

Building a Better BB/BBB Basis

Bradley Rogoff, CFA
+1 212 412 7921
bradley.rogoff@barclays.com
BCI, US

James K Martin
+ 1 212 412 2345
james.k.martin@barclays.com
BCI, US

Scott Schachter
+1 212 526 9716
scott.schachter@barclays.com
BCI, US

Jeff Darfus
+1 (212) 412 7997
jeff.darfus@barclays.com
BCI, US

This updates Building a Better BB/BBB Basis, released 20 September 2019, 10:30 GMT, to replace the BB-BBB Basis (adjusted and unadjusted) data series in Figure 3.

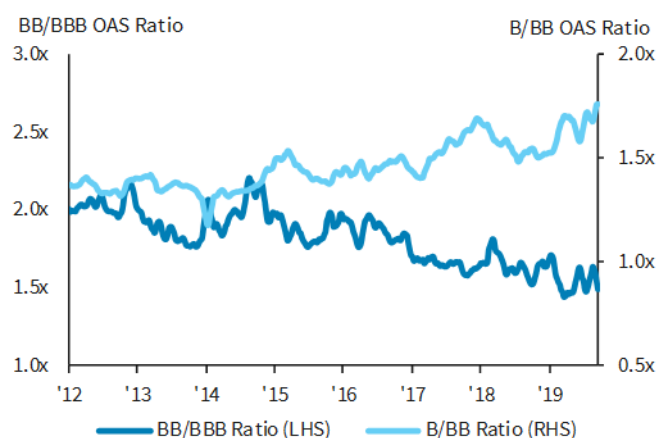
Despite the beta rally in recent weeks, higher quality has still led performance this year, with BB returns outpacing Bs and CCCs. As discussed last week, this outperformance can be attributed partly to market technicals, as retail inflows have supported BB demand while the high level of rising stars has offset the increased BB supply relative to last year (*Technical Balance in BBs*).

The tightening of BB spreads has been significant in comparison with the investment grade market as well, specifically BBBs. Thus far in 2019, non-financial BB spreads have tightened 145bp while non-financial BBB spreads have come in just 45bp, propelling the spread ratio of BBs to BBBs to the tightest level in history (Figure 1). The lower-quality portions of the high yield market have not kept up, with the B/BB spread ratio now at all-time highs. While headlines have focused on the record level of compression between BBs and BBBs, the comparison is a bit “apples to oranges,” as the two cohorts have evolved in recent years, specifically in regard to duration, sector allocation, and ratings.

One of the biggest changes has been the divergence of duration between the two markets – BBBs are now at their longest all-time duration, while BBs are at their shortest. As shown in Figure 2, the duration difference between the two buckets has increased nearly two years since the end of 2011, with BB duration declining 1.2 years and BBB duration increasing 0.7 years, and this trend has accelerated in 2019. Understandably, these shifts in duration have helped propel compression in the BB/BBB relationship.

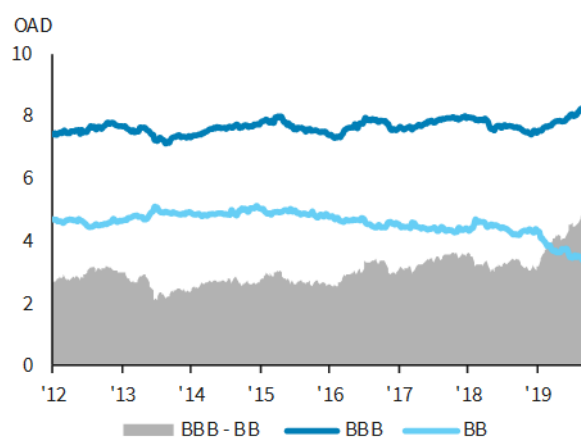
To account for this evolution in duration, we adjust spread levels by keeping the weights of various duration buckets unchanged from the levels in each BB and BBB cohort at a baseline period (we use the end of 2011). Figure 3 shows the effect of the changes in duration on the BB/BBB basis (BB OAS - BBB OAS) by comparing the unadjusted relationship between the two cohorts with the basis when duration is left unchanged.

FIGURE 1
The BB/BBB Spread Ratio Has Compressed to Record Lows...



