DEREK HALPENNY
Head of Research
Global Markets EMEA and International Securities

Global Markets Research
Global Markets Division for EMEA
T: +44 (0)20 7577 1887
E: derek.halpenny@uk.mufg.jp

LEE HARDMAN
Currency Analyst

Global Markets Research
Global Markets Division for EMEA
T: + 44 (0)20 7577 1968
E: lee.hardman@uk.mufg.jp

MUFG Bank, Ltd.
A member of MUFG, a global financial group

Oil price collapses as battle for market share commences

Some updated thoughts

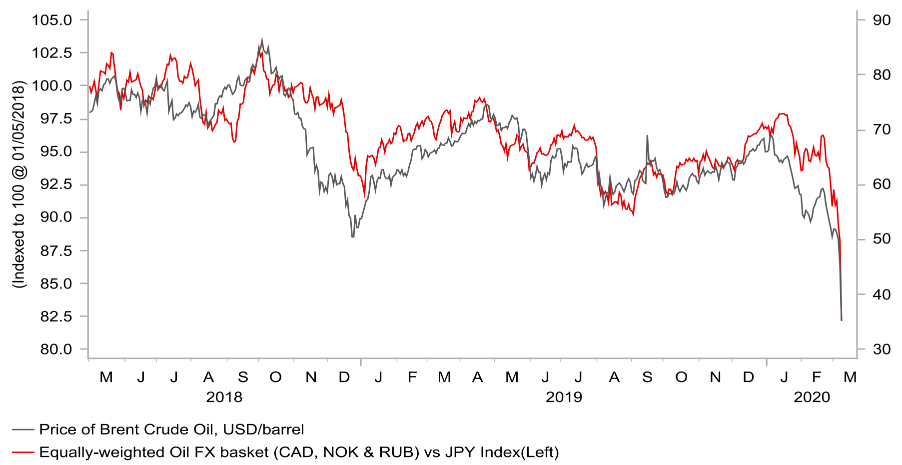
9th March 2020

- *The crude oil price plunge offers a further shock to the global economy following the COVID-19 breakout and we do not expect prices to recover any time soon.*
- *The lack of clarity and coordination from policymakers in key countries is exacerbating the financial market fallout.*
- *There is some good news though – the COVID-19 new cases from China and Asia points to containment success and adds credibility to the consensus of a peak in new cases globally in or around May time.*
- *We have revised our FX forecasts published last Monday in the wake of the events and market moves since.*

Another shock stemming from crude oil markets

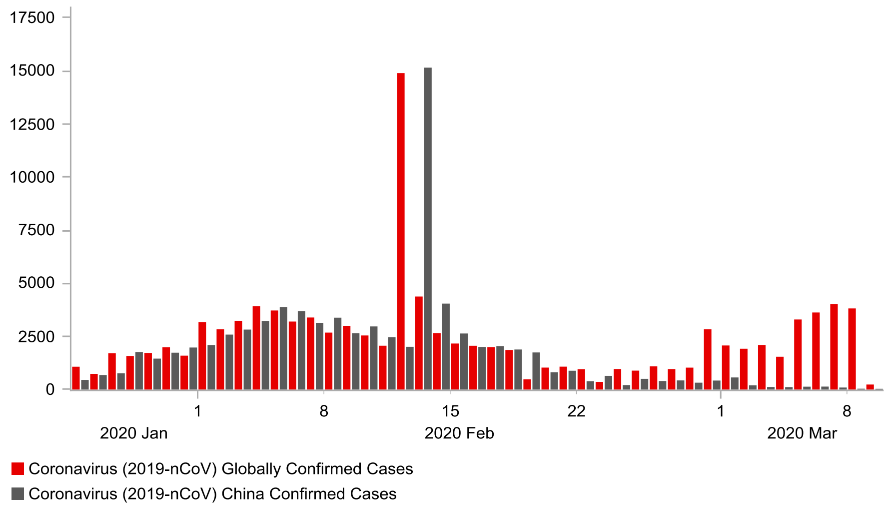
A 30% plunge in crude oil prices does not happen often – the last time was during the Gulf War in 1991 and this has implications for asset markets generally and clearly adds fuel to the retrenchment in risk. Our GMR colleague in Dubai who covers crude oil forecasts, Ehsan Khoman, has covered the key details already (click here) with the key takeaway being that we have slashed our crude oil forecasts for this year. A protracted period of crude oil prices at levels below USD 30/b that pressures production operations is possible over the coming weeks/months that will disrupt credit markets and intensify risk aversion. The next OPEC+ meeting is not until 9th June. There remains a possibility that OPEC+ quickly reconvenes and agrees a

PRICE OF OIL & RELATED CURRENCIES ADJUST SAHRPLY LOWER



Source: Bloomberg, Macrobond & MUFG GMR production cut. We do assume a recovery in crude oil prices in the second half of the year, assuming this crude oil price war does not last indefinitely and assuming we see a confirmation of a peak in COVID-19 cases during Q2.

