

# Hybrid Bank Capital

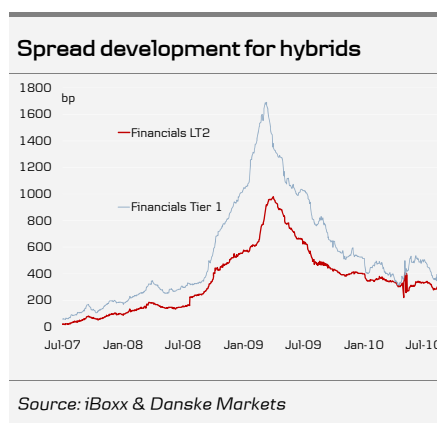
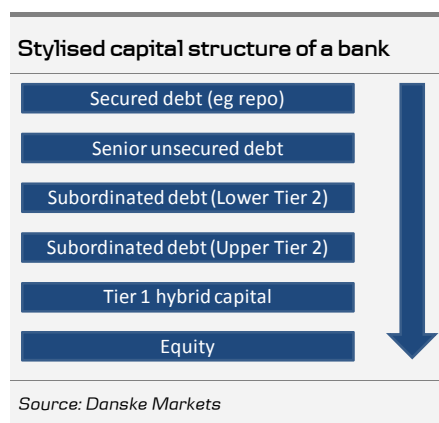
## Features and treatment by regulators and rating agencies

At times during the financial crisis hybrid bank capital traded at distressed levels as investors grew uncomfortable with the potential losses these instruments could cause. Most of the lost ground has been regained, but the investor view on hybrids is more differentiated as many of the inherent features have now been tested in real life. Furthermore, regulators as well as rating agencies have changed or clarified their views on hybrid capital.

In this note we describe hybrid capital for financial institutions and look at regulatory as well as rating agency requirements. This note complements the work of our colleagues covering corporates who earlier this month published an analysis of corporate hybrids (see “*Corporate hybrid capital*”).

### Hybrid capital: Characteristics and market development

The term hybrid covers a range of different debt instruments, which have in common that their characteristics place them somewhere between senior unsecured debt and equity in the capital structure. For financial institutions, hybrid capital is further tiered into Lower Tier 2 (LT2) which ranks senior to Upper Tier 2 (UT2) which in turn ranks senior to Tier 1 (T1). It is not the aim of this note to dig into the various types of bank capital and the differences that exist across jurisdictions. Instead we focus on how rating agencies and regulators look at hybrids in their analysis and supervision of financial institutions (banks and insurance companies).



The financial crisis hit Tier 1 bonds harder than most other asset classes as significant fears reigned concerning writedown of principal (e.g. IKB principal writedowns of T1 and UT2), coupon deferral and extension risk (e.g. Deutsche Bank’s non-call of a LT2 bond in 2008). Furthermore, there were concerns that investor protection in the bond documentation would be insufficient (e.g. Bradford & Bingley bond documentation changed by UK authorities). All in all, this led to a large number of investors fleeing the asset class and causing spreads to ‘go through the roof’.

**Senior Analyst**  
Henrik Arnt  
+45 45128504  
[henrik.arnt@danskebank.dk](mailto:henrik.arnt@danskebank.dk)

**Chief Analyst**  
Thomas Hovard  
+45 45128505  
[thomas.hovard@danskebank.dk](mailto:thomas.hovard@danskebank.dk)

After regulators took a firm grip on a number of troubled banks including some quasi nationalisations, spreads began to contract as the fear of nationalisations on a global scale abated and hybrids, like other high-beta instruments, have rallied significantly since the spread peak in March 2009. In 2010 hybrid spreads have been more stable, but the sovereign debt crisis that hit in the spring increased the polarisation in the pricing of hybrids with southern European and Irish banks taking the hardest hits.

