

United States

For important disclosures and disclaimers please see https://icg.citi.com/icg/data/documents/ST_ExternalDiscl.pdf.

Asia Pacific (Ex JPN)

This communication is prepared by a member of the Sales and Trading Department of Citi which distributes this communication by or through its locally authorised affiliates (collectively, "Citi"). Sales and Trading Department personnel are not research analysts, and the information in this communication ("Communication") is not intended to constitute "research" as that term is defined by applicable regulations. Unless otherwise indicated, any reference to a research report or research recommendation is not intended to represent the whole report and is not in itself considered a recommendation or research report. All views, opinions and estimates expressed in this Communication (i) may change without notice and (ii) may differ from those views, opinions and estimates held or expressed by Citi or other Citi personnel.

This Communication is provided for information and discussion purposes only. Unless otherwise indicated, (i) it does not constitute an offer or recommendation to purchase or sell any financial instruments or other products, (ii) it does not constitute a solicitation if it is not subject to the rules of the CFTC (but see discussion below regarding communication subject to CFTC rules) and (iii) it is not intended as an official confirmation of any transaction. Unless otherwise expressly indicated, this Communication does not take into account the investment objectives or financial situation of any particular person. Recipients of this Communication should obtain advice based on their own individual circumstances from their own tax, financial, legal and other advisors before making an investment decision, and only make such decisions on the basis of the investor's own objectives, experience and resources. The information contained in this Communication is based on generally available information and, although obtained from sources believed by Citi to be reliable, its accuracy and completeness cannot be assured, and such information may be incomplete or condensed.

Citi often acts as an issuer of financial instruments and other products, acts as a market maker and trades as principal in many different financial instruments and other products, and can be expected to perform or seek to perform investment banking and other services for the issuer of such financial instruments or other products. The author of this Communication may have discussed the information contained therein with others within or outside Citi and the author and/or such other Citi personnel may have already acted on the basis of this information (including by trading for Citi's proprietary accounts or communicating the information contained herein to other customers of Citi). Citi, Citi's personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of Citi may be long or short the financial instruments or other products referred to in this Communication, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different from or adverse to your interests. Investments in financial instruments or other products carry significant risk, including the possible loss of the principal amount invested. Financial instruments or other products denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. No liability is accepted by Citi for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this Communication. Past performance is not a guarantee or indication of future results. Any prices provided in this Communication (other than those that are identified as being historical) are indicative only and do not represent firm quotes as to either price or size. You should contact your local representative directly if you are interested in buying or selling any financial instrument or other product or pursuing any trading strategy that may be mentioned in this Communication.

Although Citibank, N.A. (together with its subsidiaries and branches worldwide, "Citibank") is an affiliate of Citi, you should be aware that none of the financial instruments or other products mentioned in this Communication (unless expressly stated otherwise) are (i) insured by the Federal Deposit Insurance Corporation or any other governmental authority, or (ii) deposits or other obligations of, or guaranteed by, Citibank or any other insured depository institution.

Citi specifically prohibits the redistribution of this Communication in whole or in part without the written permission of Citi and Citi accepts no liability whatsoever for the actions of third parties in this respect.

Hong Kong The product which relates to "securities" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) and the product which relates to "futures contracts" (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) are made available in Hong Kong by, or on behalf of, Citigroup Global Markets Asia Limited, Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citigroup Global Markets Asia Limited is regulated by Hong Kong Securities and Futures Commission. The product which relates to leveraged foreign exchange contracts (as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong)) is made available by or on behalf of Citibank N.A., (organized under the laws of U.S.A. with limited liability), Citibank Tower, Citibank Plaza, 3 Garden Road, Hong Kong. Citibank N.A. is a licensed bank in Hong Kong.

India For India trades, reference to the Citi facilitation/principal/risk desk shall mean a desk of an affiliate entity of Citigroup Global Markets India Private Limited.

Australia This communication has been prepared by a member of the Sales and Trading Department of Citigroup Global Markets Australia Pty Limited (ABN 64 003 114 832, AFSL 240992, Participant of the ASX Group), or an affiliate thereof (collectively "Citi" or the "Firm"). This e-mail is made available in Australia only to "wholesale investors" under s761G of the Corporations Act.

