## Pension Update April 2020

#### Speak to us Please contact NatWest Markets Pension Solutions PensionSolutions@natwestmarkets.com

Disclaimer: This is not Independent Research, as defined by the Financial Conduct Authority. Not intended for Retail Client distribution. This material should be regarded as a marketing communication and may have been produced in conjunction with the NatWest Markets trading desks that trade as principal in the instruments mentioned herein

## **Executive Summary**

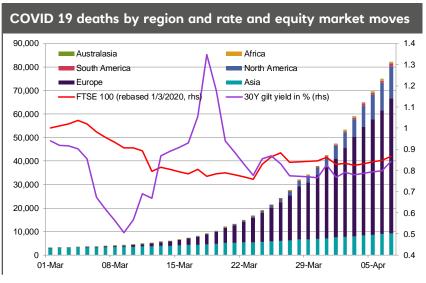
- **Monthly Educational Update:** we look at how covenant risk for pension schemes has been impacted by COVID-19 and using financial accounts, analyse the changes in surpluses/deficits, on both a Technical Provisions ('TP') and accounting basis. This is then compared to the sponsor's market cap to illustrate the sponsor variance in a selection of pension schemes
- **Market Overview:** we look at the various fiscal and monetary policy measures being taken in the UK, Europe and the US to soften the economic fallout from the outbreak of COVID-19
- **Pension Scheme Trading Activity:** March has been a very busy month in LDI with very high volatility driving changes in funding and asset allocation ratios. This was coupled by very difficult trading and liquidity conditions whilst the whole market was trying to acclimatise to working from home
- **Pension Scheme News:** DB pension deficits grew by £120bn over Q1-2020 as COVID-19 driven disruptions delivered schemes a "triple whammy", and TPR released guidance for trustees to deal pragmatically with sponsor requests for contribution deferrals / holidays
- NWM Insights: We include our latest article on where are you in your ESG investing journey and practical tips to consider

## **Educational Update: COVID 19 infects DB Funding Ratios**

By the first week of Q2 2020, over **\$18 trillion** had been wiped off **global stock markets** since the beginning of the year, as the world faced up to the reality of the **coronavirus pandemic**. Across Europe, citizens face <u>unprecedented periods</u> of "lockdown", **shortages of supplies** and **extreme measures by governments** to prop-up teetering economies.

Policymakers moved quickly to update measures aimed at allowing the **banking sector** to perform <u>effectively at times of strain</u>, acknowledging the role it must play in facilitating the extraordinary measures laid out by the likes of <u>HM Treasury</u> to <u>support</u> <u>businesses and individuals</u> through this current period of uncertainty.

Markets began to stabilise towards the end of March, with long term gilt yields close to the level they started the month, equity down ~15% and credit spreads much wider<sup>1</sup>. As markets first reacted in mid to late



February, the moves over Q1 are even greater and have had a large impact on funding ratios, pension deficits and the deficit contributions calculated in the triennial valuations. This month we look at a number of large pension schemes and estimate the likely effect these moves have had on their accounting and technical provision deficits. These are only estimates, but we expect the order of magnitude to be correct and other schemes to have experienced similar changes.

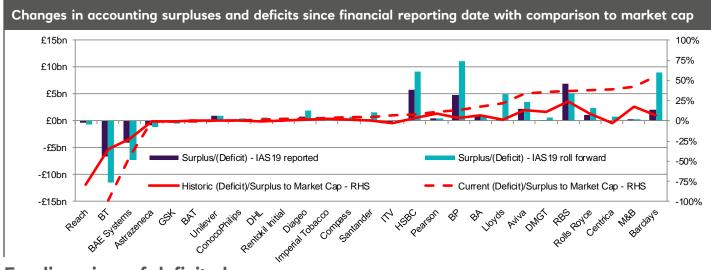
### Taking account of deficit changes

As we discussed in our <u>February educational update</u>, there are different ways to measure pension liabilities and therefore deficits. For the accounting metric the liability discount rate is based on long-dated high quality corporate bonds. This has typically been interpreted as long-dated AA yields. The use of a discount rate based on corporate bond yields has the advantage that large falls in equity are usually accompanied by credit spreads widening, lowering the valuation of the liabilities and dampening some of the asset losses. For the analysis we have conducted in this piece<sup>2</sup>, the accounting values for different schemes are available in the sponsor's financial results, as are sensitivities to rate and inflation moves. This enables us to roll the value of liabilities as well as