Note: Excludes financials.
Source: Bloomberg Barclays Indices

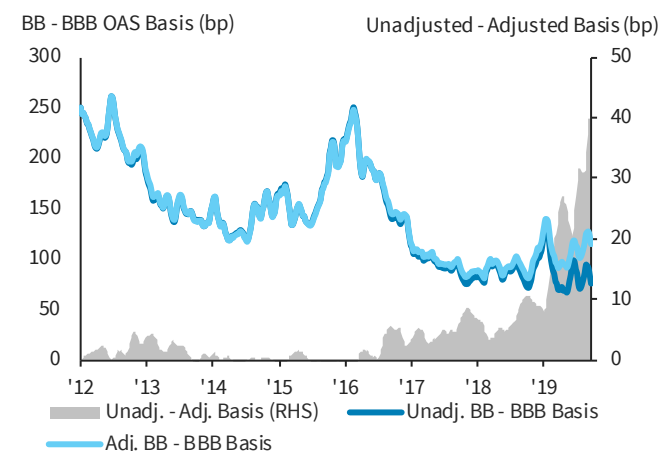
FIGURE 2
...While the Duration Difference between BBBs and BBs Has Reached Record Highs



Note: Excludes financials.
Source: Bloomberg Barclays Indices

FIGURE 3

Duration Has Driven a Significant Portion of the BB-BBB Compression in 2019...

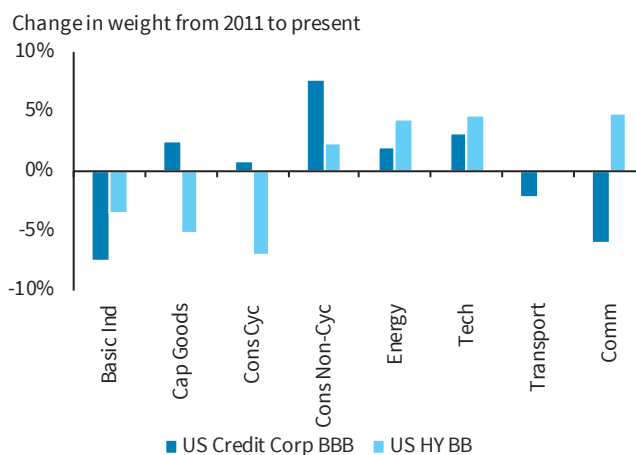


Note: Excludes financials.

Source: Bloomberg Barclays Indices

FIGURE 4

...with Sector Allocation Somewhat Mitigating the Duration Effect



Note: Industrial only.

Source: Bloomberg Barclays Indices

We find that duration shifts had a minimal effect on the BB-to-BBB spread basis up until the past three years, with a significant acceleration this year as BB duration declined significantly and BBB duration picked up. By our estimate, the shifts in duration in the two cohorts since the end of 2011 are responsible for 40bp of the compression in the BB-BBB basis.

Running the same analysis on sector weights shows that the current BB-BBB basis would actually be 11bp tighter if sector weights for the two cohorts had not changed since 2011, partially offsetting the duration effect. As seen in Figure 4, the BBB market has become weighted more toward consumer non-cyclical sectors since the end of 2011, while growth in the BB energy sector has outpaced energy BBBs. Although the tilt toward a more defensive sector mix for BBBs may have been mitigated by a deterioration in quality, we find that the average ratings of both BBBs and BBs have been generally unchanged over the past eight years.

Given that duration and sector skew cloud the BB/BBB comparison, we believe the best comparison between the two markets is at a fundamental level. Looking at just non-financial unsecured bonds, we create a custom bucket of large BB issuers that includes 20 tickers with a combined market value of nearly \$150bn and represents more than 35% of the BB market.¹ Working with our fundamental analysts, we then construct another bucket of tickers made up of the largest comparable BBB issuers for each name in the custom BB list (see Appendix 1).