DAILY CHANGE IN CHINA NEW COVID-19 CASES VERSUS GLOBAL CASES



Source: Bloomberg, Macrobond & MUFG GMR

COVID-19 to get worse before better

Peak in Q2 still looks reasonable

Why do we assume a peak on COVID-19 new cases in Q2? The bad news is that the figures are getting worse in Europe and in the US. But the good news is that the figures for China and Asia show containment is working and that new cases have peaked. For three consecutive days, the new-case count in China has been below the 100-level and today has dropped to 40 – the lowest since 18th January when the coronavirus was breaking out. But the data from Europe and the US points to higher figures ahead but the reassuring aspect is that containment works and individual behaviour should prove more effective now than during the earlier stages of the breakout that we believe gives credibility to a peak in the Apr-June quarter being realised.

Global growth adjustments further to go

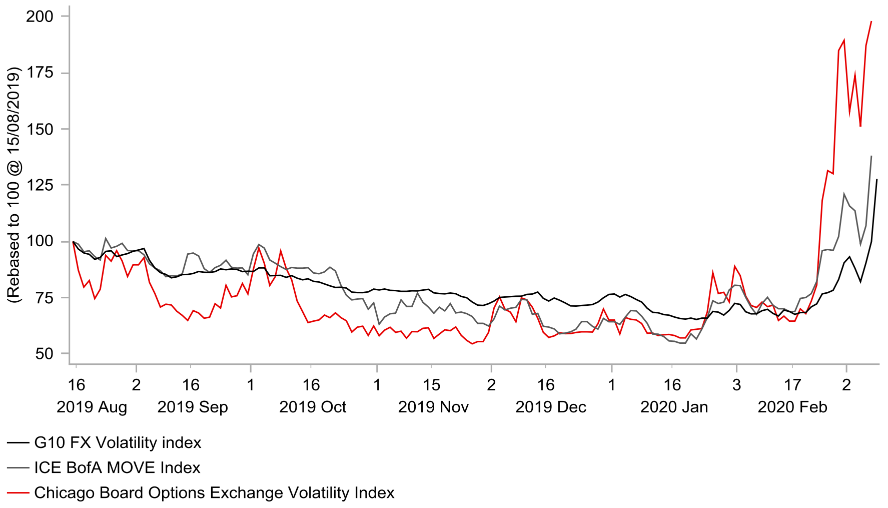
Equity fallout could have further to go

Ahead of today's US equity market open, the S&P 500 is down 12.2% from the record peak on 19th February with S&P 500 futures down as much as 5%. The high-to-low during the Great Financial Crisis was close to 58% but that was from a peak in Oct 2007 through to the low in March 2009. The post-Lehman collapse drop was 49% from Sept 2008 to Mar 2009. So in a sense, this global shock to growth, while not on a par with the GFC, has seen a relatively mild equity market correction and could certainly extend further. However, given around USD 15trn of global fixed income is yielding negative, making comparisons with prior corrections might not be reliable. Before this correction, the dividend yield for the S%P 500 was a little less than 2% while for the Euro Stoxx 600 it was around 3.5%.

Global growth projections to be cut

Another correction in risk assets will be dependent on the macro-economic hit along with confidence in policymakers responding. The OECD last week suggested the global growth rate could be halved this year. But already this is perhaps looking optimistic. How China gets back on line is one key element to global growth rebounding. Data published in the FT daily suggests this remains some way off. The Urban Civil Transportation Index, which measures congestion in major urban centres in China combined with congestion on subway travel in urban cities currently stands at 50.3 – a drop of 50% from where it should be. The Freight Logistics Activity Index is around 20% below where it should be while coal consumption is over 30% down. We suspect the flow of economic data will remain grim for at least the next two to three months which will weigh on asset prices.

