HENRY COOK
Senior Europe Economist

Economic Research Office

T: +44 (0)20 7577 1591
E: henry.cook@uk.mufg.jp

MUFG BANK, LTD.
A member of MUFG, a global financial group

Heading towards a bleak winter

17 August 2022

The UK economy is hurtling into a severe cost-of-living crisis. Inflation is now into double-digits and there is worse to come with household energy bills set to soar in October. The depth of the downturn will largely depend on government policy. It seems that support will be increased beyond what has already been announced – but it is unlikely to be enough to offset the energy shock. A recession is likely, and the subsequent recovery could be slow.

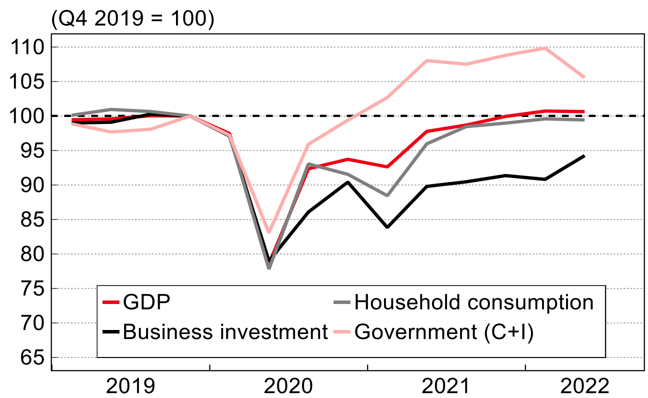
Pandemic distortions continue to cause GDP fluctuations

The UK economy contracted in Q2 (-0.1% Q/Q) with private consumption and general government expenditure providing a drag on overall activity. This was the first fall in quarterly GDP since the period of lockdown measures at the start of 2021. Despite this fall, UK GDP remains above its pre-pandemic level.

There are plenty of reasons to be concerned about the outlook for the UK economy down the line, but this Q2 growth figure was not as bad as feared. A contraction had been expected given the extra public holiday in June for the Queen's 70th Jubilee and the wind-down of government COVID related activities such as testing (see here).

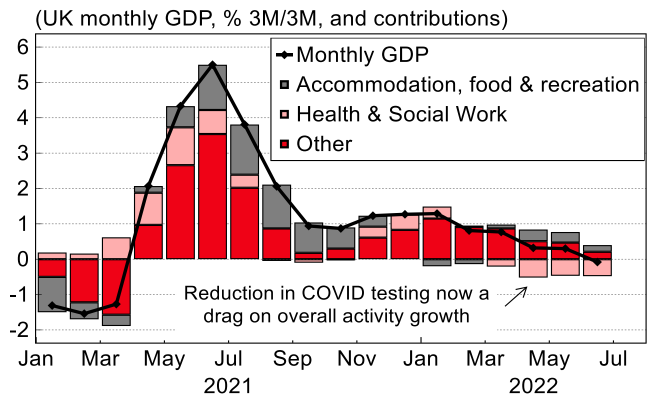
Customer-facing activities were notably resilient in the face of mounting inflationary headwinds for households. Accommodation and food services activities increased by 4.7% Q/Q, and arts, entertainment and recreation by 3.3% Q/Q. This suggests that post-pandemic pent-up demand remained relevant in Q2 and that the overall impact of the extra Bank Holiday was cushioned by the spending opportunity on food and drink etc., which is the flip side of losing an extra working day. This all served to reduce the clear drag from human health and social work activities, which fell by 5.4% across the quarter. We also suspect that there's a boost from domestic tourism with a rise in 'staycations', which could be increasingly relevant to activity data in July and August. This means there could be a little more momentum into the second half of the year than the headline Q2 growth figure suggests.

GDP HOVERING AROUND THE PRE-PANDEMIC MARK



Source: ONS, MUFG Bank Economic Research Office

HEALTHCARE IS NOW A DRAG ON ACTIVITY



Source: ONS, MUFG Bank Economic Research Office

In terms of Q3 growth, distortions that weighed on activity last quarter will start to work in the other direction. After the extra bank holiday in June, Q3 will have the full complement of working days. The drag from health-related activities will have largely eased in Q/Q terms – 3.5m fewer vaccine doses were administered in Q2 versus Q1 after free COVID testing ended on 1 April. An autumn campaign to vaccinate the over-50s and vulnerable groups is expected to start in September, which should provide some support to Q3 GDP figures.

