution outcome.

UBS SOR will determine the manner in which an order will be submitted to UBS PIN considering factors including price and quantity.

Users may request for cancellation of an order or the part of an order in a Crossing System that has not been executed. A request to cancel an order shall not be effective until the user receives an acknowledgement from UBS that the order has been cancelled. Orders that remain unexecuted by the end of the day will be purged from the Crossing Systems.

The Crossing Systems are operational on the days that the exchanges in the relevant markets are open. The market-specific schedule on page 4 set out the time when orders may be matched. Orders received during such hours are handled by the Crossing Systems taking into account of price, time priority and account crossing restrictions (such as minimum execution quantity, etc.).

¹ Under Japanese regulations, UBS Swap hedge orders are considered as agency client orders

² In Japan, overseas retail investors may incidentally access UBS PIN via overseas intermediaries.

Order Execution

Orders only execute at mid-price³ of the primary market at the time the cross is matched.

If an order is only partially executed, the unexecuted residual quantity of a posting order will remain in the Crossing Systems until it is executed, cancelled or expired, while the unexecuted residual quantity of a sweeping order will be immediately cancelled or expired. Once an execution occurs, the Crossing Systems will send electronic messages containing execution reports to the user.

There may be circumstances where the Crossing Systems may not identify crossing opportunities for an order (or portion thereof).

The Crossing Systems do not aggregate orders for execution.

The Crossing Systems are set to prevent crossing against 'same account orders' (orders sent for the same brokerage account).

User Configuration

Depending on your arrangements with UBS, you can choose whether or not your orders are routed to the Crossing Systems. If you choose to route your orders to the Crossing Systems, there are a number of configuration options available including:

- prevent crossing where the number of shares available from a single eligible contra side order is below the Minimum Execution Quantity ("MEQ") specified. MEQ may be determined by you or by a UBS algorithm when accessing the Crossing Systems. Orders below the MEQ specified by you will not be matched.
- prevent crossing against orders of the same user legal entity where such entity maintains more than one brokerage account with UBS
- prevent crossing against orders of the users' affiliates

UBS does not offer the functionality for an order to interact with selective types of liquidity in the Crossing Systems. Depending on your arrangement with UBS, user configuration settings can be set at a user level and in some cases on an order by order basis.

Should you wish to discuss any of the configuration settings or change how your crossing settings are configured you should contact your UBS sales representative or intermediary (as applicable).

Regulatory Reporting

Once a crossing opportunity has been identified, the Crossing Systems will execute and report the trade to a recognized trade reporting facility of a self-regulatory organization⁴. UBS will select the venue for reporting at its absolute discretion having regard to matters, including but not limited to its best execution obligations (if any) and administrative and procedural arrangements.

Risk Management

Controls, procedures and monitoring processes are designed and put in place to help ensure that the Crossing Systems are operating normally in an orderly manner and that any system failures are identified promptly and remediated in accordance with established and tested business continuity plans. The controls include:

- No crossing outside current market bid / offer range
- No crossing outside the daily high / low range
- No crossing if best bid / offer has not been stable for a period of time
- No crossing if stock is suspended

³ Mid-price refers to the average of best bid and offer prices. The SOR places IOC order type when sweeping and day order type when posting to the Crossing System, both with mid peg instruction and parent limit price or better conditions. In both scenarios, the Crossing System then simultaneously checks the exchange quote (Tokyo Stock Exchange for Japan and the Stock Exchange of Hong Kong for Hong Kong) and determines mid-price. Orders are subsequently matched at the aforementioned mid-price if any crossing opportunity is identified.

⁴ Please refer to the market-specific schedule on page 4 for a description of the regulatory reporting in Japan.