COVID & OIL PRICE SHOCKS BRING AN ABRUPT END TO LOW VOLATILITY



Source: Bloomberg, Macrobond & MUFG GMR

Policymakers' response key to sentiment

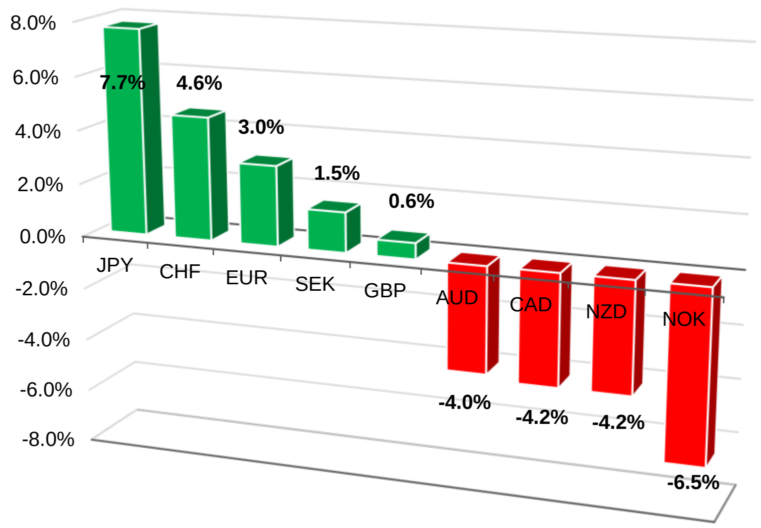
Fed policy response all we've had to date

The Fed rate cut last Tuesday is as of now, the only clear action taken by the major economies of the world. The ECB meets on Thursday and we see risks of disappointment with the focus more related to TLTRO type measures to target specific companies suffering cash-flow issues doe to COVID-19. We suspect the ECB may hold off on a rate cut and focus on the TLTRO channel for now.

The German government agreed to a small EUR 12.4bn increase in investment spending covering from 2021 to 2024 over the weekend – hardly an impressive fiscal response. Larry Kudlow in the US on Friday spoke of "targeted fiscal measures with nothing large-scale". While micro-measures make sense a global coordinated macro response is now also required. USD 8bn of spending to fight COVID-19 in the US has been made available by Congress while the Italian government has also announced fiscal support (EUR7.5 billion) but more needs to be done to counter the negative growth impact.

French Finance Minister Bruno Le Maire called for "strong massive and coordinated" fiscal stimulus in Europe to boost the economy. Will that be forthcoming? Judging by Germany's petty response to date, it will be slow in coming. The US election complicates the prospect of large-scale stimulus. We assume in our updated forecasts that stimulus will ultimately be rolled out although on a less coordinated and on a smaller scale than perhaps the markets are looking for.

G10 FX PERFORMANCE DURING COVID-19 SHOCK



Source: Bloomberg, MUFG GMR, from 20th Jan 2020 to 11am GMT 9th Mar

FX Forecast Implications & some key Assumptions

FX – as you'd expect

We have had what we would call your textbook response in the FX markets to this risk-off event. From the week starting 20th January when COVID-19 came into full focus, JPY, CHF and EUR are the top performing currencies with the global growth-sensitive currencies the laggards.

We see scope for that pattern to continue for now given the unlikelihood of any let-up over the short-term in the spread of COVID-19 globally outside of Asia. We have therefore cut our USD forecasts versus the core, low-yielding safe-haven currencies and lowered the global growth-sensitive currencies' forecasts.

The basis of these forecast changes in the G10 space are as follows:

1) The **FOMC** cut rates further – **by a total of 75bps over the coming two meetings** and commit to providing short-term liquidity to ensure smooth financial market functioning. With our US Rates strategist highlighting the risk of the Fed funds rate being back at 0% by the end of Q2.
2) The **ECB fully refrains from rate cuts** or at best cuts by just 10bps, probably in Q2. **TLTROs will be the main form of action most likely**.
3) **COVID-19 globally peaks around May-time** and signs of a turnaround in global growth emerges in the second half of the year.
4) The **FOMC are much slower to reverse the monetary easing**. Don't forget the framework review is due in June and we believe a key takeaway will be the Fed willing to take greater risks with inflation – lower for longer basically.
5) The **MUFG oil view is that Brent crude** oil will remain close to current prices in March and Q2 before rallying to **USD 46.1/b by year-end**.
6) We do not expect intervention by the BoJ but the 100-level will remain

psychologically important.

