

EHSAN KHOMAN
 Head of MENA Research and Strategy

DIFC Branch – Dubai

T: +971 (0)4 387 5033
 E: ehsan.khoman@ae.mufg.jp

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

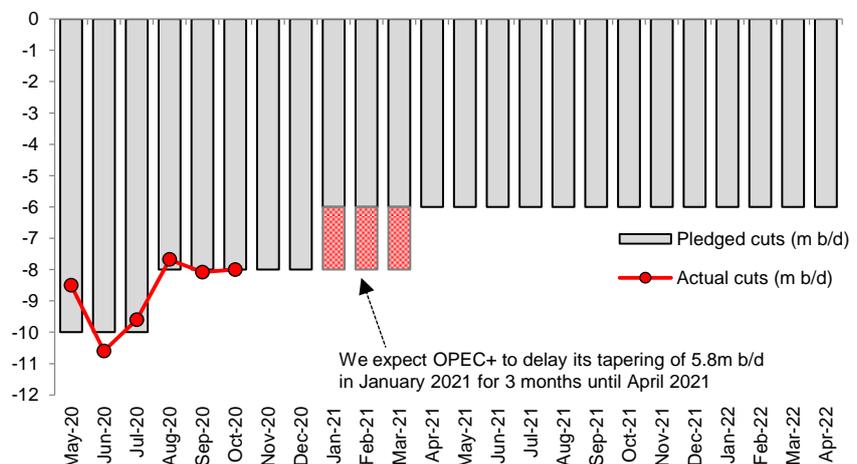
19 November 2020

OPEC+ meeting preview – base case: 3 months delayed tapering of existing cuts

- MUFG's base case for the OPEC+ 30 November/1 December meeting: a delay of the planned 1.9m b/d January output increase by 3 months to April. OPEC+ is in a spot of bother.** Navigating the wedge between the push-and-pull stemming from rising virus cases on both sides of the Atlantic on the one hand, and vaccine efficacy news as well as the phoenix-like return of Libyan crude to global oil markets on the other hand, is a tall order. Taking this into consideration, we believe the group will err on the side of caution and heed the market's anxieties stemming from the virus resurgence. As such, on balance, a 3 month delay to April provides the group breathing space to adjust its reaction function to market conditions once the COVID-19 winter speed bump is behind us.
- Despite OPEC's technical panel recommending a fairly plain vanilla freeze in cuts for 3-6 months, we view emerging robust vaccine efficacy developments, alongside diverging Saudi and Russian oil strategies, will soften the need for an extension north of 3 months.** Saudi Arabia has been a stern advocate and "hawk" in propping up prices by sticking to the prevailing OPEC+ agreement given its fiscal budgetary requirements (breakeven oil prices are north of USD70/b). Meanwhile, the encouraging vaccine developments may convince Russia – which prefers a "wait-and-see" approach being able to stomach lower prices with its fiscal breakeven ~USD45/b – that a long extension of the current cuts may not be warranted. On net, these considerations gives us conviction that the compromise of a 3 month rollover will be the most agreeable outcome.
- Oil price implications.** We do not anticipate much price action post-meeting given that a 3 months extension is baked in. Beyond the decision, the group's communication strategy will be central in determining the near-term direction of oil prices. The more united, coherent and coordinated (and less fudge and ambiguity) the group's messaging will be, the greater the prospects of markets being wowed (and vice versa).

OPEC+ COMPLIANCE WITH ITS PLEDGED CUTS HAVE BEEN IMPRESSIVE

OPEC+ AGREED 3 PHASES OF PRODUCTION CUTS AND ACTUAL CUTS (M B/D)



Source: Bloomberg, OPEC, S&P Global, MUFG Research

OPEC+ meeting preview – base case: 3 months delayed tapering of existing cuts

OPEC+ expected to delay its tapering cuts for 3 months until April 2021

OPEC+ meets on 30 November and 1 December with a host of uncertainties in its in-tray. Virus uncertainty, lockdown headlines, low trading volumes, a still high level of inventories and the aftermath of the US election are all confronting the group when it meets. Taking this into consideration, we believe the group will err on the side of caution and heed the market's anxieties stemming from the virus resurgence. As such, our base case is that the group will delay the planned 1.9m b/d January output increase by 3 months to April. We believe this will provide the group breathing space to adjust its reaction function to market conditions once the COVID-19 winter speed bump is behind us.