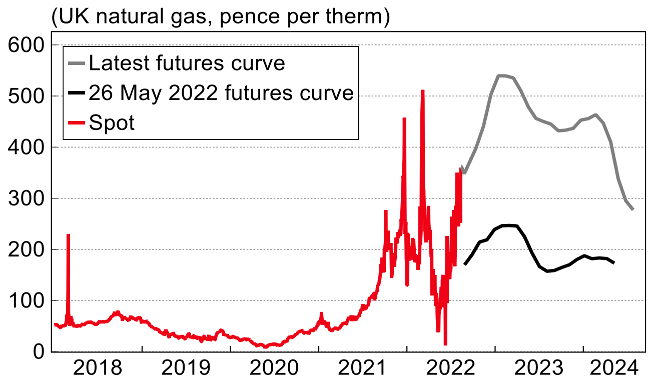
We are now looking for a small expansion overall of around 0.2% Q/Q in Q3. This would mean that the UK economy avoids a technical recession, at least for now. But, the period of respite is likely to be brief as cost-of-living pressures continue to mount.

A bleak winter ahead as energy costs continue to rise

Wholesale gas prices have risen significantly in recent months. The UK economy is exposed to this with around 80% of households using gas for heating, while a marginal pricing system means that the most expensive form of energy production needed to meet electricity demand (i.e. gas) sets the price for all forms of generation.

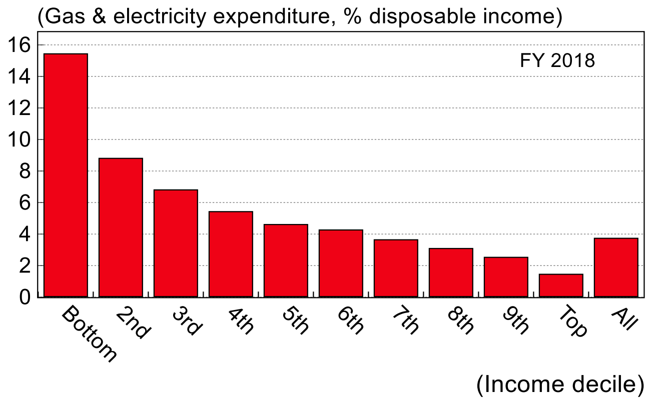
It now looks as though the UK's household energy price cap will increase by around 80% from October. This would come after a rise of 42% in April 2021, and take the average annual bill above 3500 GBP. Market pricing suggests further increases in the price cap at the start of next year. This points to a huge cost-of-living crisis. The UK's median household disposable income was around 31000 GBP in the financial year ending March 2021, and 16% of people live in households with income less than 60% of this figure.

GAS PRICING HAS CHANGED SIGNIFICANTLY SINCE THE LAST FISCAL PACKAGE WAS ANNOUNCED



Note: 26 May is when the previous fiscal support package for households was announced.
Source: Bloomberg, BoE, MUFG Bank Economic Research Office

LOWER-INCOME HOUSEHOLDS ARE HUGELY EXPOSED TO ENERGY COST INCREASES



Source: ONS, MUFG Bank Economic Research Office

It is a foreseeable crisis as the energy price cap is based partly on the gas futures market, and the government already announced fiscal support worth 37bn GBP (1.6% of 2021 GDP) in May to help households with energy bills this winter. This included a one-off payment of 400 GBP for all households, with extra support for pensioners and people on means-tested benefits. The package was well-targeted and the poorest households were set to be largely shielded from higher energy costs.

That is no longer the case with the increase in the energy price cap now likely to be roughly double what was expected in May. However, the UK government, mired in the Conservative leadership contest after the ousting of Boris Johnson, is yet to increase support. It will be up to Johnson's replacement, who will be announced on 5 September, to introduce fresh measures. Liz Truss is the clear favourite to win the contest (with betting markets implying a probability of around 90%).

Truss will be faced with a daunting in-tray. So far, she has suggested that her priority would be to cut taxes rather than increase transfer payments at an emergency Budget in September. Truss has said that she would reverse a National Insurance rise introduced by her rival in the leadership race, Rishi Sunak, when he was Chancellor.