Sales and Trading personnel are not research analysts and any market commentary in this communication is not intended to constitute "research" as that term is defined by applicable regulations. This communication is provided for information and discussion purposes only. It does not constitute advice nor an offer or invitation to purchase or sell any financial instruments. The views expressed herein may change without notice and may differ from those views expressed by other Firm personnel.

The Firm may be the issuer of, or may trade as principal in, the financial instruments referred to in this communication or other related financial instruments. The Firm, the Firm's personnel and other customers of the Firm may be long or short the financial instruments referred to herein, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different or adverse to your interests. The Firm performs or seeks to perform investment banking and other services for the issuer of any such financial instruments. Citi operates 'Chinese Walls' between different business divisions of Citi and sometimes within the same business division in an attempt to ensure that confidential or price sensitive information is appropriately managed and that employees are not exposed to any conflicts of interest.

Citi is not acting as your advisor, fiduciary or agent and you should obtain advice from your own tax, financial, legal and other advisors prior to making any investment or strategy decision. Any prices provided herein (other than those that are identified as being historical) are indicative only and do not represent firm quotations as to either price or size. No liability is accepted by the Firm for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained herein.

If you are not the intended recipient, please notify the sender immediately and delete the message from your system. You should not copy or use it for any purpose, nor disclose its contents to any other person. E-mail transmission cannot be guaranteed to be secure or error-free. No guarantee is made that any attachments are virus free. We reserve the right to monitor all e-mail communications. The information contained in this communication is based on generally available information and, although obtained from sources believed by the Firm to be reliable, its accuracy and completeness is not guaranteed.

Japan

This communication is issued by a member of the sales and trading department of Citigroup Global Markets Japan Inc. or one of its affiliates (collectively, the “Firm”). Sales and trading personnel are not research analysts and the information in this communication is not intended to constitute “research” as that term is defined by applicable regulations. Compensation of sales and trading personnel includes consideration of the performance of the department’s activities. The views expressed herein may change without notice and may differ from those views expressed by other personnel of the Firm.

The provision of information contained herein is not based on your individual circumstances and should not be relied upon as an assessment of suitability for you of a particular product or transaction.

The Firm may be the issuer of, or may trade as principal in, the financial instruments referred to in this communication or other related financial instruments. The author of this communication may have discussed the information contained herein with others within the Firm and the author and such other personnel of the Firm may have already acted on the basis of this information (including by trading for the Firm’s proprietary accounts or communicating the information contained herein to other customers of the Firm). The Firm performs or seeks to perform investment banking and other services for the issuer of any such financial instruments. The Firm, the Firm’s personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of the Firm may be long or short the financial instruments referred to herein, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different or adverse to your interests.

This communication is provided for information and discussion purposes only. Unless otherwise indicated, (i) it does not constitute an offer or recommendation to purchase or sell any financial instruments, (ii) it does not constitute a solicitation if it is not subject to the rules of the CFTC (but see discussion below regarding communications subject to CFTC rules), and (iii) it is not intended as an official confirmation of any transaction. The information contained in this communication is based on generally available information and, although obtained from sources believed by the Firm to be reliable, its accuracy and completeness is not guaranteed. Certain personnel or business areas of the Firm may have access to or have acquired material non-public information that may have an impact (positive or negative) on the information contained herein, but that is not available to or known by the author of this communication.

Certain transactions, including those involving swaps and options, give rise to substantial risk and are not suitable for all investors. The Firm does not provide investment, accounting, tax, financial or legal advice; however, you

should be aware that any proposed indicative transaction could have accounting, tax, legal or other implications that should be discussed with your independent advisors. Therefore, prior to entering into any transaction, you should determine, without reliance on the Firm, the economic risks or merits, as well as the legal, tax and accounting characteristics and consequences of the transaction and that you are able to assume these risks.