Demand picture still bleak

Oil markets have stabilised since the start of November, with Brent crude trading near its two month upper trading limit of ~USD43-44/b spurred by the encouraging vaccine efficacy news from Pfizer and its partners as well as from Moderna, and increasingly amid expectations that OPEC+ will respond to pressure and delay its next phase of production cuts for 3 months. With COVID-19 cases still reaching new records almost every day, many countries, particularly on both sides of the Atlantic, have ordered new lockdowns, hampering global oil demand.

Oil markets to pivot to a surplus in December before return back to a deficit in early 2021

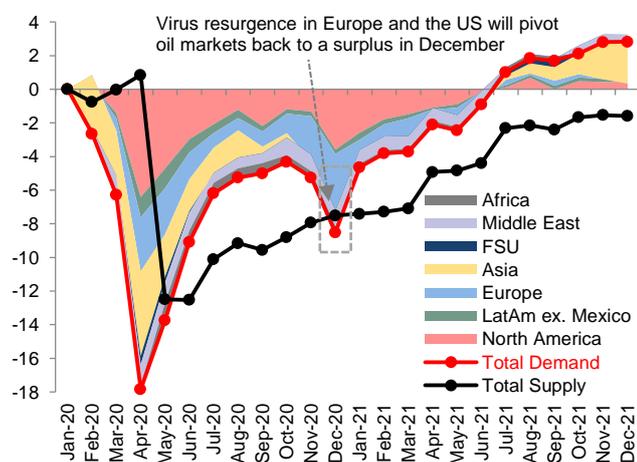
The initial design of the OPEC+ deal signed in April set up a 3 stage process of production cuts set to last until April 2022. The commitment to rebalance the market and significantly draw down global inventories remains impressively robust. The supply cuts led by OPEC+ have been successful in supporting Brent crude oil prices north of USD40/b despite the steepest demand shock in the industry's history. However, given the expected 0.7m b/d year-end oil market surplus (see [here](#)) and prevailing elevated demand uncertainty stemming from the virus, we expect that OPEC+ will delay its cuts for 3 months until April which will help bring the market back to a narrow 0.9m b/d market deficit in Q1 2021, when we forecast Brent prices to rise to USD49/b by March 2021.

Diverging Saudi-Russian oil strategies back in focus

Despite OPEC's technical panel recommending a fairly plain vanilla freeze in cuts for 3-6 months, we view emerging robust vaccine efficacy developments, alongside diverging Saudi and Russian oil strategies, will soften the need for an extension north

OIL MARKETS ARE EXPECTED TO PIVOT BACK TO A SURPLUS IN DECEMBER ...

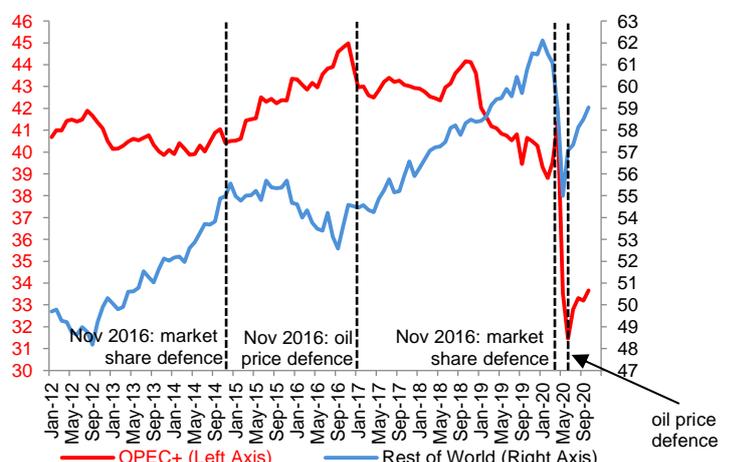
GLOBAL OIL DEMAND AND SUPPLY, CHANGE VS. JANUARY 2020 (M B/D)