Confidentiality and Conflicts Management

Physical and electronic segregations are put in place within UBS for management of conflicts of interest. Information regarding orders directed to the Crossing System is appropriately safeguarded to avoid information leakage and only made available to certain UBS staff for legitimate and bona fide on a need to know basis. Certain Group Functions IT staff has access to live trade data of orders in the Crossing Systems to provide technology support. Investment Bank Global Markets Sales and Trading only has access to live trade data of the order placed by such employee or shared desk (and not live trade data of other orders) for client servicing purposes. Global Markets Sales and Trading in the Electronic Trading team and Quant team have access to post trade data for monitoring purposes. Other Investment Bank or Group Functions control and support functions such as Operations and Legal & Compliance have access to post trade data on a need-to-know basis. Below is a summary of access to Crossing System order trade data:

Department	Access	Reason for Access
Electronic Trading Services	Live and post trade data	Client servicing and monitoring
Sales and Trading	Live trade data (only of orders placed by such employee or shared desk)	Client servicing
Quant	Live and post trade data	Monitoring
Group Technology	Live and post trade data	Technology support
Operations	Post trade data	Need to know basis
Legal and Compliance & Operational Risk	Post trade data	Need to know basis (including monitoring and trade surveillance purposes)

Policies and procedures are in place and employee training is conducted to deter improper sharing of confidential information – both outside UBS and to other areas of UBS. Compliance with information handling policies is monitored through standard supervisory channels.

No incentives are paid by UBS to any third parties for selecting Crossing Systems as execution venues.

Contingency Arrangements

The Crossing Systems are configured and operated, taking into account both the desirable capacity and redundancy provisions. In the event of systems delay or capacity issues, UBS will exercise reasonable endeavors to notify affected users of the system delay or outage where required under applicable regulations. In the event of an outage, orders will bypass the affected Crossing Systems and will be sent directly to market, unless such orders are designated to be executed only in Crossing Systems.

UBS has discretion to temporarily suspend any Crossing Systems during periods of expected or actual market volatility (such as shortly after market opens or shortly before market closes) and orders will be handled as described above.

Executions of some orders may be impacted in such events.

Potential risks associated with trades conducted in the Crossing Systems

The Crossing Systems source local market data from exchanges through third party vendors. If UBS is notified by the third party vendor or the Crossing Systems detect stale or delay in market data, UBS will take precautionary measures which may include orders bypassing the affected Crossing Systems. Delays in market data may mean that the execution price may be at a price worse than the price that could have been achieved on the exchange.

As with all electronic trading systems, the Crossing Systems are subject to technology risks relating to design, development, deployment and operation. Such technology risks may result in incidents or issues affecting or impacting order submission, execution, amendment, cancellation, priority or loss of orders.

Fees

You will not be charged additional fees as a result of your participation in the Crossing Systems, or to access Crossing Systems

Market- Specific Schedule

HONG KONG

The Crossing System in Hong Kong is operated by UBS Securities Hong Kong Limited under a Hong Kong Securities and Futures Commission Type 7 license.

Under the Code, "**qualified investors**" means:

- a person falling under paragraphs (a) to (i) of the definition of "professional investor" in section 1 of Part 1 of Schedule 1 to the Securities and Futures Ordinance; or
- a person within the meaning of sections 4, 6 (other than a person referred to in section 6(b)(ii) or 7 of the securities and Futures (Professional Investor) Rules.

Trading hours

Order matching in the Crossing System occurs from 9:30 to 11:59 HK time and from 13:00 to 15:59 HK time. However, the Crossing System may be operational before and after the stated matching periods.

Separately, the UBS SOR will begin sending orders to the Crossing System from 9:30 to 11:59 HK time and from 13:00 HK time. Any orders still in the Crossing System will be pulled out in a randomized manner within the last minute before 16:00 HK time.

Order Execution

Short sell orders are excluded from the Crossing System in Hong Kong.

For orders with the same price, priority is given to agency client orders over UBS principal orders as required by the Securities and Futures Commission. Currently, the Crossing System in Hong Kong do not contain UBS principal orders in the ordinary course of business. "Principal order" shall have the same meaning as "proprietary order" as defined under paragraph 19.2(e) of the Code.

The Crossing System will only process transactions where the mid-price is within three decimal places.

Since the mid-price is determined at the time the cross is matched, there is a possibility the executed price is worse than the Hong Kong Stock Exchange mid price at the time the order is filled.