# Note: (1) Non Financial 10Y+ AA spreads were ~60bp wider than the start of the month (2) We have made pragmatic simplifications where needed to ensure comparability between different sponsors and have rolled forward to ensure consistency of dates. We have not adjusted for different prudence assumptions between accounting and TP basis., nor have we adjusted for any sponsor contribution announcements/delays.

assets forward to the end of Q1 2020<sup>3</sup>. Our analysis, based on the most recent publically available reports, attempts to give a snapshot of the impact to a random selection of DB schemes. The chart below compares how the deficits have changed since they reported their 2019 financial results, on an accounting basis. Schemes that were further along the journey plan – with accounting surpluses, high hedging levels and less exposure to equity – have faired better, due to the increase in AA credit spreads. Those with smaller surpluses or deficits have seen little change in their pension scheme's position. However, falls in equity have made the size of their deficits look worse when compared to their sponsor's market cap.

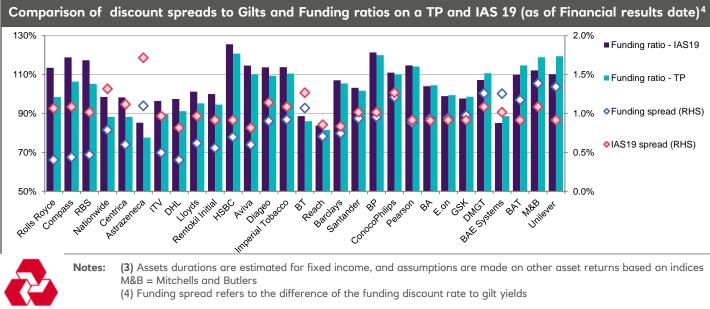


### Funding view of deficit changes

Although the accounting view indicates the effect on corporate balance sheets, with many triennial valuations occurring at the end of March we also wanted to understand the impact on Technical Provisions. The prudence in the cash flows and the discount rates used to value the TP liabilities are scheme dependent and we've used reported sensitivities to the extent to which these capture the effects of hedging strategies (where applicable) may vary. For the purposes of this analysis we have taken a pragmatic approach to estimate the TP positions by taking the asset allocation and

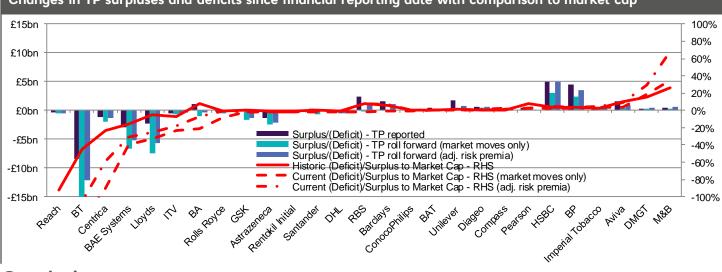
Risk premia / Spreads to Gilt curve							
	At Financial Results	End of Q1					
Equity	2.5%	3%					
Property	2.0%	2.0%					
Growth Funds	1.5%	1.75%					
Credit spreads	1.3%	1.8%					
Inflation-linked gilts	0.00%	0.15%					

assuming a haircutted risk premium for each asset class, to construct an overall discount spread to gilts, which is dependent on the asset allocation. We also assume these haircutted risk premia would be adjusted after the falls in equity and the widening of credit spreads. No change is made to the cash flow assumptions. The chart below compares TP estimates and IAS19 of spreads and funding ratios at the date of their 2019 financial results. There is significant variation in the IAS 19 spread used and we see that some firms are much further along their journey plan, with much lower TP discount spreads than under IAS 19, while others aren't.



If we roll forward the TP positions to the end of March 2020, we find large TP surpluses have reduced and large deficits have arisen. Those with large allocations to equity and credit and with low levels of interest rate hedging are particularly badly hit. The interest rate moves are offset to some extent by the falls in inflation we have seen in Q1. See the chart below for the changes, due to the market moves.

If a new triennial was conducted as at March end, we would expect the risk premia of the different asset classes to change, as credit spreads are much wider and equity indices at much lower levels. If we apply the assumptions given in our table to update the risk premia, the increase in TP liabilities is lowered and the increase is TP deficits is less pronounced. This is particularly noticeable for schemes with high allocation to credit such as BP and HSBC, as indicated by the roll forwards that include adjusted risk premia in the chart.