Source: Bloomberg, EIA, IEA, OPEC, MUFG Research

... AND THE OPEC+ STRATEGY COULD STILL SIGNAL A TEMPORARY TRUCE RATHER THAN A PERMANENT DEAL

OIL PRODUCTION (M B/D) – OPEC+ AND THE REST OF THE WORLD



Source: Bloomberg, OPEC, MUFG Research

of 3 months. Notwithstanding the resurgence in virus cases across both sides of the Atlantic sparking fears of a double-dip recession, the sheer velocity of the upward move across the entire oil price curve stemming from recent promising vaccine news will offer comfort to OPEC+'s calculus heading into the meeting at the end of this month. Meanwhile, despite their close coordination in the existing historic OPEC+ production cuts, the dynamics between Saudi Arabia and Russia will also be pivotal heading into the meeting. Whilst a Biden presidency is likely to solidify the Saudi-Russian relationship from a geopolitical perspective, the two countries have deviating approaches for oil market management (see [here](#)). Saudi Arabia has been a stern advocate of propping up prices by sticking to the prevailing OPEC+ agreement given its fiscal budgetary requirements (breakeven oil prices are north of USD70/b). Meanwhile, the encouraging vaccine developments may convince Russia – which can stomach lower oil prices with its fiscal breakeven ~USD45/b – that a long extension of the current cuts may not be warranted (Russia is also still lagging behind in its pledged commitments). On net, these considerations gives us conviction that the compromise of a 3 month rollover will be the most agreeable outcome.

A longer extension of 6 months is possible

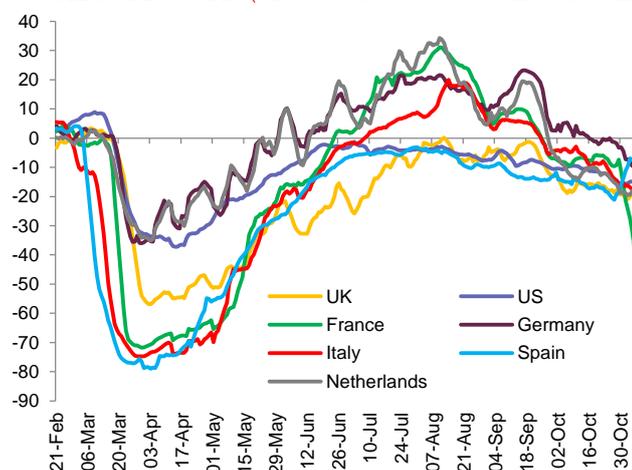
It is conceivable, albeit unlikely, that a 6 months (or longer) delay materialises during the OPEC+ deliberations at the end of the month, offering strong stability to markets. The most important consideration for the group would be the impact on global oil demand stemming from the mobility restrictions across both sides of the Atlantic. It would appear that, at face value, OPEC+ is not materially troubled by the resurgence of the virus, given that the recovery in Asia continues to garner momentum (indeed Chinese crude processing rates rose by 2.6% y/y in October, equivalent to 14.1m b/d – a record fuelled by strong gasoline consumption). However, the recent complications on the US side are more important for OPEC+ given the rising potential for new soft lockdowns being imposed to ensure the healthcare system is not overwhelmed. Though, debate on lockdowns in the US is polarised and the ability of governors to proceed with stringent European style lockdowns is limited – any level of restrictions that impacts oil demand in the US will be monitored closely by OPEC+ in the coming days ahead in the lead up to the meeting.

Other supply constraints are looming

Beyond the OPEC+ decision, supply constraints have been hampering the current oil market deficit. The phoenix-like return of Libyan production has staged an unprecedented bounce back to reach 1.2m b/d, rebounding more than 2x our expectations and previous rebounds witnessed in 2014 and 2016. Granted, there remains considerable uncertainties surrounding the fragile state of affairs given the delicate political agreement in place, we prudently price in that output will continue to

EUROPEAN AND US MOBILITY INDICATORS HAVE WANED OWING TO LOCKDOWN REIMPOSITIONS ...