### **Motives behind issuance of hybrid capital**

For financial institutions, hybrids normally offer a cheaper way than equity to address minimum capital requirements as set by the authorities. The different regulatory requirements (e.g. a high Tier 2 requirement compared to the Tier 1 requirement) could make pure equity financing relatively expensive. For banks, hybrid Tier 1 capital can offer a way to address regulatory requirements without diluting existing shareholders. The Danish bank package 2 is an example of this, as it allowed banks to issue Tier 1 instruments to the Danish Government thereby bolstering the Tier 1 capital ratio.

The combination of equity and debt-like characteristics offers a highly flexible alternative in the Treasurer's toolbox when deciding on the capital structure and funding strategies. Broadly, hybrids (may) provide debt-like cost of capital while containing senior rating-supportive equity characteristics.

### **Rating agency approach – an overview**

While important differences exist, Moody's and S&P follow the same overall approach to the assignment of equity credit and issue ratings to hybrids (in the interest of brevity, this paper does not elaborate on Fitch's approach). Broadly, they assess the equity content of a hybrid against the key defining characteristics of plain vanilla equity, i.e. (i) no maturity; (ii) no mandatory ongoing payments; and (iii) loss absorption. The more rating agencies believe that the hybrid will cushion investors in senior unsecured notes by acting like common equity during periods of stress, the greater the equity content that is assigned, and vice versa. The object of this paper is not to reproduce each agency's lengthy methodology but to summarise how rating agencies view hybrids and to highlight selected key structuring considerations to achieve a desired equity credit.

#### **Assigning equity credit to hybrid capital**

S&P places different hybrid structures on the debt/equity continuum into one of three categories: High (100% equity credit), Intermediate (50%) and Minimal (0%). Hybrids with less than 20 years to maturity or limitations on the deferability of coupon payments are typically classified as Minimal, whereas hybrids mandatorily convertible into common equity are candidates for the High category.

Moody's classifies hybrids into five baskets labelled A to E, where basket A is the most debt-like (0% equity credit) and E the most similar to equity (100%). Intermediate baskets are categorised as B, C and D, representing equity credits of 25%, 50% and 75%, respectively. Moody's revised the criteria to receive a given equity credit in July 2010, and it will not grandfather the existing basket treatment for outstanding hybrids. The agency expects to end the process of assigning new baskets where needed by the end of 2010, but the agency does not anticipate significant rating changes on the back of this.

Overall, Moody's has increased its focus on loss absorption characteristics in advance of default. Thus, it views the timing of coupon deferral as an issuer weakens financially (rather than when close to default), and whether or not deferred coupons are cumulative, as largely determinant of the loss absorption capability. To be eligible for basket D, non-cumulative mandatory deferral at strong triggers is generally necessary.

### Examples of triggers that cause deferral of coupons

Trigger type	Industry	Trigger strength
Net loss	Banks & Insurance	Strong
Minimum regulatory capital	Banks & Insurance	Weak
Solvency	Banks & Insurance	Very weak

Source: Moody's

Both S&P and Moody's treat the hybrid as partly debt and partly equity, with weightings depending on equity credit when calculating adjusted credit metrics. It is primarily through this operation that rating agencies acknowledge the hybrid in the issuer's capital structure.

### Notching of hybrid issue ratings

Obviously, the special characteristics of hybrid capital, resulting in the assignment of equity credit, impose incremental risks on hybrid investors compared with investors in senior unsecured notes. Relative to the senior issuer rating, S&P typically lowers the hybrid security issue rating by one notch for subordination (without distinguishing between gradations of subordination), one notch for optional deferral and an additional notch for mandatory deferral (i.e. a maximum three-notch differential).

Until Moody's revised its methodology in July 2010, it was less restrictive than S&P in terms of issue notching, and it operated with a general rule of a maximum of two notches when the senior issuer rating was investment grade. Now, Moody's has added an extra notch (i.e. a maximum three-notch differential, like S&P) for non-cumulative hybrids with strong mandatory coupon deferral triggers. As a result, the assignment of equity credit and notching is now better aligned, which was one of the purposes behind Moody's revised methodology.