#### Changes in TP surpluses and deficits since financial reporting date with comparison to market cap

### Conclusions

The downturn in financial markets has had a noticeable impact on pension deficits. From an accounting perspective, for many schemes this has increased surpluses and had made little difference to those schemes in deficit. When we look through a TP lens we see substantial increases in deficits caused by falls in rates and equity, and the widening of credit spreads. Reductions in inflation levels have offset part of the interest rate move for schemes that have low hedging levels. For those going through triennials, this suggests there will be large increases in deficit contributions. This emphasises the different perspectives between schemes and their sponsors and the changes they may focus on. The change in market cap also emphasises how their sponsor's position may have changed hence a covenant risk update will be important for triennials too.

This analysis does not take into account any changes in risk premia that may be applied and is indicative only using public information available. Long-end single A credit spreads were ~100bp wider by the end of Q1, while returns on equity indices may be expected to be higher. Therefore if a triennial were to be conducted, the increase in liabilities may not be as dramatic as first thought.

Triennial negotiations between sponsor and scheme may prove very difficult at a time when deficits have increased, covenants weakened, deficit contributions holiday may have been applied and the tPR has suspended its implementation of the new funding code. As long term investors however, pension schemes are well positioned to ride out current volatility and take the time to refresh their strategic view and hedging decisions.



### **Market Background**

Governments and central bankers across developed economies have unveiled a series of measures to counter the adverse effects of COVID-19 on their economies. In the following sections, we have summarised these policy actions by region.

### UK

- On 11<sup>th</sup> March, policymakers at the BoE delivered an emergency rate cut of 50bps, followed by a 10bp rate cut on 19<sup>th</sup> March, bringing the UK base rate back to 10bps, the lowest point in the last decade
- New BoE Governor, Andrew Bailey also noted that the central bank stood ready to pump unlimited liquidity into the economy to help fight the effects of COVID-19
- These measures came on the back of a new Term Funding Scheme with additional incentives to lend to SMEs which is expected to support ~£100bn of lending and lowered its counter-cyclical capital buffer to 0% from 1%
- Monetary stimulus has also been twinned with fiscal easing as the Treasury announced a £30bn fiscal policy stimulus in 2020-21
  FY in the Budget (11<sup>th</sup> March), with a further £20bn of direct fiscal measures, taking the total fiscal stimulus to 2.2% of GDP,
  targeted at supporting cashflow in the business sector (17<sup>th</sup> March)
- For larger firms, the Treasury & BoE unveiled the Covid Corporate Financing Facility (CCFF), designed to support liquidity by
  allowing firms to sell their commercial paper to the BoE, underwritten by the Treasury, while also increasing the amounts that
  can be borrowed by small firms as part of the Coronavirus Business Interruption Loan Scheme from £1.2m to £5m (17<sup>th</sup> March)
- The BoE announced on April 9<sup>th</sup> that it would directly finance the state's spending temporarily, allowing the government to meet increasing spending needs without having to tap the gilt market, under their long established Ways and Means (W&M) facility

### Europe

- Unlike other central banks, the ECB has refrained from cutting its benchmark deposit rate given it was already at a historic low of -50bps
- Instead, on 18<sup>th</sup> March, the ECB launched a new €750bn Pandemic Emergency Purchase Programme (PEPP), a new quantitative easing (QE) programme worth over 6% of the bloc's GDP
- The new programme, along with the flexible QE package announced on 12<sup>th</sup> March that expanded existing bond buying activity by €120bn, ensures that the ECB has a firing power of just over €1th between now and the year end
- As in the UK, the monetary stimulus has been coupled with fiscal easing from each country in the bloc with aggregated direct fiscal stimulus amounting to ~2% of GDP

### US

- Having already delivered a 50bps rate cut on 3<sup>rd</sup> March, Fed policymakers cut rates by another 100bps on 15<sup>th</sup> March, joining central banks in developed economies to implement a near 0% policy rate
- The central bank also announced unlimited purchased of Treasuries and Mortgage Backed Securities, up to \$1tn of CP purchases, and an SPV with leverage to purchase \$4.5bn of high quality of fixed income corporate and municipal bonds
- The accompanying fiscal package would total \$2.1tn, including \$1.2tn (~6% of GDP) of direct stimulus, with further easing expected
- In order to alleviate dollar funding stresses in the wake of the current crisis, the Fed has also opened and expanded direct swap lines with other major central banks around the globe

