UBS-IB Legal Entities	UBS Address	Country	Regulatory Body (non-exchange)	Regulator Address	Regulator URL	License Type
UBS AG	Bahnhofstrasse 45, Zürich, Switzerland	Switzerland	Swiss Financial Market Supervisory Authority (FINMA)	Swiss Financial Market Supervisory Authority FINMA Laupenstrasse 27, CH-3003 Bern	https|www.finma.ch/en/	Banking Licence Securities Business License
UBS AG Australia Branch	Level 16 Chifley Tower 2 Chifley Square, Sydney, Australia	Australia	Australian Securities & Investments Commission (ASIC)	Jacana House, 39-41 Woods St, Darwin City NT 0800, Australia	https|asic.gov.au/	Financial Services Licence
			Australian Prudential Regulation Authority (APRA)	12A Martin Pl, Sydney NSW 2000, Australia	https|www.apra.gov.au/	Banking Licence
UBS AG Canada Branch	161 Bay Street, Suite 4100, Toronto Canada	Canada	Office of the Superintendent of Financial Institutions Canada (OSFI)	255 Albert Street, 12th Floor Ottawa, Ontario K1A 0H2	http|www.osfi-bsif.gc.ca/eng	Not Available in LSDB
UBS AG Dubai Branch	5th Floor, Building 6 DIFC District PO Box 506542, Dubai, UAE	United Arab Emirates	Dubai Financial Services Authority (DFSA)	16 Happiness St, Dubai - United Arab Emirates Level 13, West Wing, The Gate, DIFC	https|www.dfsa.ae/	Financial Services Licence
UBS AG Hong Kong Branch	52 Floor Two International Finance Centre 8 Finance Street Central, Hong Kong	Hong Kong	Hong Kong Monetary Authority	55th Floor, Two International Finance Centre 8 Finance Street, Central, Hong Kong	https|www.hkma.gov.hk/eng/	Banking Licence
			Securities and Futures Commission (Hong Kong)	Securities and Futures Commission 35F, Cheung Kong Center 2 Queen's Road Central, Hong Kong	https|www.sfc.hk/	Dealing in Securities
UBS AG London Branch	5 Broadgate, London, UK	United Kingdom	Prudential Regulation Authority (PRA)	Threadneedle St, London EC2R 8AH	https|www.bankofengland.co.uk/	Registration
			Financial Conduct Authority (FCA)	12 Endeavour Square, London E20 1JN	https|www.fca.org.uk/	Registration
			Swiss Financial Market Supervisory Authority (FINMA)	Swiss Financial Market Supervisory Authority FINMA Laupenstrasse 27, CH-3003 Bern	https|www.finma.ch/en/	Registration
UBS AG Singapore Branch	One Raffles Quay #50-01 North Tower 048583, Singapore	Singapore	Monetary Authority of Singapore (MAS)	10 Shenton Way, MAS Building Singapore 079117	https|www.mas.gov.sg/	Banking Licence
			Singapore Exchange Derivatives Clearing Limited (SGX-DC)	SGX Centre Office, 2 Shenton Way, #02-02 SGX Centre 1, Singapore 068804	https|www.sgx.com/	Stock Exchange
			Singapore Exchange Derivatives Trading Limited (SGX-DT)	SGX Centre Office, 2 Shenton Way, #02-02 SGX Centre 1, Singapore 068804	https|www.sgx.com/	Stock Exchange
UBS AG Stamford Branch	Corporation Service Company 50 Weston Street, Hartford, USA	U.S.A	Federal Reserve Bank of New York	33 Liberty St, New York, NY 10045, United States	https|www.newyorkfed.org/	Banking Licence
			Office of the Comptroller of the Currency (OCC)	400 7th St SW, Washington, DC 20219, United States	https|www.occ.treas.gov/	Banking Licence
UBS AG Tokyo Branch	5-1, Otemachi 1-chome, Chiyoda-ku, Tokyo, Japan	Japan	Financial Services Agency (FSA)	Financial Services Agency The Central Common Government Offices No. 7 3-2-1 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8967 Japan	https|www.fsa.go.jp/en/	Banking License Financial Services Licence Securities Business License
			Ministry of Finance (Japan)	3-1-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8940, JAPAN	https|www.mof.go.jp/english/	License for Japan Offshore Market account
			Ministry of Agriculture, Forestry and Fisheries (Japan)	1-2-1,Kasumigaseki,Chiyoda-ku,Tokyo 100-8950,Japan	http|www.maff.go.jp/j/	OTC Derivatives License
			Ministry of Economy, Trade and Industry (Japan)	1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan	https|www.meti.go.jp/english/	OTC Derivatives License
UBS Brasil CCTVM	Avenida Brigadeiro Faria Lima 4440, 7th FloorPart, Sao Paolo	Brazil	Comissão de Valores Mobiliários (CVM)	SCN Qd 2 Bl A - Ed. Corporate Financial Center - Brasilia DF 70297-400, SCN Q 2 - Asa Norte, Brasília - DF, Brazil	http|www.cvm.gov.br/	Not Available in LSDB