However, this sort of income tax tweak would provide scant help to lower earners – those on the minimum wage would save just 60 GBP annually. Truss also plans to cut green levies on energy bills. These are set to constitute less than 5% of bills from October, so such a move would have a small effect. Further ahead, Truss wants to scrap the planned increase in corporation tax from 19% this year to 25% in April 2023. There were encouraging signs for business investment in the latest GDP release (+3.8% Q/Q) after anaemic growth since the EU referendum in 2016. But it can be a volatile series and we doubt UK firms will have a huge appetite for investment given the dismal macro outlook over the winter and into 2023, so the prospects of indirect support to households through a healthier economy seem dim.

Fiscal support will surely be bolstered – but to what extent?

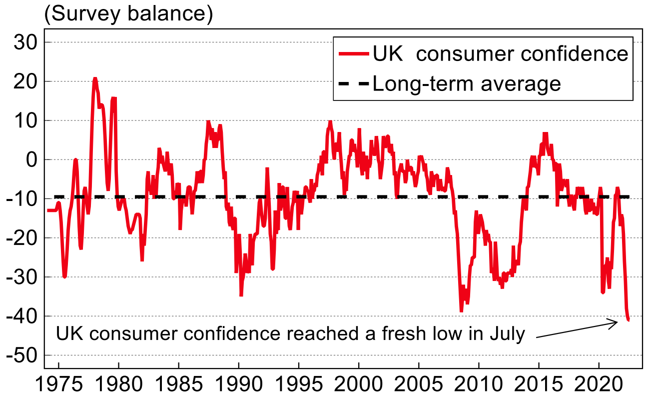
The Bank of England's latest projections, which do not assume any increase in support beyond what has already been announced, outline five consecutive quarters of negative GDP growth from Q4 2022 to Q4 2023, with growth thereafter to be "very weak by historical standards", and the unemployment rate rising above 6% in 2025.

There are certainly plenty of warning lights flashing – consumer confidence has reached a fresh all-time low and the buffer of savings accumulated by households during the pandemic has been mostly eroded by inflation and rising costs of living.

That said, the outlook probably won't be quite as dire as the BoE describes – we know that there will be at least *some* increase in fiscal support from September. However, Truss' current policy pledges look plainly insufficient in terms of supporting economic activity given the scale of the energy crunch that is coming down the track.

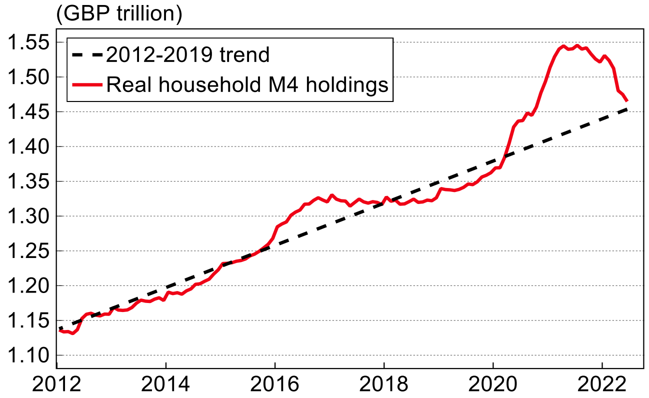
For now, there is probably an incentive for Truss and Sunak to talk up the possibility of tax cuts and downplay the likelihood of direct transfers to more vulnerable households (Conservative members, who vote on the outcome of the contest tend to be wealthier than the average UK citizen). So we expect the next PM to increase targeted support measures beyond what has been pledged during the ongoing leadership contest once elected. It's still a guessing game, however, as to what degree of extra help will be provided, or how targeted it will be.

CONSUMER CONFIDENCE IS AT AN ALL-TIME LOW



Source: GfK, MUFG Bank Economic Research Office

SAVINGS BUFFERS HAVE BEEN ERODED



Source: Bank of England, ONS, MUFG Bank Economic Research Office

Our base case is that extra measures will ease cost-of-living pressures to a degree, but fall short of fully shielding the poorest households from the October energy price cap increase as was the case with the May package. The government is likely to be wary of introducing fiscally expensive measures that would be politically hard to unwind if energy prices remain elevated. Meanwhile, the delay in announcing any extra support is not helpful – the energy story dominates the news and we expect an increase in precautionary saving to increasingly drag on spending through Q3.