## **Pension Scheme Trading Activity**

March has been a very busy month in LDI with very high volatility driving changes in funding and asset allocation ratios. This was coupled by very difficult trading and liquidity conditions whilst the whole market was trying to acclimatise to working from home! At one point futures were gapping around in ~5bps increments with no liquidity in any part of the curve as funds were liquidated, the BoE hadn't yet stepped in, and the whole market was trying to flatten their risk. The BoE came in with a huge announcement that they had cut rates by a further 15bps and more notably would be doing £200bn of QE. A key event point for the market is now Fridays at noon when the pace of the following week's operations is announced. Given that the offsetting pace of demand by the



BoE is unknown, it remains very tricky to place any meaningful structural macro risk on, following the issuance announcement and the backdrop continues to change dramatically almost daily. Whilst this clouds the narrative, what we do know is that net issuance is negative this month, short end nominal issuance is up, and linker issuance continues to decline. We continue to see most activity in gilts around supply events and the APF operations, and many clients still choosing to transact at the close which is being perceived as a liquidity point. LDI flow generally hasn't been too directional, but have seen a fair amount of two-way interest in asset swaps as they've reached interesting levels.

For a number of sessions, UK inflation followed a similar pattern daily whereby linkers performed well in the morning before pivoting at noon and suffering in the afternoon, often with aggressive price action into the close. Real yields in the back end sold off almost 100bps before making a pretty sharp round trip, but breakevens remained quite vulnerable into month end on asset allocation trades. These asset allocation flows feel like they're still ongoing, though the selling is having less of a meaningful impact now, perhaps due to improved liquidity and risk appetite.

The next quarter's issuance announcement lowered the bar even further for linker issuance, with just 2 operations in IL28s. Some further shrinkage and shortening of supply given the ongoing RPI consultation was to be expected, but given numerous calls for a bond in the 20y sector from the investor and dealer community, it is clear that demand has not dried up altogether.

On possible reform of RPI, the government and the UKSA launched the 6 week consultation on the 11th March with their response to this expected before the Parliamentary summer recess. It is recommended that RPI is going to be reformed to follow CPIH following a chain-link indexation method. The market impact of the consultation release was muted; this being overshadowed by the volatility caused by the budget and global macro backdrop. We think the market saw the consultation as wider in its questioning than expected, with more open questions being asked rather than just a focus on timing.

From here, we like holding linkers in the 30y sector and front end cash on asset swap or IOTA for the following reasons... 1) The return of positive carry; 2) Inflation assets globally could bounce further on any OPEC resolution; 3) An uptick in domestic investor appetite; 4) Supply dynamic with no linker issuance >8yrs on the horizon.

### **Pension Scheme News**

### DB funding levels - hold your horses!

- DB deficits rose by £120bn in Q1 2020 on a gilts- discounting basis according to PwC's SkyVal Index, increasing by £60bn over March alone
- The rise in deficits comes on the back of a "triple-whammy" as COVID-1 driven uncertainty has resulted in sharp market gyrations, leading to steep falls in asset values, decrease in gilt yields causing liabilities to balloon, and sponsor covenants weaken as ongoing business interruption constrains sponsors' ability to make cash contributions to plug deficits
- Consultants however continue to warn against overreacting to this market volatility, urging to take a longer term view (<u>Pensions</u> <u>Age</u>)

### TPR trusting trustees to be pragmatic

- On 3<sup>rd</sup> April, TPR has urged Trustees to take a pragmatic approach to requests for easements on deficit reduction contributions (DRCs) in light of COVID-19 driven stress
- The statement comes on the back of increasing requests from cash-strapped corporates looking for deferrals or restructuring of DRCs in order to ease cash flow to weather the current stress
- Moreover, TPR reassured trustees that while their decisions to allow easements should be recorded, trustees would not be punished for making tough pandemic decisions (<u>Pensions Expert</u>)
- TPR has also suspended its consultation for the new DB Funding Code given the current situation

#### **RPI** reform – the consultation

 HM Treasury and the UK Statistics Authority jointly published their long-awaited consultation on reforming RPI, please read NWM's piece <u>here</u>