JAPAN

The Crossing System in Japan is operated by: UBS Securities Japan Co., Ltd.
Otemachi One Tower, 2-1, Otemachi 1-chome Chiyoda-ku, Tokyo 100-0004 Japan
(Financial Instruments Business Operator #2633)

We will execute all client orders in accordance with our best execution arrangements, which is available at https://www.ubs.com/global/en/legalinfo2/jp/disclaimer/1/ubs_securities_disclaimer/ubs_securities_disclaimer6.html. This summary provides that we will execute client orders on financial instruments exchanges in Japan, however should you request us for access to Proprietary Trading Systems and/or Crossing System, you understand and acknowledge that we will direct all of your orders to external Proprietary Trading Systems and Crossing System of your choice in addition to financial instruments exchanges, unless you instruct us otherwise at the time such order is placed.

The Crossing System in Japan identifies crossing opportunities but does not execute. After a crossing opportunity is identified by the Japan Crossing System, it will send such opportunity to Tokyo Stock Exchange Trading NeTwork ("**ToSTNeT**") for execution on ToSTNeT – this may result in the TSE mid-price at the time of ToSTNeT execution differing from the TSE midprice at the time the crossing opportunity is identified. Thus, while acting in good faith when identifying crossing opportunities, there is the possibility that the executed price is worse than the TSE mid-price at the time of ToSTNeT execution.

Trading hours

Order matching in the Crossing System occurs from 9:02-11:30 Tokyo time and from 12:32-15:24 Tokyo Time. However, the Crossing System may be operational before and after the stated matching periods. Separately, the UBS SOR will begin sending orders to the Crossing System from 9:02-11:30 Tokyo time and from 12:32 Tokyo time. Any orders still in the Crossing System will be pulled out in a randomized manner within the last minute before 15:25 Tokyo time.

This material has been issued by UBS AG and/or any of its affiliates ("UBS", "our", "we" and "us"). The securities, derivatives or other financial instruments described herein ("Instruments") may not be eligible for sale in all jurisdictions or to certain categories of investors. This material is for distribution only under such circumstances as may be permitted by applicable law, rules and/or regulations. All communications between you and us may be monitored.

Please also see further details as set out under "Country-specific information" below.

Provenance and purpose	This material has been prepared by sales or trading personnel and it is not a product of our Research Department and is not intended to recommend, suggest or inform an investment strategy. Opinions expressed may differ from the opinions expressed by our other divisions, including those of the Research Department.
Recipient to exercise own judgment	The information contained herein should not be regarded by recipients as a substitute for the exercise of their own judgment. It has no regard to the specific investment objectives, financial situation or particular needs of any specific recipient and does not constitute the provision of investment advice. Prior to entering into a transaction you should consult with your own legal, regulatory, tax, financial and accounting advisers to the extent you deem necessary to make your own investment, hedging and trading decisions.
Not an offer to transact	This material has been prepared for informational purposes only and is not an offer to buy or sell, or a solicitation of an offer to buy or sell, any Instrument or to participate in any particular trading strategy. This material is not an official confirmation of terms.
Conflicts of Interest	<p>This material may contain proprietary commentary produced in conjunction with our trading desks that trade as principal in the Instruments. This commentary may therefore not be independent from our proprietary interests or those of connected parties which may conflict with your interests. We may have accumulated, or may acquire, a long or short position in the subject Instrument, or related derivative, on the basis of this material prior to its dissemination.</p> <p>We may trade as principal or otherwise act, or have acted, as market-maker and/or as an execution venue in the Instruments. Instruments may be highly illiquid which may adversely impact the price, spread and speed of execution of orders in those Instruments. Furthermore we may have, or have had, a relationship with or may provide, or have provided, investment banking, capital markets and/or other financial services to the companies associated with the Instruments.</p> <p>We have policies and procedures in place which are designed to manage conflicts of interest. In order to control the flow of information contained in an area of UBS we may rely on information barriers. Additional information can be found at: ubs.com/ibterms</p>
Contents of Material	This material is prepared from information believed to be reliable, but we make no representations or warranties, express or implied, and owe no duties (including in negligence) as to the accuracy, completeness or reliability of the material, nor is it intended to be a complete statement or summary of the Instruments, markets or developments referred to. The material is subject to change without notice. We do not undertake any obligation to update this material. Any prices or quotations contained herein are indicative only and are not for valuation purposes. Past performance is not necessarily indicative of future results.
Statement of Risk	The Instruments are not suitable for all investors, and trading in these Instruments is considered risky and is appropriate only for sophisticated investors and in particular any target market identified herein. These Instruments may involve a high degree of risk and may be highly volatile in response to fluctuations in interest rates, foreign exchange rates and other market conditions. Some Instruments may be physically settled or cash settled.
No Liability	To the fullest extent permitted by law, neither we nor any of our directors, employees or agents is liable for any loss (including indirect, special or consequential losses or damages, even if we have been advised of the possibility of such loss or damage) arising out of any person's use of, or reliance upon, the information contained herein.
Securities Act	Any Instruments that have not been registered under the United States Securities Act of 1933 may not be offered or sold in the United States except under an exception from the registration requirements of the Securities Act and applicable state securities laws.
No redistribution or reproduction	We specifically prohibit the redistribution or reproduction of this material in whole or in part without our prior written permission and we accept no liability whatsoever for the actions of third parties in this respect. © UBS as of the date of this communication. All rights reserved.