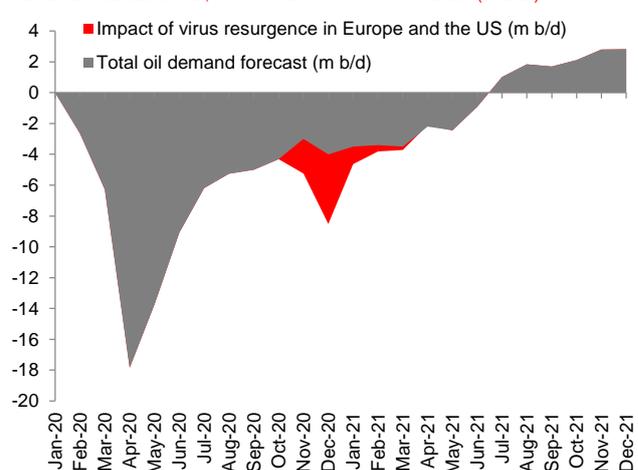
GOOGLE MOBILITY INDEX (7 DAY MOVING AVG OF CORE COMPONENTS)



Source: Google, MUFG Research

... WHICH WILL SHAVE 2.4M B/D IN GLOBAL OIL DEMAND BETWEEN NOVEMBER AND DECEMBER

GLOBAL OIL DEMAND, CHANGE VS. JANUARY 2020 (M B/D)



Source: Bloomberg, IEA, MUFG Research

recover, averaging ~1.0m b/d until the potential next OPEC+ meeting in April – note that communications from the Saudi Energy Minister stated on 17 November that OPEC+ was not discussing output quotas for Libya at the current juncture. Beyond Libya, hurricanes have materially interrupted US offshore production (~0.4m b/d since July). With OPEC+ compliance coming in at 101% in October, we forecast global oil supply increasing from 91.5m b/d in October to reach 92.3m b/d in November and 92.9m b/d in December.

A 3 months extension is baked in

Given the recent articulation from various OPEC+ ministers, on top of OPEC's technical panel recommendation on 17 November of a postponement on putting an additional 1.9m b/d crude back on the market, the odds are overwhelming that the group will concur to delay their tapering, with markets having all but priced in a 3 months extension.

As such, we do not anticipate much price action post-meeting given that a 3 months extension is baked in, with the group continuing its modus operandi strategy of supporting prices over defending market share through its active oil market intervention policy to effectively carve out an OPEC+ floor in oil prices. Beyond the decision, the group's communication strategy will be central in determining the near-term direction of oil prices. The more united, coherent and coordinated (and less fudge and ambiguity) the group's messaging will be, the greater the prospects of markets being wowed (and vice versa). Given the fragile state of current in global markets, investors are searching for credible assurance from OPEC+ that it will stand ready to take a flexible and adaptable approach in its oil supply management policies. Heading into the last few weeks of 2020 – absent any unforeseen event risk – our constructive oil price conviction remains intact (see [here](#) and [here](#)) and we continue to forecast Brent and WTI to end-2020 at USD48/b and USD45/b, respectively. For 2021, we project Brent and WTI averaging USD57/b and USD53/b, respectively, with a large inflection higher from Q3 2021, as oil markets transition from the cyclical tightening phase to the structural repricing stage which by then we are likely to see oil demand breaching the pre-virus run rate of 100m b/d and the requirement for higher upstream capex investment (see [here](#)).

OPEC+ unlikely to support free riders any longer

On the whole, the OPEC+ agreement to curb output and support prices, marks the second time since 2014 that OPEC+ endeavours to pursue a strategy of defending market share through ramping up production has buckled. Once COVID-19 slowly ebbs away and with it oil demand begins to recover, prices will recover further. Herein lies the OPEC+ dilemma that has been ongoing since 2014 – while cuts can support oil prices above shale marginal costs initially, this can only be sustained at the expense of ever diminishing volumes and revenues. This is at the core of the new oil order, which could derail the very existence of such coordinated cuts, with OPEC+ unlikely to be willing to support prices for “free riders” in the oil industry any longer. Thus, this existing OPEC+ agreement could inevitably signal a temporary truce rather than a permanent deal.