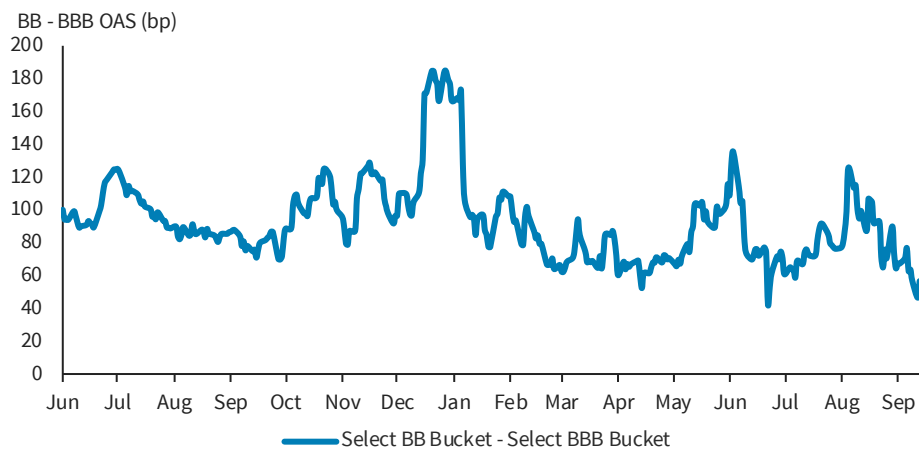
While the single-name matching process removes some of the sector bias, we also filter out bonds with durations of more than eight years to mitigate the influence of duration differences. As a result, these two custom buckets are not just similar in size and sector weight but also have a weighted duration difference of roughly one, compared with nearly five for the broader BB and BBB indices. Figure 5 plots the median spread basis between our matched pairs of BB and BBB tickers. We find that the average spread differential has compressed by roughly 30bp over the past twelve months and 120bp since reaching highs at the end of 2018.

¹ We excluded secured debt from our analysis in order to remove any bias from potential secured/unsecured pairs. Our custom bucket of large BB issuers includes 1) the ten largest non-financial issuers by market value in the BB cohort, as well as 2) the largest issuer in each sector that is at least 2% of the market value of the non-financial BB Index that is not represented in the top ten issuer list.

While duration and ratings have played a role in the evolution of the BB/BBB ratio over time, even adjusting for these factors, the spread compression between the ratings buckets has been significant. Given this dynamic and our preference for BBBs in the investment grade market (*Terming Out Is Good for Credit Health*), the current environment appears to provide a relatively inexpensive opportunity for investors to move up in quality from BBs to BBBs.

FIGURE 5

The Basis for Our Select BB and BBB Buckets Has Tightened Significantly



Note: Excludes financials and bonds with durations longer than eight years.

Source: Bloomberg Barclays Indices

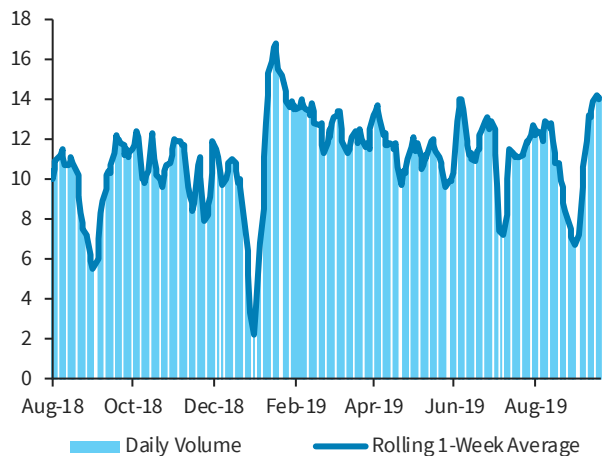
APPENDIX 1

Large BB and BBB Issuers Used in our Select Comparable Analysis

BB			BBB		
Ticker	Issuer	Sector	Ticker	Issuer	Sector
GT	Goodyear Tire & Rubber	Automotive	APTV	Aptiv	Automotive
CHTR	Charter	Cable Satellite	T	AT&T	Wirelines
SIRI	Sirius	Cable Satellite	DISCA	Discovery Communications	Media Entertainment
CSCHLD	CSC Holdings	Cable Satellite	T	AT&T	Wirelines
OLN	Olin	Chemicals	DOW	Dow Chemical	Chemicals
URI	United Rentals	Construction Machinery	CNHI	CNH Industrial	Construction Machinery
VST	Vistra Energy	Utility	EXC	Exelon	Utility
JBSSBZ	JBS	Food and Beverage	TSN	Tyson Foods	Food and Beverage
MGM	MGM Resorts	Gaming	SANLTD	Sands China	Gaming
HCA	HCA	Healthcare	CVS	CVS Health	Healthcare
LEN	Lennar Corp	Home Construction	DHI	DR Horton	Home Construction
AR	Antero Resources	Independent	EQT	EQT	Independent
NFLX	Netflix	Media Entertainment	FOXA	Fox	Media Entertainment
FCX	Freeport-McMoRan	Metals & Mining	SCCO	Southern Copper	Metals & Mining
NGLS	Targa Resources	Midstream	PAA	Plains All American	Midstream
BLL	Ball	Packaging	AMCR	Amcor	Packaging
LB	L Brands	Retailers	M	Macy's	Retailers
DELL	Dell	Technology	HPQ & HPE	Hewlett Packard	Technology
TMUS	T-Mobile	Wireless	VZ	Verizon	Wirelines
LVT	Level 3	Wirelines	EQIX	Equinix	Technology