Except as otherwise specified herein, these materials are distributed to professional clients only, and are not suitable for retail clients.

COUNTRY SPECIFIC INFORMATION

These materials may not be authorised by UBS for distribution in every country. If these materials are authorized by UBS for distribution in your country, please see below for applicable information.

EMEA

Europe Except as otherwise specified herein, these materials are distributed by UBS Europe SE, a subsidiary of UBS AG, to persons who are eligible counterparties or professional clients (as detailed in the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) Rules and according to MIFID) and are only available to such persons. The information does not apply to, and should not be relied upon by, retail clients. UBS Europe SE is a Societas Europaea registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Frankfurt am Main under HRB 107046. Registered office: Bockenheimer Landstraße 2-4, OpernTurm, 60306 Frankfurt am Main. UBS Europe SE is authorised and regulated by the German federal financial supervisory authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) and the European Central Bank (ECB). **United Kingdom** Prepared and distributed by UBS AG, London Branch which is authorised by the Prudential Regulation Authority (PRA) and regulated by the Financial Conduct Authority (FCA) and the PRA. **Germany, Luxembourg, the Netherlands, Belgium and Ireland** To the extent these materials relate to products other than cash equities or cash bond trading, prepared and distributed by UBS AG, London Branch. **Poland** These materials are distributed by UBS Europe SE (*spółka europejska*) Oddział w Polsce regulated by the Polish Financial Supervision Authority only to institutional investors in Poland. The information contained herein does not apply to, and should not be relied upon by retail clients.

Switzerland These materials are intended for distribution in Switzerland by UBS AG to institutional and professional investors pursuant to the Swiss Financial Services Act (FINSA). **Turkey** Prepared and distributed by UBS AG, London Branch. **Russia** Prepared and distributed by UBS Bank (OOO). No non-Russian securities or derivatives are offered within Russia to anybody except for investors qualified under Russian law. **South Africa** UBS South Africa (Pty) Limited (Registration No. 1995/011140/07) is an authorised user of the Johannesburg Stock Exchange (JSE) and an authorised Financial Services Provider (FSP 7328). **UAE / Dubai** These materials are distributed by UBS AG Dubai Branch and are only intended for Professional Clients and/or Market Counterparties, as classified under the DFSA rulebook. No other person should act upon these materials. These materials are not for further distribution within the United Arab Emirates. UBS AG Dubai Branch is regulated by the DFSA in the DIFC. UBS is not licensed to provide banking services in the UAE by the Central Bank of the UAE, nor is it licensed by the UAE Securities and Commodities Authority. **Saudi Arabia** These materials have been issued by UBS AG (and/or any of its subsidiaries, branches or affiliates), a public company limited by shares, incorporated in Switzerland with its registered offices at Aeschenvorstadt 1, CH-4051 Basel and Bahnhofstrasse 45, CH-8001 Zurich. This publication has been approved by UBS Saudi Arabia (a subsidiary of UBS AG), a Saudi closed joint stock company incorporated in the Kingdom of Saudi Arabia under commercial register number 1010257812 having its registered office at Tatweer Towers, P.O. Box 75724, Riyadh 11588, Kingdom of Saudi Arabia. UBS Saudi Arabia is authorized and regulated by the Capital Market Authority to conduct securities business under license number 08113-37. **Israel** UBS AG and its affiliates incorporated outside Israel are not licensed under the Investment Advice Law. These materials are being issued only to and/or are directed only at persons who are Sophisticated Investors within the meaning of the Israeli Securities Law and these materials must not be relied or acted upon by any other persons.