			Banco Central do Brasil	Setor Bancário Sul, SBS - Quadra 3 - Bloco B - Ed. Sede, 70074-900 Brasília	https|www.bcb.gov.br/	Not Available in LSDB
UBS Clearing and Execution Services Limited	5 Broadgate	United Kingdom	Not regulated	5 Broadgate, London EC2M 2QS	https|www.ubs.com/uk/en.html	Not Available in LSDB
UBS Europe SE	Bockenheimer Landstrasse 2-4 OpernTurm, Frankfurt	Germany	European Central Bank	European Central Bank 60640 Frankfurt am Main Germany	https|www.ecb.europa.eu/	Not Available in LSDB
			Bundesanstalt für Finanzdienstleistungsaufsicht (Bafin)	Bundesanstalt für Finanzdienstleistungsaufsicht Marie-Curie-Str. 24-28 60439 Frankfurt am Main	https|www.bafin.de/EN/Homepage/homepage_node.html	Banking Licence
			Deutsche Bundesbank	Wilhelm-Epstein-Straße 14 60431 Frankfurt am Main Germany	https|www.bundesbank.de/en	Not Available in LSDB
UBS Europe SE Swiss Branch	Europastrasse 1, Opfikon	Switzerland	Swiss Financial Market Supervisory Authority (FINMA)	Swiss Financial Market Supervisory Authority FINMA Laupenstrasse 27, CH-3003 Bern	https|www.finma.ch/en/	Banking Licence
UBS New Zealand Limited	Level 17 PwC Tower 188 Quay Street, Auckland	New Zealand	NZX Limited	Level 1, NZX Centre, 11 Cable Street Wellington 6011, New Zealand PO Box 2959	https|www.nzx.com/	Broker Licence Securities Trading Licence
			Financial Markets Authority (FMA)	Level 5, Ernst & Young Building,2 Takutai Square, Britomart, 59 Tyler St, Auckland CBD, Auckland 1010, New Zealand	https|www.fma.govt.nz/	Registration
UBS Securities Asia Limited	52F Two International Finance Centre 8 Finance Street Central, Hong Kong	Hong Kong	Securities and Futures Commission (Hong Kong)	Securities and Futures Commission 35F, Cheung Kong Center 2 Queen's Road Central, Hong Kong	https|www.sfc.hk/	Futures Broker's Licence Investment Adviser's Licence Dealing in Securities
UBS Securities Canada Inc.	Brookfield Place 161 Bay Street Suite 4100, Toronto	Canada	Ontario Securities Commission (OSC)	20 Queen Street West 20th Floor Toronto ON, M5H 3S8	https|www.osc.gov.on.ca/	Not Available in LSDB
			Organisme canadien de réglementation du commerce des valeurs mobilières (OCRCVM)	Suite 2000, 121 King Street West Toronto, Ontario, M5H 3T9	https|www.iiroc.ca/Pages/default.aspx	Dealer's Licence
UBS Securities India Private Limited	Level 2, 2 North Avenue Maker Maxity, Bandra-Kurla Complex Bandra (E), Mumbai	India	Securities and Exchanges Board of India (SEBI)	Plot No.C4-A, 'G' Block Bandra-Kurla Complex, Bandra (East), Mumbai - 400051, Maharashtra	https|www.sebi.gov.in/	Merchant Banking License Other Broker Licence
			BSE Limited	BSE Limited Phiroze Jeejeebhoy Towers, Dalal Street Mumbai- 400001	https|www.bseindia.com/	Membership
			National Stock Exchange of India Limited (NSE)	National Stock Exchange of India Ltd., Exchange Plaza, C-1, Block G, Bandra Kurla Complex, Bandra (E). Mumbai – 400 051	https|www.nseindia.com/	Membership
UBS Securities Japan Co., Ltd.	5-1, Otemachi 1-chome Chiyoda-ku, Tokyo	Japan	Bank of Japan (BOJ)	2-1-1 Nihonbashi-Hongokucho,Chuo-ku,Tokyo	https|www.boj.or.jp/en/	Not Available in LSDB
			Financial Services Agency (FSA)	Financial Services Agency The Central Common Government Offices No. 7 3-2-1 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8967 Japan	https|www.fsa.go.jp/en/	Securities Trading Licence
			Japan Investment Advisers Association	1 Chome-5-8 Nihonbashikayabacho, Chuo City, Tokyo 103-0025, Japan	http|www.jiaa.or.jp/index_e.html	Not Available in LSDB
			Japan Securities Dealers Association (JSDA)	Japan,103-0027 Tokyo, Chuo City, Nihonbashi, 2 Chome–11	http|www.jsda.or.jp/en/	Regular Member
			Securities and Exchange Surveillance Commission (SESC)	The Central Common Government Offices No. 7, 3-2-1 Kasumigaseki, Chiyoda-ku, Tokyo, 100-8922 Japan	https|www.fsa.go.jp/sesc/english/	Not Available in LSDB
			The Financial Futures Association of Japan (FFA)	1 Chome-3-1 Kanda Ogawamachi, Chiyoda City, Tokyo 101-0052	https|www.ffaj.or.jp/en/	Regular Member
			Tokyo Metropolitan Government	2 Chome-8-1 Nishishinjuku, Shinjuku City, Tokyo 163-8001, Japan	https|www.metro.tokyo.jp/english/	Real EstateBrokersLenders License