This communication is not intended to forecast or predict future events. Past performance is not a guarantee or indication of future results. This communication may contain such information as projections, forecasts or estimates of cash flows, yields or return, scenario analyses and proposed or expected portfolio composition. Any such information is based upon certain assumptions about events or conditions and is intended only to illustrate hypothetical results under those assumptions (not all of which are specified herein or can be ascertained at this time). It does not represent actual termination or unwind prices that may be available to you. Actual events or conditions are unlikely to be consistent with, and may differ significantly from, those assumed. Illustrative performance results may be based on mathematical models that calculate those results by using inputs that are based on assumptions about a variety of future conditions and events and not all relevant conditions or events may have been considered in developing such assumptions. Accordingly, actual results may vary and the variations may be substantial. No liability is accepted by the Firm for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained herein or derived herefrom.

If any credit ratings are contained in this material (including any attachments), those that have been issued by Japan Credit Rating Agency, Ltd. (JCR) or Rating and Investment Information, Inc. (R&I) are credit ratings that have been issued by a credit rating agency registered in Japan (registered credit ratings). Other credit ratings that are denoted as being unregistered are unregistered credit ratings. Before using unregistered credit ratings to make investment decisions, please carefully read “Explanation Regarding Unregistered Credit Ratings” (http://www.citigroupglobalmarkets.co.jp/english/legal/pdf/EUCR_e.pdf).

United Kingdom and European Economic Area

United Kingdom. This communication has been prepared by individual sales and/or trading personnel of Citigroup Global Markets Limited (**CGML**) or its subsidiaries or affiliates. In the United Kingdom: CGML is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (together, the **UK Regulator**) and has its registered office at Citigroup Centre, Canada Square, London E14 5LB. Amongst its affiliates, (i) Citibank, N.A., London Branch is regulated by Office of the Comptroller of the Currency (USA), authorised by the Prudential Regulation Authority and subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority and has its registered office at Citigroup Centre, Canada Square, London E14 5LB and (ii) Citibank Europe plc, UK Branch is regulated by the Central Bank of Ireland, the European Central Bank, the Financial Conduct Authority and subject to limited regulation by the Prudential Regulatory Authority and has its registered office at Citigroup Centre, Canada Square, London E14 5LB. This communication is directed at persons (i) who have been or can be classified by Citi as eligible counterparties or professional clients in line with the rules of the UK Regulator, (ii) who have professional experience in matters relating to investments falling within Article 19(1) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 and (iii) other persons to whom it may otherwise lawfully be communicated.

The information contained herein may relate to matters that are (i) not regulated by the UK Regulator and/or (ii) not subject to the protections of the United Kingdom’s Financial Services and Markets Act 2000 and/or the United Kingdom’s Financial Services Compensation Scheme.

For further important disclosures and disclaimers please see https://www.citibank.com/icg/global_markets/uk_terms.jsp

European Economic Area (EEA): Unless notified to you otherwise, communications and services are provided Citibank Europe plc (**CEP**), which is Licensed by the European Central Bank and regulated by the Central Bank of Ireland and the European Central Bank under the Single Supervisory Mechanism and has its registered office at 1 North

Wall Quay, Dublin 1, or by Citibank Europe plc branches located in the European Economic Area that are subject to regulation by the respective host country regulator and the Central Bank of Ireland, or by Citigroup Global Markets Europe AG (CGME), which is authorised and regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) and has its registered office at Reuterweg 16, 60323 Frankfurt am Main, Germany.

For further important disclosures and disclaimers please see http://icg.citi.com/icg/global_markets/EEA_terms.jsp.

Any communications or materials are intended for distribution solely to clients of Citi in jurisdictions where such distribution is permitted and the recipient shall not provide or distribute such materials to any person located in a jurisdiction where it would otherwise trigger a financial services licensing requirement.

General. Without prejudice to any other provision herein, the following additional matters shall apply.