7) SNB weekly sight deposit date today revealed an increase of CHF 14bn since COVID-19 risk-aversion fuelled demand picked up in January. That's equivalent to roughly 2% of GDP. The only US "currency manipulator" measure Switzerland does not meet is spending 2% of GDP or more on intervention. We may well see less SNB action over the coming weeks – this would **imply the potential for CHF to outperform as a haven currency**.
8) The UK budget on Wednesday will see the government's rules abandoned but the scale of overall stimulus may well still be conservative. **The BoE will refrain from cutting this week and wait until the meeting on 26th March** when we expect a 25bp cut.
9) We **do not expect a large-scale coordinated fiscal stimulus plan from Europe**. Smaller ad hoc steps are more likely.
10) Like Larry Kudlow implied, **there will be no large-scale fiscal stimulus support in the US either**.

UPDATED FX FORECASTS

	Q1 2020	Q2 2020	Q3 2020	Q4 2020
EUR/USD	1.1600	1.1400	1.1600	1.1800
USD/JPY	103.00	102.00	101.00	100.00
EUR/JPY	119.48	116.28	117.16	118.00
GBP/USD	1.3182	1.2955	1.3257	1.3801
EUR/GBP	0.8800	0.8800	0.8750	0.8550
USD/CAD	1.3800	1.3900	1.3700	1.3500
AUD/USD	0.6500	0.6400	0.6600	0.6700
NZD/USD	0.6300	0.6300	0.6400	0.6500
USD/NOK	9.3103	9.5614	9.2241	8.9831
EUR/NOK	10.800	10.900	10.700	10.600
USD/SEK	9.3103	9.5175	9.2672	8.9831
EUR/SEK	10.800	10.850	10.750	10.600
USD/CHF	0.9052	0.9079	0.8966	0.8856
EUR/CHF	1.0500	1.0350	1.0400	1.0450
DXY	94.300	95.500	93.800	92.000

Source: MUFG GMR

CERTIFICATION

The author(s) mentioned on the cover of this report hereby certify(ies) (or, where multiple authors are responsible, individually certify with respect to each security that the author covers in this report) that the views expressed in this report accurately reflect their personal views about the subject company(ies) and its (their) securities, and also certify(ies) that they have not been, are not, and will not be receiving direct or indirect compensation in exchange for expressing any specific recommendation(s) or view(s) in this report.

DISCLAIMERS

DISCLAIMERS

This report has been prepared by the Global Markets Research, US Rates and Credit Strategy desks within MUFG Bank , Ltd. ("MUBK") and MUFG Securities EMEA plc ("MUS(EMEA)") and may be distributed to you either by MUBK, MUS(EMEA) or by another subsidiary of the Mitsubishi UFJ Financial Group ("MUFG").

Legal entities and branches

The securities related businesses within MUFG (together referred to in this presentation as "MUFG Securities") are: (1) MUFG SECURITIES EMEA PLC ("MUS(EMEA)") which is authorised in the United Kingdom by the Prudential Regulation Authority ("PRA") and regulated by the Financial Conduct Authority ("FCA") and the PRA (FS Registration Number 124512). MUS(EMEA) has a branch office that is registered at Level 3, East Wing, The Gate, Dubai International Financial Centre, PO Box 506894, Dubai, UAE ("Dubai Branch"). The Dubai Branch is authorised to operate in the Dubai International Financial Centre ("DIFC") as a Non-DIFC Entity (Commercial License Number CL1656) and is regulated by the Dubai Financial Services Authority (Reference Number F002623); (2) (MUFG Securities (Europe) N.V. ("MUS (EU)") which is authorized and regulated in the Netherlands by the Dutch Authority for the Financial Markets (AFM) and also regulated by De Nederlandsche Bank (DNB). MUS (EU) Paris Branch is regulated in France by the Autorité de contrôle prudentiel et de résolution (ACPR) and the Autorité des marchés financiers (AMF); (3) MUFG SECURITIES AMERICAS INC. ("MUSA") which is registered in the United States with the Securities and Exchange Commission ("SEC") and regulated by the Financial Industry Regulatory Authority ("FINRA") (SEC# 8-43026; CRD# 19685); (4) MUFG SECURITIES (CANADA), LTD. ("MUS(CAN)") is an investment dealers registered in Canada with the Ontario Securities Commission ("OSC") and in each province and territory of Canada, a member of the Investment Industry Regulatory Organization of Canada ("IIROC"), and a member of the Canadian Investor Protection Fund ("CIPF"). Customers' accounts are protected by CIPF within the specified limits; (5) MUFG SECURITIES ASIA LIMITED ("MUS(ASIA)") which is incorporated in Hong Kong, licensed under the Hong Kong Securities and Futures Ordinance and regulated by the Hong Kong Securities and Futures Commission (Central Entity Number AAA889). MUS(ASIA) is registered as a foreign company under the Corporations Act 2001 of Australia ARBN No. 169 329 453; and (6) MUFG Securities Asia (Singapore) Limited ("MUS(SPR)") which is licensed as an approved merchant bank by the Monetary Authority of Singapore. In respect of the financial services provided to wholesale clients in Australia, MUS(ASIA), MUS(EMEA), MUS(USA) and MUS(SPR) are each exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 of Australia under the Australian Securities and Investments Commission Class Order Exemption CO 03/1099, CO 03/1103, CO 03/1100, and CO 03/1102, respectively. Each of MUS(ASIA), MUS(EMEA), MUSA, MUS(CAN), and MUS(SPR) are regulated under the laws of Hong Kong, the United Kingdom, the United States, Canada and Singapore respectively, which differ from Australian laws.