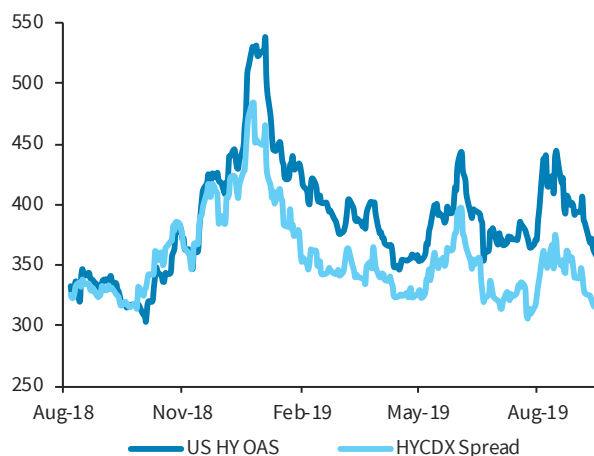
We excluded secured debt from our analysis in order to remove any bias from potential secured/unsecured pairs. Our custom bucket of large BB issuers includes: 1) the ten largest non-financial issuers by market value in the BB cohort, as well as 2) the largest issuer in each sector that is at least 2% of the market value of the non-financial BB Index that is not represented in the top ten issuer list. Source: Bloomberg Barclays Indices

High Yield Average Institutional Trade Volume (\$bn)



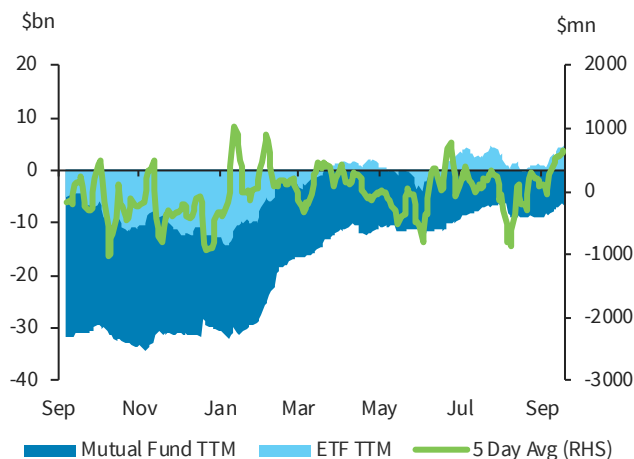
Note: Includes both registered and 144A volumes. Source: FINRA TRACE

On-the-Run HYCDX versus US High Yield Index (bp)



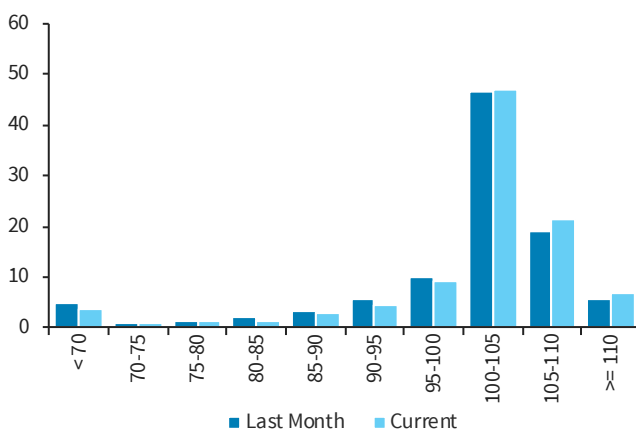
Source: Barclays Research

Flows to High Yield Mutual Funds and ETFs



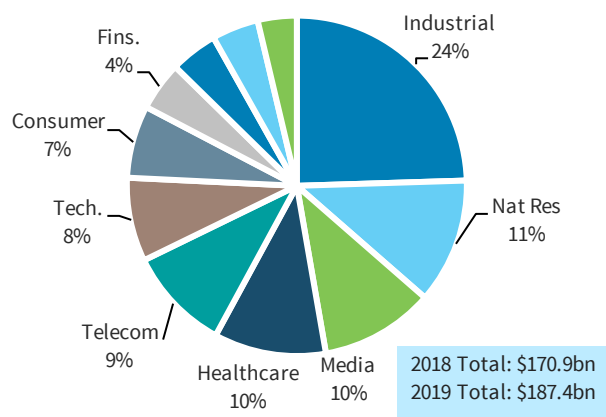
Note: Daily reporters only. Source: EPFR