Citigroup Inc. and any respective affiliate which may be providing services to you (collectively **Citi**) is not acting as your agent, fiduciary or investment adviser and is not managing your account. The provision of information in this communication is not based on your individual circumstances and should not be relied upon as an assessment of suitability for you of a particular product or transaction. It does not constitute investment advice and Citi makes no recommendation as to the suitability of any of the products or transactions mentioned. Even if Citi possesses information as to your objectives in relation to any transaction, series of transactions or trading strategy, this will not be deemed sufficient for any assessment of suitability for you of any transaction, series of transactions or trading strategy. Save in those jurisdictions where it is not permissible to make such a statement, we hereby inform you that this communication should not be considered as a solicitation or offer to sell or purchase any securities, deal in any product or enter into any transaction. You should make any trading or investment decisions in reliance on your own analysis and judgment and/or that of your independent advisors and not in reliance on Citi and any decision whether or not to adopt any strategy or engage in any transaction will not be Citi's responsibility. Citi does not provide investment, accounting, tax, financial or legal advice; such matters as well as the suitability of a potential transaction or product or investment should be discussed with your independent advisors. Prior to dealing in any product or entering into any transaction, you and the senior management in your organisation should determine, without reliance on Citi, (i) the economic risks or merits, as well as the legal, tax and accounting characteristics and consequences of dealing with any product or entering into the transaction (ii) that you are able to assume these risks, (iii) that such product or transaction is appropriate for a person with your experience, investment goals, financial resources or any other relevant circumstance or consideration. Where you are acting as an adviser or agent, you should evaluate this communication in light of the circumstances applicable to your principal and the scope of your authority.

Any information referred to herein is not intended to be used for the purposes of (a) determining the price or amounts due in respect of one or more financial products, and/or (b) measuring or comparing the performance of a financial product or a portfolio of financial instruments, and any such use is strictly prohibited without the prior written consent of Citi. Unless stated otherwise any information, including any trade or strategy ideas, is provided by individual sales and/or trading personnel of Citi and not by Citi's research department and therefore the directives on the independence of research do not apply. Any view expressed in this communication may represent the current views and interpretations of the markets, products or events of such individual sales and/or trading personnel and may be different from other sales and/or trading personnel and may also differ from Citi's published research – the views in this communication may be more short term in nature and liable to change more quickly than the views of Citi research department which are generally more long term. On the occasions where information provided includes extracts or summary material derived from research reports published by Citi's research department, you are advised to obtain and review the original piece of research to see the research analyst's full analysis. Any prices used herein, unless otherwise specified, are indicative. Although all information has been obtained from, and is based upon sources believed to be reliable, it may be incomplete or condensed and its accuracy cannot be guaranteed. Citi makes no representation or warranty, expressed or implied, as to the accuracy of the information, the reasonableness of any assumptions used in calculating any illustrative performance information or the accuracy (mathematical or otherwise) or validity of such information. Any opinions attributed to Citi constitute Citi's judgment as of the date of the relevant material and are subject to change without notice. Provision of information may cease at any time without reason or notice being given. Commissions and other costs relating to any dealing in any products or entering into any transactions referred to in this communication may not have been taken into consideration.

Any scenario analysis or information generated from a model is for illustrative purposes only. Where any communication contains “forward-looking” information, such information may include, but is not limited to, projections, forecasts or estimates of cashflows, yields or return, scenario analyses and proposed or expected portfolio composition. Any forward-looking information is based upon certain assumptions about future events or conditions and is intended only to illustrate hypothetical results under those assumptions (not all of which are specified herein or can be ascertained at this time). It does not represent actual termination or unwind prices that may be available to you or the actual performance of any products and neither does it present all possible outcomes or describe all factors that may affect the value of any applicable investment, product or investment. Actual events or conditions are unlikely to be consistent with, and may differ significantly from, those assumed. Illustrative performance results may be based on mathematical models that calculate those results by using inputs that are based on assumptions about a variety of future conditions and events and not all relevant events or conditions may have been considered in developing such assumptions. Accordingly, actual results may vary and the variations may be substantial. The products or transactions identified in any of the illustrative calculations presented herein may therefore not perform as described and actual performance may differ, and may differ substantially, from those illustrated in this communication. When evaluating any forward looking information you should understand the assumptions used and, together with your independent advisors, consider whether they are appropriate for your purposes. You should also note that the models used in any analysis may be proprietary, making the results difficult or impossible for any third party to reproduce. This communication is not intended to predict any future events. Past performance is not indicative of future performance.