Ranges and outlook for the week ahead

BRENT – BULLISH BIAS – (41.00-48.00)

WTI – BULLISH BIAS – (38.00-46.00)

Quarter End	Spot close 19.11.20	Q4 2020	Q1 2021	Q2 2021	Q3 2021
Brent	44.17	48.40	49.20	54.60	57.80
NYMEX	41.50	44.70	45.20	50.30	53.60
		Range	Range	Range	Range
Brent		33.90-59.10	41.70-64.20	43.10-66.10	45.30-66.30
NYMEX		31.20-55.60	38.60-61.80	40.80-63.80	42.10-64.10

Research

London:

MR DEREK HALPENNY

Head of Research, Global Markets EMEA
& International Securities

T: +44 (0)20 7577 1887

MR LEE HARDMAN

Currency Analyst

T: +44 (0)20 7577 1968

MS MOMOKO MIYACHI

Research Assistant

T: +44 (0)20 7577 1886

Shanghai:

MR MARCO SUN

Chief Financial Markets Analyst

T: +86 21 6888 1666

New York:

MR JOHN HERRMANN

Rates Strategist

T: +1-212- 405-7447

Dubai:

MR EHSAN KHOMAN

Head of MENA Research and Strategy

T: +971 (0)4 387 5033

Tokyo

MR MINORI UCHIDA

Tokyo Head of Global Markets Research

T: +81 (0) 3 6214 4147

MR TOSHIYUKI SUZUKI

Senior Market Economist

T: +81 (0) 3 6214 4148

MR TAKAHIRO SEKIDO

Chief Japan Strategist

T: +81 (0) 3 6214 4150

MS SUMINO KAMEI

Senior Analyst

T: +81 (0) 3 6214 4179

Singapore:

MS SOOK MEI LEONG

Asean Head of Global Markets Research

T: +65 6918 5536

MR TEPPEI INO

Senior Analyst

T: +65 6918 5538

MS SOPHIA NG

Analyst

T: +65 6918 5537

Sao Paulo:

MR CARLOS PEDROSO

Senior Economist

T: +55-11-3268-0245

MR MAURICIO NAKAHODO

Economist

T: +55-11-3268-0420

Disclaimer

This document has been prepared by MUFG Bank Ltd. (the "Bank") for general distribution. It is only available for distribution under such circumstances as may be permitted by applicable law and is not intended for use by any person in any jurisdiction which restricts the distribution of this document. The Bank and/or any person connected with it may make use of or may act upon the information contained in this document prior to the publication of this document to its customers.

Neither the information nor the opinions expressed in this document constitute or are to be construed as, an offer, solicitation or recommendation to buy, sell or hold deposits, securities, futures, options or any other derivative products or any other financial products. This document has been prepared solely for informational purposes and does not attempt to address the specific needs, financial situation or investment objectives of any specific recipient. This document is based on information from sources deemed to be reliable but is not guaranteed to be accurate and should not be regarded as a substitute for the exercise of the recipient's own judgment. Historical performance does not guarantee future performance. The Bank may have or has had a relationship with or may provide or has provided financial services to any company mentioned in this document. Our group affiliates, from time to time, may have interests and/or underwriting commitments in the relevant securities mentioned in this document and/or may have positions or holdings in such securities or related instruments.

All views in this document (including any statements and forecasts) are subject to change without notice and none of the Bank, its head office, branches, subsidiaries and affiliates is under any obligation to update this document.

The information contained in this document has been obtained from sources the Bank believed to be reliable but the Bank does not make any representation or warranty nor accepts any responsibility or liability as to its accuracy, timeliness, suitability, completeness or correctness. The Bank, its head office, branches, subsidiaries and affiliates and the information providers accept no liability whatsoever for any loss or damage of any kind arising out of the use of or reliance upon all or any part of this document.

The Bank retains copyright to this document and no part of this document may be reproduced or re-distributed without the written permission of the Bank. The Bank expressly prohibits the distribution or re-distribution of this document to private or retail clients, via the Internet or otherwise, and the Bank, its head office, branches, subsidiaries and affiliates accept no liability whatsoever to any third parties resulting from such distribution or re-distribution.