### Structuring considerations

Both S&P and Moody's ultimately take a holistic approach to instrument characteristics and consider the overall effect of hybrid capital on the issuer's credit profile when assigning equity credit. However, an absence or presence of certain equity features plays an important role and can disqualify the hybrid from a given equity credit assignment. Below, we highlight key hybrid structuring considerations to achieve a desired equity credit, as well as differences and similarities between Moody's revised methodology and S&P. Appendix 1 & 2 contain summary tables that can be helpful with structuring considerations in order to receive a desired equity credit or notching by S&P and Moody's.

#### Ongoing payments (deferral possibilities)

Most hybrids have a stated coupon, where the payment may be deferred at the discretion of management (optional deferral) or where it must be deferred on breach of a pre-defined financial trigger (mandatory deferral). Deferrals can be non-cumulative or cumulative (i.e. the issuer must honour deferred payments), with settlement in cash or through an alternative coupon settlement mechanism (ACSM), closely resembling payment-in-kind.

In case of optional deferral, both S&P and Moody's are generally indifferent between cumulative and non-cumulative coupons, but allocate less equity content to instruments with constraints on deferability. Such a constraint could be a maximum deferral period, which S&P regards as inconsistent with Intermediate equity content if below five years. A **dividend pusher** forcing hybrid coupon payments if dividends are paid on common stock in a look-back period exceeding one year also disqualifies for Intermediate equity content from S&P. Moody's lowers equity content, all else equal, if the look-back period exceeds six months. S&P generally has a neutral view on a **dividend stopper**, where coupon deferral prohibits dividend payments on common stock.

Moody's overall views non-cumulative hybrids senior only to common equity that tend to absorb losses for a "going" concern (i.e. well ahead of default) as eligible for basket D, whereas cumulative hybrids senior only to common equity that tend to absorb losses for a "gone" concern (i.e. where default is imminent) are eligible for basket C at best.

A key distinction between corporate hybrids and hybrids from financial institutions is that the latter are defined as being *regulated industries*. In practice this implies that where corporate issuers are assumed not to defer optionally until default is imminent this is not the case for financial institutions where the regulator is assumed to press the case for coupon deferral at an earlier stage. In practice this means that loss absorption is more probable for financial institutions than it is for corporates. To be classified as effectively non-cumulative and eligible for basket D at Moody's, mandatory deferral at strong triggers is necessary. Under S&P's methodology, mandatory deferral triggers set at a level close to the issuer's current rating (i.e. within two to three notches of the current rating) qualify for High equity content. Weaker triggers may qualify for Intermediate equity content.

S&P views a requirement of ASCM settlement of optionally-deferred coupons within five years as inconsistent with Intermediate equity content, as the prospect of having to sell common equity or additional hybrids at a time when pricing could be depressed is likely to postpone deferral in the first place. ASCM settlement of mandatorily deferred coupons is generally eligible for Intermediate equity content. In July 2010, Moody's strengthened its view on ASCM settlement, leading to less equity content. The agency no longer views ASCM settlement as synonymous to a non-cumulative hybrid.

### **Permanence**

Rating agencies require hybrid capital to be sufficiently permanent to justify equity content, and most hybrids come with long or even perpetual maturity. S&P requires an effective time to maturity of at least 20 years to warrant Intermediate or High equity content, implying that equity content is eliminated when the remaining time to maturity falls below this threshold. Following the July 2010 revision, Moody's views 60 years as tantamount to perpetuity, and hybrids must have at least an initial 30-year maturity at issuance for the assignment of equity credit. Equity credit will be eliminated when the remaining time to maturity is 10 years.

### **Call possibilities and step-ups**

It is common for hybrids to be callable, either starting on a certain date and continuing for a defined period, or on discrete days. Simple callability does not necessarily limit equity credit, but it can be constrained by built-in call incentives (such as a coupon step-up). S&P views step-ups of more than 100bp or half the initial spread as defining the effective maturity date of the hybrid. Also an initial call date less than five years from the date of issuance generally disqualifies for equity credit from S&P.