Citi shall have no liability to the user or to third parties, for the quality, accuracy, timeliness, continued availability or completeness of any data or calculations contained and/or referred to in this communication nor for any special, direct, indirect, incidental or consequential loss or damage which may be sustained because of the use of the information contained and/or referred to in this communication or otherwise arising in connection with the information contained and/or referred to in this communication, provided that this exclusion of liability shall not exclude or limit any liability under any law or regulation applicable to Citi that may not be excluded or restricted.

Citi may submit prices, rates, estimates or values to data sources that publish indices or benchmarks which may be referenced in products or transactions discussed in this communication. Such submissions may have an impact on the level of the relevant index or benchmark and consequently on the value of the products or transactions. Citi will make such submissions without regard to your interests under a particular product or transaction. Citi has adopted policies and procedures designed to mitigate potential conflicts of interest arising from such submissions and our other business activities. In light of the different roles performed by Citi you should be aware of such potential conflicts of interest. Additionally, certain products mentioned in this communication may contain provisions that refer to a reference or benchmark rate which may change, cease to be published or be in customary market usage, become unavailable, have its use restricted and/or be calculated in a different way. As a result, those reference or benchmark rates that are the subject of such changes, may cease to be appropriate for the products mentioned in this communication. We encourage you to keep up to date with the latest industry developments in relation to benchmark transitioning and to consider its impact on your business. You should consider, and continue to keep under review, the potential impact of benchmark transitioning on any existing product you have with Citi, or any new product you enter into with Citi. Citi does not provide advice, or recommendations on the suitability of your product choice including with respect to any benchmark transitioning on any existing product you have with Citi. You should obtain professional independent advice (legal, financial or otherwise) in respect of the suitability of your products in light of benchmark transitioning as you consider necessary.

Any transactions and any products described may be subject to fluctuations of their market price or value and such fluctuations may, depending on the type of product or security and the financial environment, be substantial. Where a product or transaction provides for payments linked to or derived from prices or yields of, without limitation, one or more securities, other instruments, indices, rates, assets or foreign currencies, such provisions may result in negative fluctuations in the value of and amounts payable with respect to such product prior to or at redemption. You should consider the implications of such fluctuations with your independent advisors. The products or transactions referred to in this communication may be subject to the risk of loss of some or all of your investment, for instance (and the examples set out below are not exhaustive), as a result of fluctuations in price or value of the product or transaction or a lack of liquidity in the market or the risk that your counterparty or any guarantor fails to perform its obligations or, if this the product or transaction is linked to the credit of one or more entities, any change to the creditworthiness of the credit of any of those entities.

Citi (whether through the individual sales and/trading personnel involved in the preparation or issuance of this communication or otherwise) may from time to time have long or short principal positions and/or actively trade, for its own account and those of its customers, by making markets to its clients, in products identical to or economically related to the products or transactions referred to in this communication. Citi may also undertake hedging transactions related to the initiation or termination of a product or transaction, that may adversely affect the market price, rate, index or other market factor(s) underlying the product or transaction and consequently its value. Citi may have an investment banking or other commercial relationship with and access to information from the issuer(s) of securities, products, or other interests underlying a product or transaction. Citi may also have potential conflicts of interest due to the present or future relationships between Citi and any asset underlying the product or transaction, any collateral manager, any reference obligations or any reference entity.

Any decision to purchase any product or enter into any transaction referred to herein should be based upon the information contained in any associated offering document if one is available (including any risk factors or investment considerations mentioned therein) and/or the terms of any agreement. Any securities which are the subject of this communication have not been and will not be registered under the United States Securities Act of 1933 as amended (the **Securities Act**) or any United States securities law, and may not be offered or sold within the United States or to, or for the account or benefit of, any US person, except pursuant to an exemption from, or in a product or transaction, not subject to, the registration requirements of the Securities Act. Any communication herein is not intended for distribution to, or to be used by, any person or entity in any jurisdiction or country which distribution or use would be contrary to law or regulation.

