13 February 2018

Yield Outlook

More upside for 5Y and 10Y yields

This year has started with a fixed income sell-off, which has pushed the 10Y Bund yield higher by c.30bp since the year began and by close to 45bp since mid-December 2017.

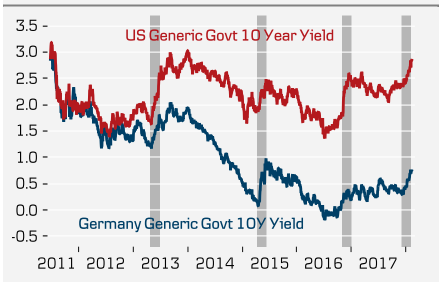
If we compare the sell-off with the US-induced 2013 tapering sell-off or the 2015 Bund-led sell-off, the market moves are still smaller. In 2013, the 10Y US Treasury yield rose close to 100bp in the first two months of the tapering sell-off. In 2015, 10Y Bund yields rose 60bp in the first two months of the sell-off alone and peaked two and a half months later, more than 80bp higher overall.

The rise in both European and US yields has come earlier than we expected in, for example, *Yield Outlook – Risk to yields skewed on the upside but mainly on a 12M horizon*, which we published on 17 January.

We argue that the rapid rise in yields seen this year is now slowing down but that risk is still seen on the upside, especially if we look six to 12 months forward. We now forecast that 10Y US Treasury yields will rise to 3.30% (previously 2.90%) on a 12-month horizon. We expect German 10Y Bund yields to rise to 1.20% (previously 1.0%) on a 12-month horizon. As we elaborate overleaf, we now see higher inflation expectations and higher interest volatility in 2018 and therefore a higher term premium than previously expected in both the European and the US markets. We also see 'real rates' moving higher as the global cyclical recovery continues. The latest boost to fiscal policy in the US will also add to the upside potential for 10Y yields, especially in the US, but will also have an impact on 10Y yields and rates in Europe.

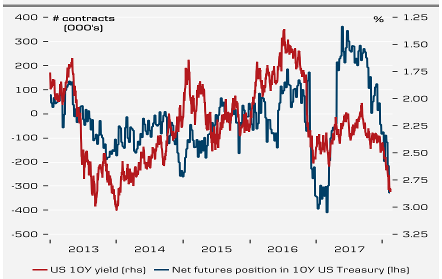
However, this said, it is not unusual that after a fixed income sell-off we see some stabilisation and some support for global bond markets. It is noteworthy that positioning, especially in the US bond market, has swung dramatically in favour of higher yields. According to the so-called CFTC data, speculative investors are now stretched short US 10Y Treasury bonds. Hence, the speculative community has already positioned for higher US yields. When positioning is stretched like now, we often see the opposite move in yields (short term) as speculative investors 'take profit'.

Bond market sell-off has been abrupt...



Source: Macrobond Financial, Danske Bank

...but the speculative part of the market is now positioned for higher 10Y US yields



Source: Macrobond Financial, CFTC

Quick links

Eurozone forecasts

US forecasts

UK forecasts

Denmark forecasts

Sweden forecasts

Norway forecasts

Forecasts table

Policy rate outlook

Country	Spot	+3m	+6m	+12m
USD	1.50	1.75	2.00	2.25
EUR	-0.40	-0.40	-0.40	-0.40
GBP	0.50	0.50	0.50	0.50
DKK	-0.65	-0.65	-0.65	-0.65
SEK	-0.50	-0.50	-0.50	-0.50
NOK	0.50	0.50	0.50	0.75

Source: Danske Bank

10-year government bond yield outlook

Country	Spot	+3m	+6m	+12m
USD	2.55	2.55	2.70	2.90
GER	0.56	0.60	0.70	1.00
GBP	1.30	1.35	1.50	1.80
DKK	0.57	0.61	0.75	1.05
SEK	0.83	0.95	0.95	1.10
NOK	1.65	1.65	1.75	2.10

Note: EUR = Germany
Source: Danske Bank

Chief Analyst
Arne Lohmann Rasmussen
+45 45 12 85 32
arr@danskebank.com

Assistant Analyst
Morten Ehlers
+45 45 12 82 87
moeh@danskebank.com

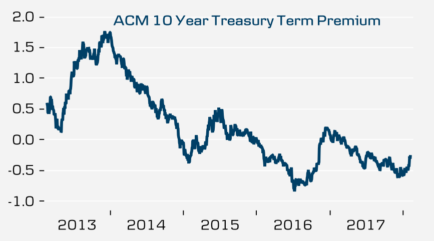
What will drive yields higher in 2018?

A higher term premium if rate volatility moves higher

A starting point would be to look at the 'term premium', which theoretically reflects the premium an investor demands in order to buy a long bond; for example a 10-year bond instead of buying 10 one-year bonds covering the next 10 years. It is not observable in the market and can only be estimated.

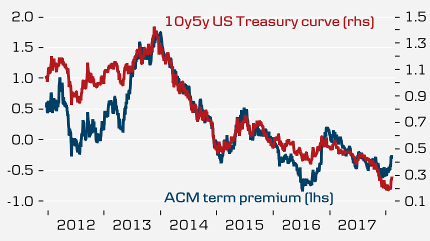
It is well known generally that the 10-year term-premium is highly correlated with the 5Y10Y curve and influenced by interest rate volatility. If the latter goes up, one should expect investors to demand a higher risk/term premium for holding long bonds. As shown in the charts below, these two factors are very important for the US.