High Yield Index Price Distribution by Par (%)



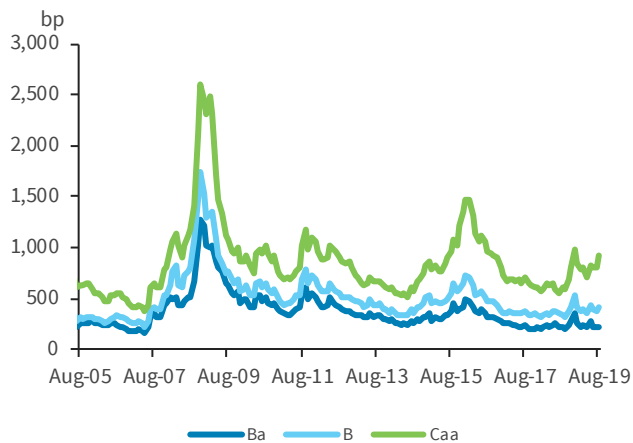
Source: Barclays Research

High Yield Supply by Sector



Note: 2019 new issue data as of September 18.
Source: Bloomberg Barclays Indices

High Yield Spreads by Credit Quality



Source: Bloomberg Barclays Indices

Analyst Certification

We, Jeffrey Darfus, James K Martin, Bradley Rogoff, CFA and Scott Schachter, hereby certify (1) that the views expressed in this research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this research report and (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report.

Important Disclosures:

Barclays Research is produced by the Investment Bank of Barclays Bank PLC and its affiliates (collectively and each individually, "Barclays").

All authors contributing to this research report are Research Analysts unless otherwise indicated. The publication date at the top of the report reflects the local time where the report was produced and may differ from the release date provided in GMT.

Availability of Disclosures:

For current important disclosures regarding any issuers which are the subject of this research report please refer to <https://publicresearch.barclays.com> or alternatively send a written request to: Barclays Research Compliance, 745 Seventh Avenue, 13th Floor, New York, NY 10019 or call +1-212-526-1072.

Barclays Capital Inc. and/or one of its affiliates does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that Barclays may have a conflict of interest that could affect the objectivity of this report. Barclays Capital Inc. and/or one of its affiliates regularly trades, generally deals as principal and generally provides liquidity (as market maker or otherwise) in the debt securities that are the subject of this research report (and related derivatives thereof). Barclays trading desks may have either a long and / or short position in such securities, other financial instruments and / or derivatives, which may pose a conflict with the interests of investing customers. Where permitted and subject to appropriate information barrier restrictions, Barclays fixed income research analysts regularly interact with its trading desk personnel regarding current market conditions and prices. Barclays fixed income research analysts receive compensation based on various factors including, but not limited to, the quality of their work, the overall performance of the firm (including the profitability of the Investment Banking Department), the profitability and revenues of the Markets business and the potential interest of the firm's investing clients in research with respect to the asset class covered by the analyst. To the extent that any historical pricing information was obtained from Barclays trading desks, the firm makes no representation that it is accurate or complete. All levels, prices and spreads are historical and do not necessarily represent current market levels, prices or spreads, some or all of which may have changed since the publication of this document. Barclays Research Department produces various types of research including, but not limited to, fundamental analysis, equity-linked analysis, quantitative analysis, and trade ideas. Recommendations and trade ideas contained in one type of Barclays Research may differ from those contained in other types of Barclays Research, whether as a result of differing time horizons, methodologies, or otherwise.

In order to access Barclays Statement regarding Research Dissemination Policies and Procedures, please refer to <https://publicresearch.barcap.com/S/RD.htm>. In order to access Barclays Research Conflict Management Policy Statement, please refer to: <https://publicresearch.barcap.com/S/CM.htm>.

All pricing information is indicative only. Prices are sourced from Refinitiv as of the last available closing price at the time of production of the research report, unless another time and source is indicated.

Types of investment recommendations produced by Barclays FICC Research:

In addition to any ratings assigned under Barclays' formal rating systems, this publication may contain investment recommendations in the form of trade ideas, thematic screens, scorecards or portfolio recommendations that have been produced by analysts in FICC Research. Any such investment recommendations produced by non-Credit Research teams shall remain open until they are subsequently amended, rebalanced or closed in a future research report. Any such investment recommendations produced by the Credit Research teams are valid at current market conditions and may not be otherwise relied upon.