Moody's increased its focus on loss absorption characteristics in advance of default in its July 2010 revision. Rather than factoring the time to the first call date into an equity basket it is merely factored into the overall senior issuer rating. However, built-in call incentives still hurt equity content. Like S&P, Moody's considers a step-up in excess of 100bp to be the effective maturity date. Equity content is also reduced if a call date with a 100bp step-up occurs earlier than 10 years after issuance.

Another key difference between financial institutions and corporates relates to replacement capital covenant (RCC). For the latter, S&P requires a legally-binding RCC rather than a mere expression of intent, to qualify for Intermediate equity content. For financial institutions it is assumed that the regulator will prevent a call if it deems that the company has insufficient capital – i.e. a legally binding RCC is not necessary.

## Subordination

In terms of priority in event of default, S&P generally considers the distinction between subordination and deep subordination as a secondary factor in the assignment of equity credit compared with other key defining characteristics. Moody's assignment of equity content is eligible for deeply subordinated securities (senior only to common equity and called 'preferred' securities in Moody's terminology) that cannot default or cross-default other than at maturity. Furthermore, they must have limited influence on the outcome of a bankruptcy proceeding. If these conditions are not satisfied, equity credit is capped at basket B.

## Capacity limit for hybrids in the capital structure

For both rating agency and regulatory purposes hybrid capital is only beneficial up to a certain point. At S&P banks can count in hybrids with high equity content up to 50% of adjusted common equity (ACE). Hybrids with intermediate equity content can account for up to 33% of ACE. For insurance companies High equity content hybrids may account for up to 35% of total adjusted capital (TAC) whereas Intermediate equity content hybrids may only account for up to 25% (in Europe). S&P's equity credit cap is calculated using the hybrid capital principal value.

Moody's introduced a 25% equity credit cap in 2008, with the object of limiting the equity credit contribution of hybrids relative to straight common equity. The limit on equity credit reflects the view that common equity may be more predictable as a source of credit support in stressful conditions, and should be the dominant component of a company's capital structure.

## Regulatory changes for hybrids: Basel III and Solvency II

### Basel III

When the Basel committee published its proposals for recommendations in December it also included the requirements for the features of hybrid capital going forward. So far, however, concrete limits for inclusion of hybrid capital are lacking but the asset class is likely to continue to be an important part of banks' capital structure in our view.

The future tiering of bank capital should be limited: Tier 1 must absorb losses on a going concern basis and Tier 2 must absorb losses on a gone concern basis. Sub-categories of Tier 2 capital will therefore be removed, i.e. there will be a harmonisation of LT2 and UT2 instruments.

According to the Basel Committee Tier 1 instruments must be comprised of instruments that are subordinated, have fully discretionary non-cumulative dividends or coupons and have neither a maturity date nor an incentive to redeem (i.e. no step-up). Payments (coupons) on Tier 1 bonds will be considered a distribution of earnings (dividends). Innovative hybrid capital instruments with an incentive to redeem through features like step-up clauses, currently limited to 15% of the Tier 1 capital base, will be phased out.

The current limitation of Tier 2 capital (that it cannot exceed Tier 1 capital) will be removed and replaced by minimum Tier 1 and total capital requirements. The future role of Tier 2 capital is likely to be determined by the difference between the total capital requirement and the Tier 1 requirement. If the difference is large, Tier 2 capital is likely to continue to play a role as it would provide a cheaper way to address regulatory limits.

Outstanding hybrids will be subject to grandfathering but nothing has so far been communicated as to the length of it. Our assumption is that it will at least run until first call date as this would ensure that banks would not receive adverse capital treatment compared to what was expected at the time of issuance.

### Solvency II

Overall, the mindset concerning hybrids is the same under Solvency II as it is in Basel III. European implementation of Solvency II is currently expected by October 2012 although

we would not be surprised by delays. In the table below the new regulatory limits are shown. As can be seen, qualifying hybrid instruments cannot constitute more than 20% of Tier 1 capital.