## **NWM** Insights

Where are you in your ESG investing journey? Here's how to get ahead

- Whether it's primary issuance from companies or investments by asset managers and asset owners ESG is an area which permeates them all.
- This article explores practical tips for different market participants, particularly pension schemes, in terms of relevant considerations as this market continues to evolve
- Full article: <u>https://www.nwm.com/insights/articles/where-are-you-in-your-esg-investing-journey-here-s-how-to-get-ahead</u>



#### If you have any thoughts or questions, please don't hesitate to contact the NatWest Markets Pension Solutions team.

#### Insurance & Pension, Content & Advisory

Robin Thompson 020 7085 2092 Robin.Thompson@natwestmarkets.com

Andrew Kenyon 020 7085 9747 Andrew.Kenyon@natwestmarkets.com

Mohammad Ali Vehb 020 7085 7279 MohammadAli.Vehb1@natwestmarkets.com

Krishna Mepani 020 7085 4294 Krishna.Mepani@natwestmarkets.com



**Insurance & Pension Solutions** 

Michael Veldman 020 7085 0156 Michael.Veldman@natwestmarkets.com

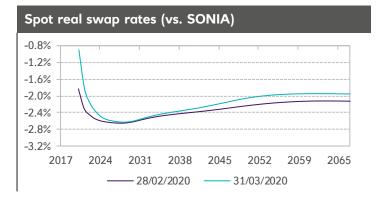
Michaela Rizzo 020 7085 6402 Michaela.Rizzo@natwestmarkets.com

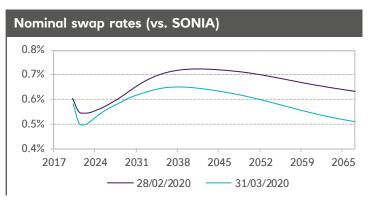
#### **UK LDI Sales**

Simon Clark 020 7085 2430 Simon.Clark@natwestmarkets.com

Harriet Dunscombe 020 7085 3258 Harriet.Dunscombe@natwestmarkets.com

## Market Database







Spot bre	eakeve	n Infia	tion sv	vap ra	tes		
3.4% 3.1% 2.8% 2.5% 2.2% 1.9% 1.6% 1.3%							
2017	2024	2031	2038	2045	2052	2059	2065
	_		2/2020	<u> </u>	1/03/202	20	

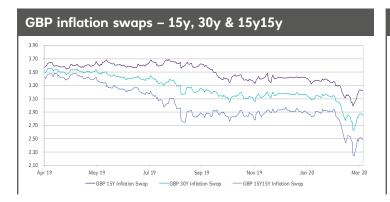
:-- [] -- +:

UK Economic Data					
Market Data	Latest	Previous	Market Data	Latest	Previous
GDP Growth qoq	0.00%	0.50%	Services PMI	34.5	53.2
CPI	1.70%	1.80%	Industrial Production mom	-0.10%	0.10%
Core Inflation	1.70%	1.60%	Manufacturing Prod mom	0.20%	0.30%
PSNB-ex	£0.3bn	£-11.7bn	Construction Output mom	-0.80%	0.40%
Total Trade Deficit	£-4.2bn	£-6.3bn	Unemployment Rate	3.90%	3.80%
Manufacturing PMI	47.8	51.7	Weekly earnings growth	3.10%	2.90%
Construction PMI	39.3	52.6	Retail sales ex. Autos	-0.50%	1.80%
Equity markets	31-Mar-20	28-Feb-20	Swap spreads (bps)	31-Mar-20	28-Feb-20
FTSE 100	5,672	6,581	2Y	40	19
DJ Euro Stoxx 50	2,787	3,329	5Y	32	24
S&P 500	2,585	2,954	10Y	24	19
Nikkei	19,085	21,948	20Y	-11	-12
			30Y	-22	-23
			50Y	-12	-15
Gilt yields	31-Mar-20	28-Feb-20	IL Gilt yields	31-Mar-20	28-Feb-20
2Y	0.12	0.31	2Y	-2.44	-2.45
5Y	0.20	0.33	5Y	-2.41	-2.41
10Y	0.35	0.44	10Y	-2.63	-2.65
20Y	0.75	0.84	20Y	-2.10	-2.22
30Y	0.82	0.94	30Y	-1.87	-2.05
50Y	0.61	0.80	50Y	-1.77	-1.96