APAC

Hong Kong Materials relating to equities and other securities business and related research are distributed in Hong Kong by UBS Securities Asia Limited to professional investors. Materials relating to corporate finance, foreign exchange, fixed income products and other banking business and related research are distributed in Hong Kong by UBS AG Hong Kong Branch (incorporated in Switzerland with limited liability) or UBS Securities Hong Kong Limited to professional investors. **Singapore** These materials are distributed in Singapore by UBS Securities Pte. Ltd or UBS AG Singapore Branch to institutional investors or accredited investors, as defined under the Securities and Futures Act ("SFA"). These materials may be defined as an "advertisement" in the SFA and Financial Advisers Act. This advertisement has not been reviewed by the Monetary Authority of Singapore. **Indonesia** These materials are distributed in Indonesia by PT UBS Sekuritas Indonesia to professional investors. **Malaysia** These materials are authorized to be distributed in Malaysia by UBS Securities Malaysia Sdn. Bhd (199201022321 / 253825-x), holder of Capital Markets Services Licence No. CMSL/A0063/2007. **Australia** These materials are distributed by UBS AG (ABN 47 088 129 613 and holder of Australian Financial Services Licence No. 231087) and/or UBS Securities Australia Ltd (ABN 62 008 586 481 and holder of Australian Financial Services Licence No. 231098). These materials contain general information and/or general advice only and do not constitute personal financial product advice. As such, the materials have been prepared without taking into account any investor's objectives, financial situation or needs, and investors should, before acting, consider the appropriateness of the materials, having regard to their objectives, financial situation and needs. If the materials relate to the acquisition, or potential acquisition of a particular financial product by a "retail client" as defined by section 761G of the Corporations Act 2001 (Cth) where a Product Disclosure Statement would be required, the retail client should obtain and consider the Product Disclosure Statement relating to the product before making any decision about whether to acquire the product and consult the relevant Financial Services Guide. UBS AG, Australia Branch is a foreign Authorised Deposit-taking Institution ("foreign ADI") under the Banking Act 1959 (Cth) and is supervised by the Australian Prudential Regulation Authority. However, it is important for you to note that should you make a deposit with UBS AG, Australia Branch in connection with the services UBS AG, Australia Branch provides you, provisions of the Banking Act 1959 (Cth) for the protection of depositors generally do not apply to foreign ADIs including UBS AG, Australia Branch. For example, depositors with foreign ADIs do not receive the benefit of the following protections: (i) Deposits are not covered by the financial claims scheme and are not guaranteed by the Australian Government; (ii) Deposits do not receive priority ahead of amounts owed to other creditors. This means that if a foreign ADI were unable to meet its obligations or otherwise is in financial difficulties and ceases to make payments, its depositors in Australia would not receive priority for repayment of their deposits from the foreign ADI's assets in Australia; (iii) A foreign ADI is not required to hold assets in Australia to cover its deposit liabilities in Australia. This means that if the foreign ADI were unable to meet its obligations or otherwise is in financial difficulties and ceases to make payments, it is uncertain whether depositors would be able to access the full amount of their deposit. UBS Securities Australia Ltd is a subsidiary of UBS AG. However, it is not an authorised deposit-taking institution under the Banking Act 1959 (Cth). The obligations of UBS Securities Australia Ltd do not represent deposits or other liabilities of UBS AG, and UBS AG does not stand behind, support or guarantee UBS Securities Australia Ltd in any way. **New Zealand** These materials are distributed in New Zealand by UBS New Zealand Ltd. UBS New Zealand Ltd is not a registered bank in New Zealand. You are being provided with this UBS publication or material because you have indicated to UBS that you are a "wholesale client" within the meaning of section 5C of the Financial Advisers Act 2008 of New Zealand (Permitted Client). This publication or material is not intended for clients who are not Permitted Clients (non-permitted Clients). If you are a non-permitted Client you must not rely on this publication or material. If despite this warning you nevertheless rely on this publication or material, you hereby (i) acknowledge