**Table 1. Capital limits under Solvency II**

	Tier 1 capital	Tier 2 capital	Tier 3 capital
MCR cover	>80%	<20%	Not allowed
SCR cover	>50%	<50%	<15%
Amount of qualifying hybrid debt allowed	<20%	<100%	<100%

*Source: QIS 5 specifications & Danske Markets*

Furthermore, the minimum amount of non-hybrid to cover the minimum capital requirement (MCR) is 64% ( $80\% - (0.2 * 80\%)$ ) while the minimum amount of non-hybrid to cover the solvency capital requirement (SCR) is 40% ( $50\% - (0.2 * 50\%)$ ). Under the current solvency rules hybrid debt may constitute up to 50% of the minimum requirement.

Under Solvency II, Tier 1 bonds must – as a minimum – possess the following features:

- Principal loss absorbency mechanisms for which the trigger event is a breach of 75% of the SCR or a breach of the SCR which is not resolved within two months
- Be undated or have an original maturity of at least 10 years. Maturity date deemed to be first opportunity to repay or redeem unless contractual obligation to replace with an item of same or higher quality capital (RCC)
- Not callable or repayable without supervisory permission, and if the SCR is breached although supervisor may waive this if item replaced with equal or higher quality and MCR is complied with
- No step-up
- Should have both an optional coupon skip, and a mandatory coupon skip linked to a breach of the SCR
- A fixed coupon is allowed, but skipped coupons are cancelled unless there is an immediate equity settled ACSM.

For Tier 2 the following criteria must be fulfilled:

- Be undated or have an original maturity of at least five years. Maturity date deemed to be first opportunity to repay or redeem unless contractual obligation to replace with an item of same or higher quality capital
- Not callable or repayable without supervisory permission, and if the SCR is breached although supervisor may waive this if item replaced with another tier 1 or tier 2 item and MCR is complied with
- May have a moderate incentive to redeem; step-ups must not exceed either 100bp or 50% of initial credit spread
- Cumulative deferral of coupon on a breach of the SCR.

Almost all of the current outstanding Tier 1 instruments will not be eligible for inclusion under these requirements and will be classified as Tier 2 instead. However, grandfathering is expected although details are still lagging as to the length of the period.

### Appendix 1: Examples for equity content at Moody's

The table provides examples of how hybrids can be structured and what the (maximum) equity content would be with these features.

Some Numbered Generic Hybrid Examples to Illustrate the Application of the Revised Guidance															
COLUMN NUMBERS		#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14
Coupon skip	Mandatory Weak <sup>1</sup>		X												
	Restricted Optional <sup>2</sup>			X							X				
	Mandatory Moderate <sup>3</sup>											X			
	Optional	X			X	X		X	X				X		
	Optional & Mandatory Strong <sup>4</sup>						X			X				X <sup>5</sup>	X
Settle-ment	Cumulative	X	X	X	X	X	X	X		X					
	Non-cumulative								X		X	X	X	X	X
Ranking	Subordinated	X	X	X	X	X	X								
	Preferred							X	X	X	X	X	X	X	
	Equity														X
Maturity	< 30 years	X													
	30 - 59 years				X				X						
	>= 60 years		X	X		X	X	X		X	X	X	X	X	
	Irredeemable														X
Basket for Banks		A	B	B	B	B	B	C	C	C	C	C	D	D	E
Basket for Non-Banks		A	B	B	B	B	B	C	C	C	C	C	C	D	E

- Key:
- 1 Mandatory Weak Triggers include minimum regulatory capital ratios set at low levels.
  - 2 Restricted Optional is when the issuer either has to breach certain triggers or stop payment on parity or junior securities for more than 6 months before being able to skip hybrid coupons.
  - 3 Mandatory Moderate Triggers include a balance sheet loss trigger for banks.
  - 4 Optional and Mandatory Strong Triggers includes both optional skip mechanisms and strong or "meaningful" triggers such as net loss triggers for banks.
  - 5 The mandatory coupon suspension is non-cumulative; the optional coupon suspension can either be cumulative or non-cumulative.