A recession looks hard to avoid

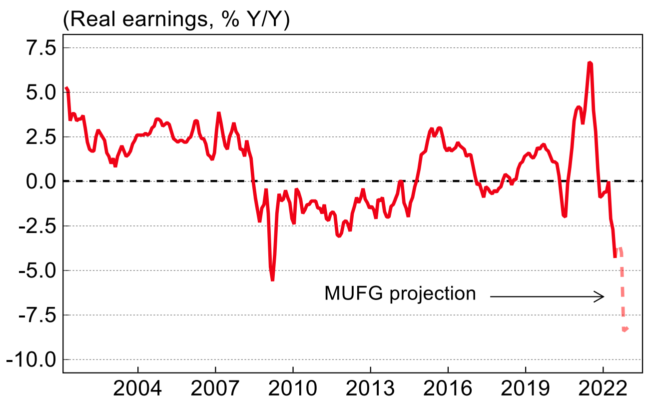
While our current forecast is not as bleak as the BoE's, we do expect a UK recession around the turn of the year. After some mild and brief respite in Q3, GDP is set to contract considerably in Q4 as energy costs (and price rises more broadly) rock the UK economy. The energy price cap is to be adjusted more frequently from next year (from every six to every three months) and current market pricing points to another increase in January, so we have pencilled in a consecutive, albeit more moderate, GDP contraction in Q1 next year.

Any subsequent recovery is likely to be sluggish. Recent BoE rate hikes will increasingly filter through to the real economy. 80% of UK mortgage holders are on fixed rates, but at the end of these fixed rate deals, which are typically between two and five years in length, home-owners will be forced to re-mortgage onto considerably more expensive terms. We think that the BoE will struggle to raise rates quite as high as has been priced in by markets, but another 50bp hike in September still seems more likely than not at this stage, meaning over 200bp of tightening since this time last year. We also expect unemployment rates will start to edge up by year-end as the sense of gloom around the economy intensifies and firms start to put off hiring decisions

Meanwhile, the ONS has suggested that 7% of businesses were affected by industrial action in June. That figure is likely to rise, providing a further drag. The (so far) resilient labour market may embolden more workers to strike against a background of sharp falls in real pay, which is likely to continue for some time. Our current inflation forecasts are in line with the BoE's: CPI is likely to rise above 13% in October (10.1% currently) when the price cap increases.

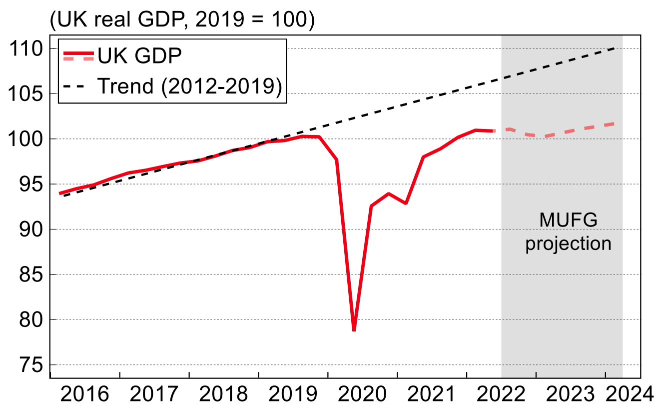
So it is set to be an extremely challenging period for the UK. Overall, we expect UK GDP growth of 3.4% in 2022 (which is hugely flattered by a carryover effect of 2.8pp from last year). We then expect annual average growth of just 0.2% in 2023, with the UK economy left staggering after what looks set to be an extremely tough winter.

THE SQUEEZE ON HOUSEHOLDS WILL INTENSIFY



Source: ONS, MUFG Bank Economic Research Office

OUTLOOK – RECESSION THEN A SLOW RECOVERY



Source: ONS, MUFG Bank Economic Research Office

UK MACRO FORECASTS

% Y/Y unless otherwise stated	2019	2020	2021	2022F	2023F
GDP	1.7	-9.3	7.4	3.4	0.2
Household spending	1.2	-10.5	5.9	3.9	0.0
Government spending	4.2	-5.9	14.3	-0.3	1.3
Fixed investment	0.5	-9.5	5.9	6.3	2.6
Net exports (*contribution, pp*)	0.1	1.0	-1.4	-3.6	-0.7
Unemployment rate (*%*)	3.8	4.6	4.5	3.9	4.5
CPI	1.8	0.9	2.6	9.4	6.0
Average weekly wages	3.5	1.7	5.9	4.9	3.2

Source: ONS, MUFG Bank Economic Research Office

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 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..

.