			Type II Financial Instruments Firms Association	2-11-2 Nihonbashi, Chuo-ku, Tokyo 103-0027	https|www.t2ffa.or.jp/	Regular Member
UBS Securities LLC	Corporation Service Company 251 Little Falls Drive, Wilmington	U.S.A	Commodity Futures Trading Commission (CFTC)	Commodity Futures Trading Commission, Three Lafayette Centre, 1155 21st Street, NW Washington, DC 20581	https|www.cftc.gov/	Not Available in LSDB
			Federal Deposit Insurance Corporation (FDIC)	Federal Deposit Insurance Corporation Consumer Response Center, 1100 Walnut St, Box #11 Kansas City, MO 64106	https|www.fdic.gov/	Not Available in LSDB
			Federal Energy Regulatory Commission (FERC)	Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426	https|www.ferc.gov/	Not Available in LSDB
			Federal Reserve Bank of New York	33 Liberty St, New York, NY 10045, United States	https|www.newyorkfed.org/	Not Available in LSDB
			Financial Industry Regulatory Authority (FINRA)	FINRA 1735 K Street, NW Washington DC , 20006	https|www.finra.org/	Not Available in LSDB
			Municipal Securities Rule Making Board	Municipal Securities Rulemaking Board 1300 I Street NW, Suite 1000 Washington, DC 20005	http|www.msrb.org/	Not Available in LSDB
			National Association of Securities Dealers, Inc. (NASD)	1735 K Street Washington, DC 20006 United States	151 W. 42nd Street, New York City, NY, 10036, United States	Not Available in LSDB
			National Futures Association (USA)	300 S Riverside Plaza suite 1800, Chicago, IL 60606, United States	https|www.nfa.futures.org/	Not Available in LSDB
			Securities & Exchange Commission (SEC)	100 F Street, NE Washington, DC 20549	https|www.sec.gov/	Not Available in LSDB
UBS Securities Pte. Ltd. Seoul Branch	22nd Floor, Seoul Finance Center 136 Sejong Daero, Jung-Gu, Seoul	Republic of Korea	Financial Supervisory Service (FSS)	Seoul Government Complex, 209 Sejong-daero, Jongno-gu, Seoul, Republic of Korea	http|meng.fsc.go.kr/	Not Available in LSDB
		Republic of Korea	Financial Services Commission (FSC) (South Korea)	Seoul Government Complex, 209 Sejong-daero, Jongno-gu, Seoul, Republic of Korea	http|meng.fsc.go.kr/	Broker Licence Brokerage of OTC derivatives Dealing of OTC derivatives Dealing in Securities Dealing of equity linked exchange traded derivatives Brokerage of equity linked exchange traded derivatives Brokerage of Securities
UBS Securities Pte. Ltd. Taipei Branch	Cathay Financial Centre 5F, No 7, Sung Jen Road, Taipei	Taiwan	Securities and Futures Bureau (SFB)	85, Sec. 1, Xinshen S. Rd., Da'an District , Taipei City, Taiwan (R.O.C.)	https|www.sfb.gov.tw/en/	Not Available in LSDB
			Financial Supervisory Commission of Taiwan	18F., No.7, Sec. 2, Xianmin Blvd , Banqiao Dist , New Taipei City 22041, Taiwan(R.O.C.)	https|www.fsc.gov.tw/en/	Financial Services Licence

**Disclaimer These materials have been prepared by UBS AG and/or a subsidiary and/or an affiliate thereof ("UBS"). These materials are for distribution only under such circumstances as may be permitted by applicable law. They have not been prepared with regard to the specific investment objectives, financial situation or particular needs of any specific recipient. They are published solely for informational purposes and are not to be construed as a solicitation or an offer to buy or sell any securities or related financial instruments or to participate in any particular trading strategy. Options, derivative products and futures are not suitable for all investors, and trading in these instruments is considered risky. The recipient should not construe the contents of these materials as legal, tax, accounting, regulatory, or other specialist or technical advice or services or investment advice or a personal recommendation. Foreign currency rates of exchange may adversely affect the value, price or income of any security or related instrument mentioned in these materials. No representation or warranty, either express or implied, is provided in relation to the accuracy, completeness or reliability of the information contained herein except with respect to information concerning