Disclosure of other investment recommendations produced by Barclays FICC Research:

Barclays FICC Research may have published other investment recommendations in respect of the same securities/instruments recommended in this research report during the preceding 12 months. To view all investment recommendations published by Barclays FICC Research in the preceding 12 months please refer to <https://live.barcap.com/go/research/Recommendations>.

Legal entities involved in producing Barclays Research:

Barclays Bank PLC (Barclays, UK)
Barclays Capital Inc. (BCI, US)
Barclays Bank Ireland PLC, Frankfurt Branch (BBI, Frankfurt)
Barclays Bank Ireland PLC, Paris Branch (BBI, Paris)
Barclays Bank Ireland PLC, Milan Branch (BBI, Milan)
Barclays Securities Japan Limited (BSJL, Japan)
Barclays Bank PLC, Hong Kong branch (Barclays Bank, Hong Kong)
Barclays Capital Canada Inc. (BCCI, Canada)
Barclays Bank Mexico, S.A. (BBMX, Mexico)
Barclays Securities (India) Private Limited (BSIPL, India)
Barclays Bank PLC, India branch (Barclays Bank, India)
Barclays Bank PLC, Singapore branch (Barclays Bank, Singapore)

Disclaimer:

This publication has been produced by Barclays Research Department in the Investment Bank of Barclays Bank PLC and/or one or more of its affiliates (collectively and each individually, "Barclays"). It has been prepared for institutional investors only and not for retail investors. It has been distributed by one or more Barclays affiliated legal entities listed below. It is provided to our clients for information purposes only, and Barclays makes no express or implied

warranties, and expressly disclaims all warranties of merchantability or fitness for a particular purpose or use with respect to any data included in this publication. To the extent that this publication states on the front page that it is intended for institutional investors and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors under U.S. FINRA Rule 2242, it is an "institutional debt research report" and distribution to retail investors is strictly prohibited. Barclays also distributes such institutional debt research reports to various issuers, media, regulatory and academic organisations for their own internal informational news gathering, regulatory or academic purposes and not for the purpose of making investment decisions regarding any debt securities. Media organisations are prohibited from re-publishing any opinion or recommendation concerning a debt issuer or debt security contained in any Barclays institutional debt research report. Any such recipients that do not want to continue receiving Barclays institutional debt research reports should contact debtresearch@barclays.com. Barclays will not treat unauthorized recipients of this report as its clients and accepts no liability for use by them of the contents which may not be suitable for their personal use. Prices shown are indicative and Barclays is not offering to buy or sell or soliciting offers to buy or sell any financial instrument.

Without limiting any of the foregoing and to the extent permitted by law, in no event shall Barclays, nor any affiliate, nor any of their respective officers, directors, partners, or employees have any liability for (a) any special, punitive, indirect, or consequential damages; or (b) any lost profits, lost revenue, loss of anticipated savings or loss of opportunity or other financial loss, even if notified of the possibility of such damages, arising from any use of this publication or its contents.

Other than disclosures relating to Barclays, the information contained in this publication has been obtained from sources that Barclays Research believes to be reliable, but Barclays does not represent or warrant that it is accurate or complete. Barclays is not responsible for, and makes no warranties whatsoever as to, the information or opinions contained in any written, electronic, audio or video presentations of third parties that are accessible via a direct hyperlink in this publication or via a hyperlink to a third-party web site ("Third-Party Content"). Any such Third-Party Content has not been adopted or endorsed by Barclays, does not represent the views or opinions of Barclays, and is not incorporated by reference into this publication. Third-Party Content is provided for information purposes only and Barclays has not independently verified its accuracy or completeness.

The views in this publication are solely and exclusively those of the authoring analyst(s) and are subject to change, and Barclays Research has no obligation to update its opinions or the information in this publication. Unless otherwise disclosed herein, the analysts who authored this report have not received any compensation from the subject companies in the past 12 months. If this publication contains recommendations, they are general recommendations that were prepared independently of any other interests, including those of Barclays and/or its affiliates, and/or the subject companies. This publication does not contain personal investment recommendations or investment advice or take into account the individual financial circumstances or investment objectives of the clients who receive it. The securities and other investments discussed herein may not be suitable for all investors. Barclays is not a fiduciary to any recipient of this publication. Investors must independently evaluate the merits and risks of the investments discussed herein, consult any independent advisors they believe necessary, and exercise independent judgment with regard to any investment decision. The value of and income from any investment may fluctuate from day to day as a result of changes in relevant economic markets (including changes in market liquidity). The information herein is not intended to predict actual results, which may differ substantially from those reflected. Past performance is not necessarily indicative of future results. The information provided does not constitute a financial benchmark and should not be used as a submission or contribution of input data for the purposes of determining a financial benchmark.