MUFG Bank Ltd. ("MUFG Bank") is a limited liability stock company incorporated in Japan and registered in the Tokyo Legal Affairs Bureau (company no. 0100-01-008846). MUFG Bank's head office is at 7-1 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo 100-8388, Japan. MUFG Bank's London branch is registered as a UK establishment in the UK register of companies (registered no. BR002013). MUFG Bank is authorised and regulated by the Japanese Financial Services Agency. MUFG Bank's London branch is authorised by the Prudential Regulation Authority (FCA/PRA no. 139189) and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of MUFG Bank London branch's regulation by the Prudential Regulation Authority are available from us on request.

MUFG Bank Ltd. ("MUFG Bank") is a limited liability stock company incorporated in Japan and registered in the Tokyo Legal Affairs Bureau (company no. 0100-01-008846). MUFG Bank's head office is at 7-1 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo 100-8388, Japan. MUFG Bank's London branch is registered as a UK establishment in the UK register of companies (registered no. BR002013). MUFG Bank is authorised and regulated by the Japanese Financial Services Agency. MUFG Bank's London branch is authorised by the Prudential Regulation Authority (FCA/PRA no. 139189) and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of MUFG Bank London branch's regulation by the Prudential Regulation Authority are available from us on request.

This Presentation has been prepared by MUFG Bank. This Presentation is not intended for Retail Clients within the meaning of the United Kingdom PRA/FCA rules and should not be distributed to Retail Clients. This Presentation has been prepared for information purposes only and for the avoidance of doubt, nothing expressed or implied in this Presentation constitutes any commitment by MUFG Bank or any of its subsidiaries or affiliates to arrange and/or provide any services and/or financing. This Presentation does not constitute legal, tax, accounting or investment advice.

MUFG Bank retains copyright to this Presentation and no part of this Presentation may be reproduced or redistributed without the prior written permission of MUFG Bank. MUFG Bank and its subsidiaries and affiliates accept no liability whatsoever to any third parties resulting from any unauthorised distribution. MUFG Bank and its subsidiaries, affiliates, directors and employees accept no liability whatsoever for any reliance on the information contained in the Presentation and make no representation or warranty as to its accuracy and completeness. This Presentation is based on information from sources deemed by MUFG Bank to be reliable but is not guaranteed to be accurate and should not be regarded as a substitute for the exercise of the recipient's own judgement.

The views contained in this Presentation (including any statements and forecasts) are solely those of MUFG Bank and are subject to change without notice. MUFG Bank is under no obligation to correct any inaccuracies in the Presentation or update the information contained therein.

The provision of the service described in this Presentation is or will be subject to an agreement constituting terms of business ("the Agreement"). In the event of a conflict between information in this Presentation and the Agreement, the latter shall prevail.

The MUFG Bank Presentation and all claims arising in connection with it are governed by, and to be construed in accordance with, English law.

The Bank's DIFC branch - Dubai is part of the Mitsubishi UFJ Financial Group and is located at Level 3, East Wing, The Gate, Dubai International Financial Centre, Dubai, UAE. The Bank's Dubai branch is regulated by the Dubai Financial Services Authority (DFSA) (License number: F000470) and the Japanese Financial Services Agency.

The Bank's Doha office is part of the Mitsubishi UFJ Financial Group and is located at Suite A3, Mezzanine floor, Tornado Tower, West Bay, Doha, Qatar. The Bank's Doha branch is regulated by the Qatar Financial Centre Regulatory Authority (QFCRA) (Licence number: 00103) and the Japanese Financial Services Agency.

The Bank's Abu Dhabi branch is part of the Mitsubishi UFJ Financial Group and is located at 1st Floor, IPIC Square, Muroor Street, PO Box 2174, Abu Dhabi, UAE. The Bank's Abu Dhabi branch is regulated by the Central Bank of the U.A.E (CBAUE) (Licence number: CN-1002032) and the Japanese Financial Services Agency.

The Bank's Bahrain branch is part of the Mitsubishi UFJ Financial Group and is located at 12th Floor, West Tower, Bahrain Financial Harbor, Bahrain. The Bank's Bahrain branch is regulated Bahrain by the Central Bank of Bahrain (CBB) (Licence number WB/020) and the Japanese Financial Services Agency.