In the European Economic Area or United Kingdom, unless a key information document (KID) has been prepared pursuant to the PRIIPs Regulation (Regulation (EU) 1286/2014) including as such Regulation has been on-shored into UK legislation and published on our designated website, no transaction or product manufactured by Citi for which such a KID is required, is to be offered, sold or otherwise made available to a retail investor in the United Kingdom EEA.

Citi may offer, issue, distribute or provide other services (including, without limitation, custodial and other post-trade services) in relation to certain financial instruments. Some of these financial instruments may be unsecured financial instruments issued or entered into by BRRD Entities (i.e. EEA entities within the scope of Directive 2014/59/EU (the BRRD including as such Directive has been on-shored into UK legislation), including EEA credit institutions, certain EEA investment firms and / or their EEA subsidiaries or parents and UK equivalents under equivalent on-shored UK legislation) (**BRRD Financial Instruments**). In various jurisdictions (including, without limitation, the UK, EEA countries and the United States) national authorities have certain powers to manage and resolve banks, broker dealers and other financial institutions (including, but not limited to, Citi) when they are failing or likely to fail. There is a risk that the use, or anticipated use, of such powers, or the manner in which they are exercised, may materially adversely affect (i) your rights under certain types of unsecured financial instruments (including, without limitation, BRRD Financial Instruments), (ii) the value, volatility or liquidity of certain unsecured financial instruments (including, without limitation, BRRD Financial Instruments) that you hold and / or (iii) the ability of an institution (including, without limitation, a BRRD Entity) to satisfy any liabilities or obligations it has to you. You may have a right to compensation if the exercise of such powers results in less favourable treatment for you than the treatment that you would have received under normal insolvency proceedings. By accepting any services from Citi, you confirm that you are aware of these risks. Some of these risks (in particular the risks that arise under the BRRD) are set out in more detail at the link below and you are deemed to have reviewed and considered such risks prior to any decision to purchase any product or enter into any transaction referred to in this communication.

Although CGML, CGME and CEP are affiliated with Citibank, N.A. (together with Citibank N.A.'s subsidiaries and branches worldwide, **Citibank**), you should be aware that none of the products mentioned in this communication (unless expressly stated otherwise) are (i) insured by the Federal Deposit Insurance Corporation or any other governmental authority, or (ii) deposits or other obligations of, or guaranteed by, Citibank or any other insured depository institution.

Miscellaneous

In any instance where distribution of this communication is subject to the rules of the US Commodity Futures Trading Commission ("CFTC"), this communication constitutes an invitation to consider entering into a derivatives transaction under U.S. CFTC Regulations §§ 1.71 and 23.605, where applicable, but is not a binding offer to buy/sell any financial instrument.

This communication contains data compilations, writings and information that are confidential and proprietary to Citi and protected under copyright and other intellectual property laws, and may not be reproduced, distributed or otherwise transmitted by you to any other person for any purpose unless Citi's prior written consent have been obtained. © 2022 Citigroup Inc. Citi, Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.

IRS Circular 230 Disclosure: Citigroup Inc. and its affiliates do not provide tax or legal advice. Any discussion of tax matters in these materials (i) is not intended or written to be used, and cannot be used or relied upon, by you for the purpose of avoiding any tax penalties and (ii) may have been written in connection with the "promotion or marketing" of a transaction (if relevant) contemplated in these materials. Accordingly, you should seek advice based your particular circumstances from an independent tax advisor.

Additional Contract Terms To Be Included In Citi's Subscriber Agreement or Click Agreement

"Subscriber agrees and acknowledges that the CUSIP Database and the information contained therein is and shall remain valuable intellectual property owned by, or licensed to, Standard & Poor's CUSIP Service Bureau ("CSB") and the American Bankers Association ("ABA"), and that no proprietary rights are being transferred to Subscriber in such materials or in any of the information contained therein. Any use by Subscriber outside of the clearing and settlement of transactions requires a license from CSB, along with an associated fee based on usage. Subscriber agrees that misappropriation or misuse of such materials will cause serious damage to CSB and ABA, and that in such event money damages may not constitute sufficient compensation to CSB and ABA; consequently, Subscriber agrees that in the event of any misappropriation or misuse, CSB and ABA shall have the right to obtain injunctive relief in addition to any other legal or financial remedies to which CSB and ABA may be entitled."