United Kingdom: This document is being distributed (1) only by or with the approval of an authorised person (Barclays Bank PLC) or (2) to, and is directed at (a) persons in the United Kingdom having professional experience in matters relating to investments and who fall within the definition of "investment professionals" in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (b) high net worth companies, unincorporated associations and partnerships and trustees of high value trusts as described in Article 49(2) of the Order; or (c) other persons to whom it may otherwise lawfully be communicated (all such persons being "Relevant Persons"). Any investment or investment activity to which this communication relates is only available to and will only be engaged in with Relevant Persons. Any other persons who receive this communication should not rely on or act upon it. Barclays Bank PLC is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange.

European Economic Area ("EEA"): This material is being distributed in the EEA by Barclays Bank PLC. Barclays Bank PLC is not registered in France with the *Autorité des marchés financiers* or the *Autorité de contrôle prudentiel*.

Americas: The Investment Bank of Barclays Bank PLC undertakes U.S. securities business in the name of its wholly owned subsidiary Barclays Capital Inc., a FINRA and SIPC member. Barclays Capital Inc., a U.S. registered broker/dealer, is distributing this material in the United States and, in connection therewith accepts responsibility for its contents. Any U.S. person wishing to effect a transaction in any security discussed herein should do so only by contacting a representative of Barclays Capital Inc. in the U.S. at 745 Seventh Avenue, New York, New York 10019.

Non-U.S. persons should contact and execute transactions through a Barclays Bank PLC branch or affiliate in their home jurisdiction unless local regulations permit otherwise.

This material is distributed in Canada by Barclays Capital Canada Inc., a registered investment dealer, a Dealer Member of IIROC (www.iiroc.ca), and a Member of the Canadian Investor Protection Fund (CIPF).

This material is distributed in Mexico by Barclays Bank Mexico, S.A.

Japan: This material is being distributed to institutional investors in Japan by Barclays Securities Japan Limited. Barclays Securities Japan Limited is a joint-stock company incorporated in Japan with registered office of 6-10-1 Roppongi, Minato-ku, Tokyo 106-6131, Japan. It is a subsidiary of Barclays Bank PLC and a registered financial instruments firm regulated by the Financial Services Agency of Japan. Registered Number: Kanto Zaimukyokuchō (kinsho) No. 143.

Asia Pacific (excluding Japan): Barclays Bank PLC, Hong Kong Branch is distributing this material in Hong Kong as an authorised institution regulated by the Hong Kong Monetary Authority. Registered Office: 41/F, Cheung Kong Center, 2 Queen's Road Central, Hong Kong.

All Indian securities-related research and other equity research produced by Barclays' Investment Bank are distributed in India by Barclays Securities (India) Private Limited (BSIPL). BSIPL is a company incorporated under the Companies Act, 1956 having CIN U67120MH2006PTC161063. BSIPL is registered and regulated by the Securities and Exchange Board of India (SEBI) as a Research Analyst: INH000001519; Portfolio Manager INP000002585; Stock Broker/Trading and Clearing Member: National Stock Exchange of India Limited (NSE) Capital Market INB231292732, NSE Futures & Options INF231292732, NSE Currency derivatives INE231450334, Bombay Stock Exchange Limited (BSE) Capital Market INB011292738, BSE Futures & Options INF011292738; Depository Participant (DP) with the National Securities & Depositories Limited (NSDL): DP ID: IN-DP-NSDL-299-2008; Investment Adviser: INA000000391. The registered office of BSIPL is at 208, Ceejay House, Shivsagar Estate, Dr. A. Besant Road, Worli, Mumbai – 400 018, India. Telephone No: +91 2267196000. Fax number: +91 22 67196100. Any other reports produced by Barclays' Investment Bank are distributed in India by Barclays Bank PLC, India Branch, an associate of BSIPL in India that is registered with Reserve Bank of India (RBI) as a Banking Company under the provisions of The Banking Regulation Act, 1949 (Regn No BOM43) and registered with SEBI as Merchant Banker (Regn No INM000002129) and also as Banker to the Issue (Regn No INBI00000950).