MUFG Bank Ltd ("MUBK"), is a limited liability stock company incorporated in Japan and registered in the Tokyo Legal Affairs Bureau (company no. 0100-01-008846). MUBK's head office is at 7-1 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo 100-8388, Japan. MUBK's London branch is at Ropemaker Place, 25 Ropemaker Street, London EC2Y 9AN, and is registered as a UK establishment in the UK register of companies (registered no. BR002013). The principal office of MUBK's Canada branch (MUFG Bank, Ltd., Canada Branch) is located at 200 Bay Street, Suite 1800, Toronto, Ontario, M5J 2J1, Canada. MUFG Bank's Canada branch is an authorized foreign bank branch permitted to carry on business in Canada pursuant to the Bank Act (Canada); Deposits with MUFG Bank Canada are not insured by the Canada Deposit Insurance Corporation. MUBK is authorised and regulated by the Japanese Financial Services Agency. MUBK's London branch is authorised by the UK Prudential Regulation Authority ("PRA") and regulated by the UK Financial Conduct Authority ("FCA") with limited regulation by the PRA.

General disclosures

This report is for information purposes only and should not be construed as investment research as defined by MIFID 2 or a solicitation of any offer to buy or sell any security, commodity, futures contract or related derivative (hereafter "instrument") or to participate in any trading strategy. This report does not constitute a personal recommendation and does not take into account the individual financial circumstances, needs or objectives of the recipients. Recipients should therefore seek their own financial, legal, tax or other advice before deciding to invest in any of the instruments mentioned in this report.

Certain information contained in this report has been obtained or derived from third party sources and such information is believed to be correct and reliable but has not been independently verified. MUFG does not make any guarantee, representation, warranty or undertaking, express or implied, as to the fairness, accuracy, reliability, completeness, adequacy or appropriateness of any information or comments contained in this report. Furthermore the information may not be current due to, among other things, changes in the financial markets or economic environment. MUFG has no obligation to update any such information contained in this report.

The information contained in this report may contain forward-looking information ("FLI"). FLI is information regarding possible events, conditions, or results of operations that is based on assumptions about future economic conditions and courses of action and may be presented as either a forecast or a projection. This report is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. Upon receipt of this report, each recipient acknowledges and agrees that any FLI included herein should not be considered material. Recipients should consult their own legal and financial advisers for additional information. Any prices provided herein (other than those identified as being historical) are indicative only and do not represent firm quotes as to either price or size.

This report is proprietary to MUFG and may not be quoted, circulated or otherwise referred to without our prior written consent. Notwithstanding this, MUFG shall not be liable in any manner whatsoever for any consequences or loss (including but not limited to any direct, indirect or consequential loss, loss of profits and damages) arising from any reliance on or usage of this report and accepts no legal responsibility to any investor who directly or indirectly receives this material.

Country and region specific disclosures

This report 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 locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to any law, regulation or rule. Each entity and branch within MUFG is subject to distinct regulatory requirements and certain products and services discussed in this document may not be available in all jurisdictions or to all client types.