UBS, nor is it intended to be a complete statement or summary of the securities markets or developments referred to in these materials or a guarantee that the services described herein comply with all applicable laws, rules and regulations. They should not be regarded by recipients as a substitute for the exercise of their own judgment. Any opinions expressed in these materials are subject to change without notice and may differ or be contrary to opinions expressed by other business areas or groups of UBS as a result of using different assumptions and criteria. UBS is under no obligation to update or keep current the information contained herein, and past performance is not necessarily indicative of future results. UBS, its directors, officers, employees or clients may have or have had interest or long or short positions in the securities or other financial instruments referred to herein and may at any time make purchases and/or sales in them as principal or agent. UBS may act or have acted as market-maker in the securities or other financial instruments discussed in these materials. Furthermore, UBS 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 relevant companies. Neither UBS nor any of its directors, officers, employees or agents accepts any liability for any loss or damage arising out of the use of all or any part of these materials or reliance upon the information contained herein. Additional information may be made available upon request. Clients wishing to effect transactions should contact their local sales representative. 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 fur 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). France Prepared by UBS Europe SE and distributed by UBS Europe SE and UBS Securities France S.A. UBS Securities France S.A. is regulated by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and the Autorité des Marchés Financiers (AMF). Where an analyst of UBS Securities France S.A. has contributed to this document and/or these materials, they are also deemed to have been prepared by UBS Securities France S.A.. Spain Prepared by UBS Europe SE and distributed by UBS Europe SE and UBS Securities España SV, SA. UBS Securities España SV, SA is regulated by the Comisión Nacional del Mercado de Valores (CNMV). United Kingdom Prepared and distributed by UBS AG, London Branch. UBS AG, London Branch 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 qualified investors pursuant to Art.10 of the Swiss Federal Act on Collective Investment Schemes (CISA) as, for example, institutional investors only. 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. 1995/011540/07) 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 Bahnhofstasse 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. 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 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 (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 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 provides you, that deposit will not be covered by the provisions in the Banking Act 1959 (Cth) for the protection of depositors, as these provisions 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 was unable to meet its obligations or suspends payment, 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 was unable to meet its obligations or suspends payment 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, 2 North Avenue, Maker Maxity, Bandra Kurla Complex, Bandra (East), Mumbai (India) 400051. Phone: +912261556000 SEBI Registration Numbers: NSE (Capital Market Segment): INB230951431, NSE (F&O Segment) INF230951431, NSE (Currency Derivatives Segment) INE230951431, BSE (Capital Market Segment) INB010951437. 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. 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. 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 as a foreign dealer in Canada with the ongoing registration exemption. Brazil Research reports are distributed by UBS Brasil CCTVM S.A. to its clients or prospects who are eligible investors in Brazil, which are required to be: (i) financial institutions,