"Subscriber agrees that Subscriber shall not publish or distribute in any medium the CUSIP Database or any information contained therein or summaries or subsets thereof to any person or entity except in connection with the normal clearing and settlement of security transactions. Subscriber further agrees that the use of CUSIP numbers and descriptions is not intended to create or maintain, and does not serve the purpose of the creation or maintenance of, a master file or database of CUSIP descriptions or numbers for itself or any third party recipient of such service and is not intended to create and does not serve in any way as a substitute for the CUSIP MASTER TAPE, PRINT, DB, INTERNET, ELECTRONIC, CD-ROM Services and/or any other future services developed by the CSB."

"NEITHER CSB, ABA NOR ANY OF THEIR AFFILIATES MAKE ANY WARRANTIES, EXPRESS OR IMPLIED, AS TO THE ACCURACY, ADEQUACY OR COMPLETENESS OF ANY OF THE INFORMATION CONTAINED IN THE CUSIP DATABASE. ALL SUCH MATERIALS ARE PROVIDED TO SUBSCRIBER ON AN "AS IS" BASIS, WITHOUT ANY WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE NOR WITH RESPECT TO THE RESULTS WHICH MAY BE OBTAINED FROM THE USE OF SUCH MATERIALS. NEITHER CSB, ABA NOR THEIR AFFILIATES SHALL HAVE ANY RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR OMISSIONS NOR SHALL THEY BE LIABLE FOR ANY DAMAGES, WHETHER DIRECT OR INDIRECT, SPECIAL OR CONSEQUENTIAL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL THE LIABILITY OF CSB, ABA OR ANY OF THEIR AFFILIATES PURSUANT TO ANY CAUSE OF ACTION, WHETHER IN CONTRACT, TORT, OR OTHERWISE, EXCEED THE FEE PAID BY SUBSCRIBER FOR ACCESS TO SUCH MATERIALS IN THE MONTH IN WHICH SUCH CAUSE OF ACTION IS ALLEGED TO HAVE ARISEN. FURTHERMORE, CSB AND ABA SHALL HAVE NO RESPONSIBILITY OR

LIABILITY FOR DELAYS OR FAILURES DUE TO CIRCUMSTANCES BEYOND THEIR CONTROL."

"Subscriber agrees that the foregoing terms and conditions shall survive any termination of its right of access to the materials identified above."

"Subscriber agrees that access to CUSIP and ISIN data is expressly conditioned on the effectiveness of an agreement between the CUSIP Service Bureau and its distributors, and Subscriber's access may be terminated without prior notice to Subscriber."

Additional Disclaimers for Data Sourced from FTSE Fixed Income LLC

"Source: FTSE Fixed Income LLC ("FTSE FI") © FTSE 2018. "FTSE®" is a trademark of the London Stock Exchange Group companies and is used by FTSE FI under license. All rights in the indices and / or ratings vest in FTSE FI and / or its licensors. FTSE FI gives no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Neither FTSE FI nor its licensors accept any liability for any errors or omissions in the indices, ratings and / or underlying data and no party may rely on any indices, ratings and / or underlying data contained in this communication. No further distribution of indices, ratings or underlying data is permitted without FTSE FI's express written consent. FTSE FI does not promote, sponsor or endorse the content of this communication."

Additional Disclaimers for Analytics Provided by The Yield Book® Software

"Analytics provided by The Yield Book® software. © FTSE Fixed Income LLC ("FTSE FI") 2018. "FTSE®" and "The Yield Book®" are trademarks of the London Stock Exchange Group companies and are used by FTSE FI under license. All rights in such analytics and The Yield Book software vest in FTSE FI and / or its licensors. FTSE FI gives no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Neither FTSE FI nor its licensors accept any liability for any errors or omissions in the analytics and / or underlying data and no party may rely on such analytics and / or underlying data contained in this communication. No further distribution of the analytics or underlying data is permitted without FTSE FI's express written consent. FTSE FI does not promote, sponsor or endorse the content of this communication."