Barclays Investments and Loans (India) Limited, registered with RBI as Non Banking Financial Company (Regn No RBI CoR-07-00258), and Barclays Wealth Trustees (India) Private Limited, registered with Registrar of Companies (CIN U93000MH2008PTC188438), are associates of BSIPL in India that are not authorised to distribute any reports produced by Barclays' Investment Bank.

This material is distributed in Singapore by the Singapore branch of Barclays Bank PLC, a bank licensed in Singapore by the Monetary Authority of Singapore. For matters in connection with this material, recipients in Singapore may contact the Singapore branch of Barclays Bank PLC, whose registered address is 10 Marina Boulevard, #23-01 Marina Bay Financial Centre Tower 2, Singapore 018983.

This material is distributed to persons in Australia by Barclays Bank PLC. None of Barclays Bank PLC, nor any other Barclays group entity, holds an Australian financial services licence and instead relies on an exemption from the requirement to hold such a licence. This material is intended to only be distributed to "wholesale clients" as defined by the Australian Corporations Act 2001.

Middle East: Nothing herein should be considered investment advice as defined in the Israeli Regulation of Investment Advisory, Investment Marketing and Portfolio Management Law, 1995 ("Advisory Law"). This document is being made to eligible clients (as defined under the Advisory Law) only. Barclays Israeli branch previously held an investment marketing license with the Israel Securities Authority but it cancelled such license on 30/11/2014 as it solely provides its services to eligible clients pursuant to available exemptions under the Advisory Law, therefore a license with the Israel Securities Authority is not required. Accordingly, Barclays does not maintain an insurance coverage pursuant to the Advisory Law.

This material is distributed in the United Arab Emirates (including the Dubai International Financial Centre) and Qatar by Barclays Bank PLC. Barclays Bank PLC in the Dubai International Financial Centre (Registered No. 0060) is regulated by the Dubai Financial Services Authority (DFSA). Principal place of business in the Dubai International Financial Centre: The Gate Village, Building 4, Level 4, PO Box 506504, Dubai, United Arab Emirates. Barclays Bank PLC-DIFC Branch, may only undertake the financial services activities that fall within the scope of its existing DFSA licence. Related financial products or services are only available to Professional Clients, as defined by the Dubai Financial Services Authority. Barclays Bank PLC in the UAE is regulated by the Central Bank of the UAE and is licensed to conduct business activities as a branch of a commercial bank incorporated outside the UAE in Dubai (Licence No.: 13/1844/2008, Registered Office: Building No. 6, Burj Dubai Business Hub, Sheikh Zayed Road, Dubai City) and Abu Dhabi (Licence No.: 13/952/2008, Registered Office: Al Jazira Towers, Hamdan Street, PO Box 2734, Abu Dhabi). Barclays Bank PLC in the Qatar Financial Centre (Registered No. 00018) is authorised by the Qatar Financial Centre Regulatory Authority (QFCRA). Barclays Bank PLC-QFC Branch may only undertake the regulated activities that fall within the scope of its existing QFCRA licence. Principal place of business in Qatar: Qatar Financial Centre, Office 1002, 10th Floor, QFC Tower, Diplomatic Area, West Bay, PO Box 15891, Doha, Qatar. Related financial products or services are only available to Business Customers as defined by the Qatar Financial Centre Regulatory Authority.

Russia: This material is not intended for investors who are not Qualified Investors according to the laws of the Russian Federation as it might contain information about or description of the features of financial instruments not admitted for public offering and/or circulation in the Russian Federation and thus not eligible for non-Qualified Investors. If you are not a Qualified Investor according to the laws of the Russian Federation, please dispose of any copy of this material in your possession.

IRS Circular 230 Prepared Materials Disclaimer: Barclays does not provide tax advice and nothing contained herein should be construed to be tax advice. Please be advised that any discussion of U.S. tax matters contained herein (including any attachments) (i) is not intended or written to be used, and cannot be used, by you for the purpose of avoiding U.S. tax-related penalties; and (ii) was written to support the promotion or marketing of the transactions or other matters addressed herein. Accordingly, you should seek advice based on your particular circumstances from an independent tax advisor.

© Copyright Barclays Bank PLC (2019). All rights reserved. No part of this publication may be reproduced or redistributed in any manner without the prior written permission of Barclays. Barclays Bank PLC is registered in England No. 1026167. Registered office 1 Churchill Place, London, E14 5HP. Additional information regarding this publication will be furnished upon request.

BRCF2242