## Appendix 2 – an overview of the key structuring considerations

### Key structuring considerations – rating agency guidelines when senior issuer rating is investment grade (1)

	Standard & Poor's	Moody's
<b>Share of hybrid allowed in the capital structure</b>	Banks: High equity content up to 50% of adjusted common equity (ACE). Intermediate equity content up to 33% of ACE. Insurance: High equity content up to 35% of total adjusted capital (TAC). Intermediate equity content up to 25%.	Hybrid equity credit/(equity + hybrid equity credit) <= 25%
<b>Equity credit</b>	Minimal (0%), Intermediate (50%) and High (100%)	Baskets A to E covering equity credit of 0%, 25%, 50%, 75% and 100%, respectively.
<b>Coupon deferral</b>	<u>Optional deferral</u> : Indifferent between cumulative and non-cumulative. Not eligible for Intermediate if maximum deferral period below five years. <u>Mandatory deferral</u> : Triggers close to current rating requirement qualify for High. Weaker but meaningful triggers qualify for Intermediate.	<u>Optional deferral</u> : Indifferent between cumulative and non-cumulative, eligible for basket C. In general, restricted options to defer qualify for basket C at best. <u>Mandatory deferral</u> : Strong triggers qualify for basket D if non-cumulative.
<b>ACSM to settle cumulative coupons</b>	<u>Optional deferral</u> : Not eligible for Intermediate if ACSM settlement within five years of initial deferral. <u>Mandatory deferral</u> : ACSM settlement eligible for Intermediate but not High.	<u>Optional and/or mandatory deferral</u> : ACSM settlement is eligible for basket C. However, basket D may still be assigned to mandatory deferral with strong triggers if non-cumulative coupons can be ACSM settled at the issuers option.
<b>Dividend pusher and dividend stopper</b>	Not eligible for Intermediate if <u>dividend pusher</u> look-back period exceeds one year. Neutral view on <u>dividend stopper</u> .	<u>Dividend pusher</u> : Moody's lowers equity content, all else equal, if look-back period exceeds 6 months.
<b>Time to maturity</b>	Time to maturity of at least <u>20 years</u> to warrant Intermediate or High. Equity credit is eliminated when the remaining time to maturity falls below this threshold.	Moody's views <u>60 years</u> as tantamount to perpetuity and hybrids must have at least an initial <u>30 year</u> maturity at issuance for the assignment of equity credit. Equity credit will be eliminated when the remaining time to maturity is <u>10 years</u> .
<b>Built-in call incentives and replacement language</b>	<u>Step-up</u> of more than 100bp or half the initial spread, the call date will be treated as the effective maturity date. Initial call date (even without step-up) less than five years from issuance disqualifies Intermediate even if RCC.	RCC is not a key consideration. Built-in call incentives hurt <u>equity content</u> 1) 100bp step-up within 10 years from issuance results in lower equity content 2) step-up above 100bp defines effective maturity date
<b>Subordination</b>	Distinction between subordination and deep subordination a <u>secondary factor</u> to other characteristics	Equity content is eligible for deeply subordinated securities senior only to common equity that cannot default or cross-default other than at maturity and that have limited influence on the outcome of a bankruptcy proceeding. If these conditions are not satisfied, equity credit is capped at basket B
<b>Notching</b>	One notch for subordination, one notch for optional deferral, one notch for mandatory deferral	Two notches if deeply subordinated and senior only to common equity. An additional notch if non-cumulative with strong mandatory trigger

Source: S&P, Moody's and Danske Markets. Note 1) Both S&P and Moody's ultimately take a holistic approach to instrument characteristics and consider the overall effect of hybrid capital on the issuer's credit profile when assigning equity credit. However, an absence or presence of certain equity features play an important role and can disqualify the hybrid from a given equity credit assignment.