This presentation has been prepared by the Bank and is not intended for Retail Clients within the meaning of the PRA/FCA, the DFSA, QFCRA, CBB and CBAUE rules and should not be distributed to Retail Clients. This presentation has been prepared for information purposes only and, for the avoidance of doubt, nothing expressed or implied in this presentation constitutes any commitment by the Bank, its subsidiaries or affiliates to arrange and/or provide any services and/or financing. This presentation does not constitute legal, tax, accounting or investment advice. The Bank retains copyright to this presentation and no part of this presentation may be reproduced or redistributed without the prior written consent of the Bank. The Bank and its subsidiaries and affiliates accept no liability whatsoever to any third party resulting from any unauthorised distribution. The Bank, its subsidiaries, affiliates and each of their respective directors and employees accept no liability whatsoever for any reliance on the information contained in the presentation and make no representation or warranty as to its accuracy and completeness. This presentation is based on information from sources considered by the Bank to be reliable but is not guaranteed to be accurate and should not be regarded as a substitute for the exercise of the recipient's own judgement. The views, opinions and other information contained in this presentation (including, without limitation, any statements or forecasts) are solely those of the Bank and are subject to change without notice.

Notwithstanding the foregoing, nothing contained herein shall be deemed to limit or exclude liability on the part of the Bank to the extent it is not permitted to exclude in accordance with the laws administered by the Dubai Financial Services Authority (DFSA).

The Bank is under no obligation to correct any inaccuracies or update the information contained in this presentation. The provision of the service described in this presentation is, or will be, subject to an agreement constituting terms of business. In the event of a conflict between information contained in this presentation and such terms of business, the latter shall prevail. This disclaimer is governed by English law.

This report shall not be construed as solicitation to take any action such as purchasing/selling/investing in financial market products. In taking any action, the reader is requested to act on the basis of his or her own judgment. This report is based on information believed to be reliable, but the Bank does not guarantee or accept any liability whatsoever for its accuracy. The Bank, its affiliates and subsidiaries and each of their respective officers, directors and employees accept no liability whatsoever for any loss or damage of any kind arising out of the use of all or any part of this report. The contents of the report may be revised without advance notice. The Bank retains copyright to this report and no part of this report may be reproduced or re-distributed without the Bank's written consent. The Bank expressly prohibits the re-distribution of this report to Retail Customers (within the meaning of the PRA/FCA, the DFSA, QFCRA, CBB, CBAUE rules), via the internet or otherwise and the Bank, its subsidiaries and affiliates accept no liability whatsoever to any third parties resulting from such re-distribution.

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

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 authorised 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. ("MUS(USA)") 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)") which is registered in Canada with the Ontario Securities Commission ("OSC") and regulated by the Investment Industry Regulatory Organization of Canada ("IIROC"); (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 AA889). 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 03/1102, and CO 03/1102, respectively. Each of MUS(ASIA), MUS(EMEA), MUS(USA), 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). 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 MFIF 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 Securities 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 Securities has no obligation to update any such information contained in this report.

This report is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. 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 Securities and may not be quoted, circulated or otherwise referred to without our prior written consent. Notwithstanding this, MUFG Securities 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.

In this regard, please note the following in relation to the jurisdictions in which MUFG Securities 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 MUS(USA), is intended for Institutional Investors ("Institutional Accounts" as defined by FINRA Rule 4512(c)). When distributed by a non-US affiliate of MUS(USA), 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 MUS(USA) 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 MUS(USA) 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, this report is distributed by MUS(EMEA) or MUS(USA). MUS(EMEA) operates under an International Dealer Exemption from registration with the securities regulators in Alberta, British Columbia, Manitoba, Ontario and Québec. MUS(USA) operates under an International Dealer Exemption from registration with the securities regulators in all Canadian Provinces and Territories. 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. 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") to a "Financial Instruments Business Operator" engaged in "Securities-Related Business" as defined in the FIEA or 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., 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 MUS(USA) 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. MUS(USA) operates under the exemption in all Canadian Provinces and Territories.