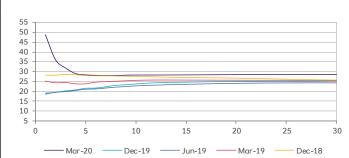
Source: Bloomberg as at end-Mar







#### 6m LIBOR – SONIA basis curve





GBP interest rate swaps (vs. SONIA)

10y

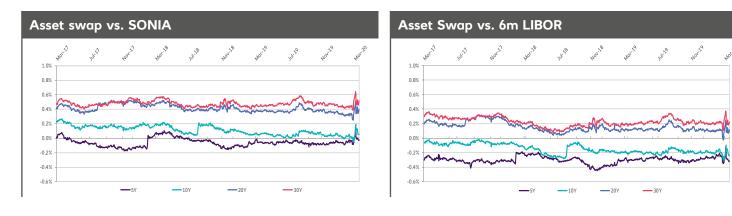
30

50y

5y

#### UKTI real yield & 25y RZCS





1y2y

Source: Bloomberg as at end-Mar



This communication has been prepared by NatWest Markets Plc, and should be regarded as a Marketing Communication, for which the relevant competent authority is the UK Financial Conduct Authority. Please follow the link for the following information https://www.natwestmarkets.com/natwest-markets/regulation/mar-disclosures.html

- MAR Disclaimer
- Conflicts of Interest statement
- Glossary of definitions
- Historic Trade ideas log

This material is intended for your sole use and is provided to you on the understanding that, before entering into any transaction referred to in this material, and/or any related transaction (together, the "Transaction"), you will ensure that you fully understand the potential risks and return of the Transaction and determine whether the Transaction is appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances. Nothing in this material constitutes an offer or invitation to enter into any engagement or transaction or an offer or invitation for the sale, purchase, exchange or transfer of any securities or a recommendation to enter into any transaction, have to form the basis of any investment decision. None of NatWest Markets PIC, NatWest Markets DIC, NatWest Markets PIC, NatWest Markets DIC, not based on the material conditions, or needs of individual clients or whether any transaction is suitable for any particular investment objectives, financial conditions, or needs of individual clients or whether any transaction is suitable for any particular investor. The remuneration of the author(s) is not directly tied to any transactions performed, or trading fees received, by any entity of the RBS Group, for example, through the use of commission-based remuneration arrangements.

This material has been prepared by NatWest Markets and has not been prepared in accordance with the legal and regulatory requirements designed to promote the independence of investment research, and is not subject to any prohibition on dealing ahead of its dissemination. Any views expressed may differ from those of other business units of NatWest Markets. The opinions, commentaries, forecasts, assumptions, estimates, derived valuations and target price(s) or other statements contained in this communication (the "Views") are valid as at the date and/or time indicated and are subject to change at any time without prior notice. NatWest Markets does not undertake to update you of such changes. Views expressed herein are not intended to be, and should not be viewed as advice or as a personal recommendation. The Views may not be objective or independent of the interests of the authors or other NatWest Markets trading desks, who may be active participants in the markets, investments or strategies referred to in this material. NatWest Markets will not act and has not acted as your legal, tax, regulatory, accounting or investment advise; roor does NatWest Markets owe any fiduciary duties to you in connection with the Transaction and no reliance may be placed on NatWest Markets for investment advice or expressed target of the relevance and deviance of the interesting constrained in this deviance to the prior or the interest or the prior or other the primetry of the prior or other to recommendations of any sort. You should make your own independent evaluation of the relevance and adequacy of the information contained in this document and make such other investigations as you deem necessary including obtaining independent financial davice, before participating in any transaction in relation to the securities referred to in this document. This material is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation. The information contained herein is confidential and may not be given (in whole or part) or otherwise distributed to any other third party without the prior written consent of NatWest Markets.

NatWest Markets and its affiliates, connected companies, employees or clients may have an interest in financial instruments of the type described in this material and/or in related financial instruments giving rise to potential conflicts of interest which may impact the performance of such financial instruments. Such interests may include, but are not limited to, (a) dealing in, trading, holding or acting as market-maker or liquidity provider in such financial instruments and any reference obligations; (b) entering into hedging strategies on behalf of issuer clients and their affiliates, investor clients or for itself or its affiliates and connected companies; and (c) providing banking, credit and other financial services to any company or issuer of securities or financial instruments are the performance of the type described in this material and/or in related financial investor clients or for itself or its affiliates, connected companies; and (c) providing banking, credit and other financial services to any company or issuer of securities or financial instruments are the performance of the perform positions) which may impact the performance of a financial instrument.