## Fixed Income Credit Research

### Head of Credit Research

Thomas Hovard  
+45 45 12 85 05  
thomas.hovard

#### TMT, Utilities & Energy

Jakob Magnussen  
+45 45 12 85 03  
jakob.magnussen

Nadia Bendriss  
+47 8540 7067  
nab@fokus.no

#### Financials & Strategy

Thomas Hovard  
+45 45 12 85 05  
thomas.hovard

Henrik Arnt  
+45 45 12 85 04  
henrik.arnt

#### Pulp & Paper

Peter Tind Larsen  
+45 45 12 85 08  
peter.tind.larsen

#### Industrials

Peter Tind Larsen  
+45 45 12 85 08  
peter.tind.larsen

Asbjørn P. Andersen  
+45 45 14 88 86  
asbjorn.andersen

Nadia Bendriss  
+47 8540 7067  
nab@fokus.no

*email addresses end @danskebank.com*

## Disclosure

This research report has been prepared by Danske Research, which is part of Danske Markets, a division of Danske Bank. Danske Bank is under supervision by the Danish Financial Supervisory Authority.

Danske Bank research reports are prepared in accordance with the Danish Society of Investment Professionals' Ethical rules and the Recommendations of the Danish Securities Dealers Association.

Danske Bank has established procedures to prevent conflicts of interest and to ensure the provision of high quality research based on research objectivity and independence. These procedures are documented in the Danske Bank Research Policy. Employees within the Danske Bank Research Departments have been instructed that any request that might impair the objectivity and independence of research shall be referred to Research Management and to the Compliance Officer. Danske Bank Research departments are organised independently from and do not report to other Danske Bank business areas. Research analysts are remunerated in part based on the over-all profitability of Danske Bank, which includes investment banking revenues, but do not receive bonuses or other remuneration linked to specific corporate finance or debt capital transactions.

The Equity and Corporate Bonds analysts of Danske Bank and undertakings with which the Equity and Corporate Bonds analysts have close links are not permitted to invest in securities within the research sector to which the securities covered by the relevant Equity or Corporate Bonds analyst relate.

Danske Bank is a market maker and may as such hold positions in the financial instruments mentioned in this research report.

Please go to [www.danskebank.com/Research](http://www.danskebank.com/Research) for further disclosures and information.

## Disclaimer

This publication has been prepared by Danske Markets for information purposes only. It has been prepared independently, solely from publicly available information and does not take into account the views of Danske Bank's internal credit department. It is not an offer or solicitation of any offer to purchase or sell any financial instrument. Whilst reasonable care has been taken to ensure that its contents are not untrue or misleading, no representation is made as to its accuracy or completeness and no liability is accepted for any loss arising from reliance on it. Danske Bank, its affiliates or staff may perform services for, solicit business from, hold long or short positions in, or otherwise be interested in the investments (including derivatives), of any issuer mentioned herein. The Equity and Corporate Bonds analysts are not permitted to invest in securities under coverage in their research sector. This publication is not intended for retail customers in the UK or any person in the US. Danske Markets is a division of Danske Bank A/S. Danske Bank A/S is authorized by the Danish Financial Supervisory Authority and is subject to provisions of relevant regulators in all other jurisdictions where Danske Bank A/S conducts operations. Moreover Danske Bank A/S is subject to limited regulation by the Financial Services Authority (UK). Details on the extent of our regulation by the Financial Services Authority are available from us on request. Copyright (C) Danske Bank A/S. All rights reserved. This publication is protected by copyright and may not be reproduced in whole or in part without permission.

This publication has been prepared by the correspondent of Auerbach Grayson & Company Incorporated ("AGC") named above on the date listed above.

We are distributing this publication in the U.S. and any U.S. person receiving this report and wishing to effect transactions in any security discussed herein, should do so only with a representative of Auerbach Grayson & Company Incorporated. Additional information on recommended securities is available on request.