that you may not rely on the content of this publication or material and that any recommendations or opinions in such this publication or material are not made or provided to you, and (ii) to the maximum extent permitted by law (a) indemnify UBS and its associates or related entities (and their respective Directors, officers, agents and Advisors) (each a 'Relevant Person') for any loss, damage, liability or claim any of them may incur or suffer as a result of, or in connection with, your unauthorised reliance on this publication or material and (b) waive any rights or remedies you may have against any Relevant Person for (or in respect of) any loss, damage, liability or claim you may incur or suffer as a result of, or in connection with, your unauthorised reliance on this publication or material. **Korea** These materials are distributed in Korea by UBS Securities Pte. Ltd., Seoul Branch to professional investors. Affiliates of UBS Securities Pte. Ltd., Seoul Branch may have edited or may have contributed to the editing of these materials. **India** Distributed in India by UBS Securities India Private Ltd. (Corporate Identity Number U67120MH1996PTC097299) 2/F, 3 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000 SEBI Registration Number: INZ000259830. **Japan** These materials are distributed in Japan to institutional investors only by UBS Securities Japan Co., Ltd., a registered financial instruments business operator, or by UBS AG Tokyo Branch, a licensed bank. For further details of our local services, please call your regular contact at UBS in Japan. **Philippines** These materials are distributed in the Philippines by UBS Securities Philippines, Inc. to institutional investors. **China** These materials are distributed in People's Republic of China (for the avoidance of doubt, excluding Hong Kong Special Administration Region, Macau Special Administration Region and Taiwan District) by UBS Securities Co., Limited to professional investors. **Thailand** These materials are distributed only upon request in Thailand by UBS Securities (Thailand) Limited, which is licensed by the Securities and Exchange Commission of Thailand ("Thai SEC") under the Securities and Exchange Act and Derivatives Act. The contents of this material have not been approved by the Thai SEC or any other authorities in Thailand. This material has been prepared and issued for distribution in Thailand to "institutional investors" only. Thai recipients should contact UBS Securities (Thailand) Limited for any matters arising from, or in connection with, this material. This material is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of, or is located in, any jurisdiction where such distribution, publication, availability or use would be contrary to applicable law or regulation, or which would subject UBS AG, UBS Securities (Thailand) Limited and/or its subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction. Materials have been furnished to the recipient and should not be redistributed without the express written consent of UBS Securities (Thailand) Limited. Past performance is not necessarily indicative of future performance. Any prospective investor must understand the conditions, risks and return before making a decision. **All other Asian jurisdictions** These materials are not to be construed as a solicitation or an offer to buy or sell any securities, related financial instruments or services. Please also note that the products are not intended for marketing to the public.

AMERICAS

United States These materials constitute an invitation to consider entering into a derivatives transaction under the rules and regulations of the Commodity Futures Trading Commission (CFTC) and the U.S. Securities and Exchange Commission (SEC), where applicable. These materials are distributed by UBS Securities LLC (member New York Stock Exchange (NYSE), Financial Industry Regulatory Authority (FINRA) and Securities Investor Protection Corporation (SIPC)) or by UBS Financial Services Inc. (member FINRA and SIPC), both of which are subsidiaries of UBS AG; or solely to US institutional investors by UBS AG or by a subsidiary or affiliate thereof that is not registered as a US broker-dealer (a "non-US affiliate"). Transactions resulting from materials distributed by a non-US affiliate must be effected through UBS Securities LLC or UBS Financial Services Inc. **Canada** These materials are distributed by UBS Securities Canada Inc., a registered investment dealer in Canada and a Member of the Canadian stock exchanges and Canadian Investor Protection Fund, or by another affiliate of UBS AG which is registered to conduct business in Canada or otherwise exempt from registration. **Brazil** Except as otherwise specified herein, this material is prepared by UBS Brasil CCTVM S.A. to persons who are eligible investors residing in Brazil, which are considered to be: (i) financial institutions, (ii) insurance firms and investment capital companies, (iii) supplementary pension entities, (iv) entities that hold financial investments higher than R\$300,000.00 and that confirm the status of qualified investors in written, (v) investment funds, (vi) securities portfolio managers and securities consultants duly authorized by Comissão de Valores Mobiliários (CVM), regarding their own investments, and (vii) social security systems created by the Federal Government, States, and Municipalities.