This material may relate to over-the-counter derivatives ("OTC Derivatives") in which case you should be aware that OTC Derivatives can provide benefits but may also involve a variety of significant risks. All OTC Derivatives involve risks which include (among other things) the risk of adverse or unanticipated market, financial or political developments, risks relating to the counterparty, liquidity and other risks of a complex character. In the event that such risks arise, substantial costs and/or losses may be incurred and operational risks may arise in the event that appropriate internal systems and controls are not in place. Therefore you should also determine whether OTC Derivatives are appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances.

If you enter into an OTC Derivative transaction and decide to close out the transaction, or the transaction otherwise terminates before its scheduled termination date, you may have to pay break costs. These will be calculated by reference to prevailing market conditions and include any costs incurred by NatWest Markets in terminating any related financial instrument or trading position. Please note that such break costs can be substantial. If you enter into an OTC Derivative transaction for the purposes of hedging a loan or other debt and you subsequently wish to repay the debt (whether through refinancing or otherwise), you should be aware that it may be necessary for NatWest Markets to terminate the hedging transaction before its scheduled termination date and satisfy any liabilities that you may have to it with respect to such transaction (including break costs) before NatWest Markets will release any related security that you have provided to it.

This material has been prepared for information purposes only, does not constitute an analysis of all potentially material issues and is subject to change at any time without prior notice. NatWest This inderial has been prepared for information purposes only, does not constitute on analysis of all potentially material issues and is subject to change at any time without provide values of the basis of publicly available information believed to be reliable but no representation, warranty, undertaking or assurance of any kind, express or implied, is made as to the adequacy, accuracy, completeness or reasonableness of this material, nor does NatWest Markets accept any obligation to any recipient to update, correct or determine the reasonableness of such information or assuranties or reasonableness of such information or assuranty. Undertaking or assurance of any kind, express or implied, is made as to the adequacy, accuracy, completeness or reasonableness of this material, nor does NatWest Markets accept any obligation to any recipient to update, correct or determine the reasonableness of such information or assuration or any applicable are information or otherwise) arising from the use of this material or reliance on the information contained herein. However this shall not restrict, exclude or limit any duty or liability to any person under any applicable laws or regulations of any jurisdiction which may person under any applicable laws or regulations of any jurisdiction which may not lawfully be disclaimed.

In the U.S., this material, to the extent it relates to securities, is intended for distribution only to major institutional investors as defined in Rule 15a-6 of the U.S. Securities Exchange Act of 1934 as amended (excluding documents produced by our affiliates within the U.S.). This material is not intended as an offer or the solicitation of an offer to buy or sell securities as defined under U.S. securities laws.

Notwithstanding the foregoing (but subject to any applicable federal or state securities laws), NatWest Markets and the recipient may disclose to any and all persons, without limitation, the tax treatment and tax structure of any transaction contemplated hereby and all materials (including opinions or other tax analyses) relating thereto. IRS Circular 230 Disclosure: NatWest Markets does not provide tax advice. Accordingly, any discussion of U.S. tax matters contained 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 unaffiliated with NatWest Markets of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

NatWest Markets PIc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and Prudential Regulation Authority and is provisionally registered as a swap dealer with the United States Commodity Futures Commission. NatWest Markets N.V. is incorporated with limited liability in the Netherlands, authorised and regulated by De Nederlandsche Bank and the Autoriteit Financiële Markten. It has its seat at Amsterdam, the Netherlands, and is registered in the Commercial Register under number 33002587. Registered Office: Claude Debussyland 94, Amsterdam, the Netherlands. Branch Reg No. in England BR001029. NatWest Markets Die is, in certain jurisdictions, an authorised agent of NatWest Markets PIC. Securities business in the United States is conducted through NatWest Markets Securities Inc., a FINRA registered broker-dealer (http://www.finra.org), a SIPC member (www.sipc.org) and a wholly owned indirect subsidiary of NatWest Markets Plc. NatWest Markets Securities Inc. is authorised by NatWest Markets Plc to act as its agent for certain kinds of its activities.

Copyright © 2018 The Royal Bank of Scotland Group plc. All rights reserved.