In this regard, please note the following in relation to the jurisdictions in which MUFG has a local presence:

• United Kingdom / European Economic Area (EEA): This report is intended for distribution to a “professional client” or “eligible counterparty” as those terms are defined in the rules of the FCA and PRA. In other EEA countries, this report is intended only for persons regarded as professional investors (or equivalent) in their home jurisdiction.

• United States of America: This report, when distributed by MUSA, is intended for Institutional Investors (“Institutional Accounts” as defined by FINRA Rule 4512(c)). When distributed by a non-US affiliate of MUSA, this report is intended for distribution solely to “major U.S. institutional investors” or “U.S. institutional investors” pursuant to Rule 15a-6 under the U.S. Securities Exchange Act of 1934, as amended. Securities referenced in this report may have been underwritten by MUSA and/or its affiliates. Nothing in this report should be considered an offer or solicitation of an offer to buy or sell securities or any other financial product or a commitment of any kind with respect to any transaction.

IRS Circular 230 Disclosure: MUFG Securities does not provide tax advice. Accordingly, any discussion of U.S. tax matters included herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone not affiliated with MUSA of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

• Hong Kong: This report is only intended for distribution to a “professional investor” as that term is defined in the Securities and Futures Ordinance and should not be passed onto any other person.

• Singapore: This report is only intended for distribution to an "institutional investor", "accredited investor" or "expert investor" as those terms are defined under regulation 2 of the Financial Advisers Regulation. It is solely for the use of such investors and shall not be distributed, forwarded, passed on or disseminated to any other person. Investors should note that, as a result of exemptions that apply when this report is distributed to "accredited investors" and "expert investors", MUSS is exempt from complying with certain requirements under the Financial Advisers Act, including section 25 of the Financial Advisers Act (which requires a financial adviser to disclose all material information on certain investment products), section 27 (which requires a financial adviser to have a reasonable basis for making recommendations on investments) and section 36 (which requires a financial adviser to disclose any interests that it holds in securities that it recommends).

• Canada: When distributed in Canada by MUS(EMEA) or MUSA. MUS(EMEA) operates under an International Dealer Exemption from registration with the securities regulators in Alberta, British Columbia, Manitoba, Ontario and Québec. MUSA operates under an International Dealer Exemption from registration with the securities regulators in all Canadian Provinces and Territories. When distributed by MUS(EMEA) or MUSA, this report is only intended for a “permitted client” as that term is defined under the National Instrument 31-103 in Canada and is not intended for re-distribution to any other person. When distributed by MUS(CAN), this report is only intended for an “institutional client” as that term in defined under the IIROC dealer member rules and is not intended for re-distribution to any other person. The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, or solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Under no circumstance is the information contained herein to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. • Japan: This Note, when distributed by MUFG Securities affiliates located outside of Japan, is intended for distribution in accordance with Article 58-2 of the Financial Instruments Exchange Act 1948 (“FIEA”) i) to a “Financial Instruments Business Operator” engaged in “Securities-Related Business” as defined in the FIEA or ii) to the government, the Bank of Japan, a qualified financial institution defined in Article 209 of the Cabinet Office Ordinance Concerning Financial Instruments Business, Etc., or an Investment Manager.

When distributed by Mitsubishi UFJ Morgan Stanley Securities Co., Ltd. (“MUMSS”), this Note is intended for distribution to a “Professional Investor (tokutei-toushika)” as defined in the FIEA.

• United Arab Emirates: This report is only intended for distribution to a “Professional Client” or “Market Counterparty” as those terms are defined under the rules of the Dubai Financial Services Authority and only a person meeting the criteria for these terms should act upon this report.

• Australia: This Note is only intended for distribution to persons in Australia who are sophisticated or professional investors for the purposes of section 708 of the Corporations Act of Australia, and are wholesale clients for the purposes of section 761G of the Corporations Act of Australia. This Note is not intended to be distributed or passed on, directly or indirectly, to any other class of persons in Australia.

Other jurisdictions:

MUFG Securities also relies on local registrations or regulatory exemptions in order to undertake certain securities business in other countries. In Thailand, MUS(EMEA) has a derivatives dealer registration with the Securities and Exchange Commission, Thailand. In Canada, MUS(EMEA) and MUSA each operate under an international dealer exemption registered with the securities regulators. MUS(EMEA) operates under the exemption in Alberta, Quebec, Ontario, British Columbia and Manitoba. MUSA operates under the exemption in all Canadian Provinces and Territories..