US term premium has started to move marginally higher



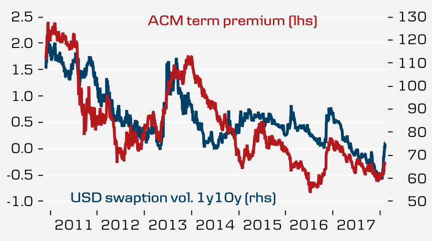
Source: Bloomberg based on Adrian, Crump & Moench

Term premium and the 5Y10Y curve (US)



Source: Bloomberg

Swaption volatility and term premium



Source: Bloomberg

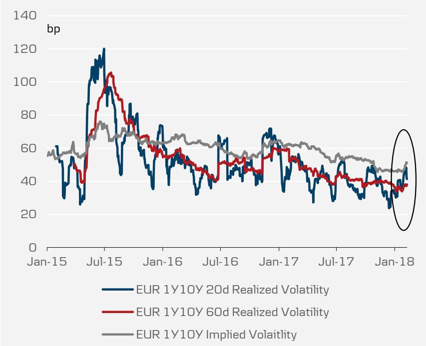
Hence, the key to understanding if we could see a more pronounced rise in the global term premium is whether interest rate volatility continues to move higher in 2018.

Interestingly, the EUR rates volatility market has been somewhat resilient to the relatively large moves in outright EUR rates.

However, the uncertainty for us is what could push interest rate volatility higher Carry-unwinding is one risk factor. It has been a consensus trade to sell volatility. Particularly after the recent stock market sell-off, this is an evident risk. However, given that the volatility curve remains steep, this could drive the market only to a limited degree if we do not see a spike in realised volatility. The latter is the main risk and could be triggered if a surprise eventuates, particularly in inflation prints and inflation expectations over coming quarters.

Another risk to the term premium is a potential QE premium in the curve. This is particularly relevant for the EGB market ahead of the possible end to QE later this year – not least seen in light of the US tapering sell-off in 2013. However, the US curve could see an impact from the Fed's quantitative tightening.

No significant spike in EUR rates realised volatility. Implied volatility has stayed relatively muted



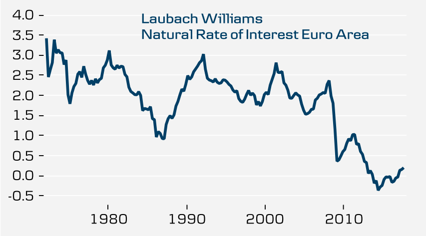
Note: Normal implied volatility reported as bp/year, realised volatility computed as 20-day average of squared daily changes in underlying swap, reported as bp/year
Source: Danske Bank

A move higher in inflation expectations and real rates

Another important theme in 2018 could be real rates. We note real rates have stayed negative in the eurozone for several years and have only recently started to move higher. The real rate is closely related to the natural 'real' rate, which fell significantly after the financial crisis. However, we note that most estimates now indicate the natural rate has begun to move higher.

Here we use the Laubach Williams estimates for the eurozone, which are available from the Federal Reserve Bank of San Francisco. They show the natural rate moved above zero for the first time in four years in 2017. We have data only until Q3 17 but, given the growth in the European economy in Q4 and Q1, we estimate the natural rate will continue moving higher in 2018 if investments pick up but remember the natural rate is not as such a reflection of the output gap but decided primarily by investment and savings patterns and trend growth.

Natural real rate is still low in eurozone

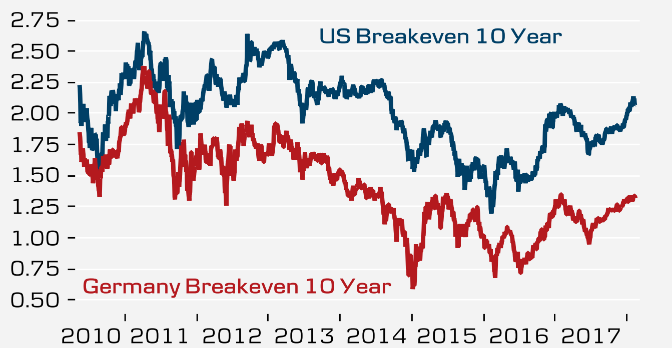


Source: Bloomberg, Macrobond Financial

If the natural real rate were to start moving higher slowly and the output gap were to continue to close, we would expect the market to start pricing in higher inflation expectations and a higher real rate at the same time.

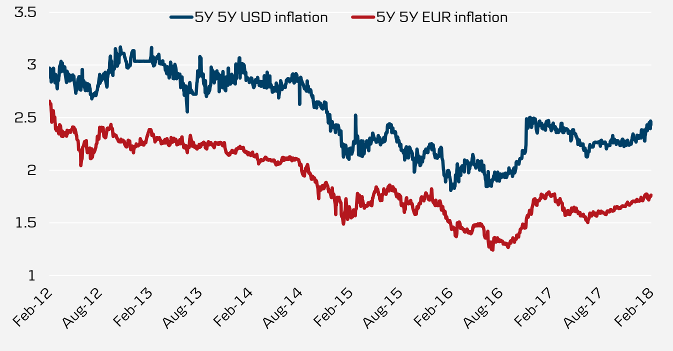
We have already seen that market-based inflation expectations have moved higher in both the eurozone and the US. It is part of the renewed focus on 'reflation' that has dominated the financial markets since the autumn, as it has become clear that the global economy is in a synchronic recovery. The latter focus on US fiscal policy could also push inflation expectations higher and, in particular, push US rate hike expectations higher. However, even after the recent move higher, inflation expectations including 5Y5Y expectations are still well below the levels seen in 2010-13.

Breakeven rates have moved higher…



Source: Bloomberg, Macrobond Financial

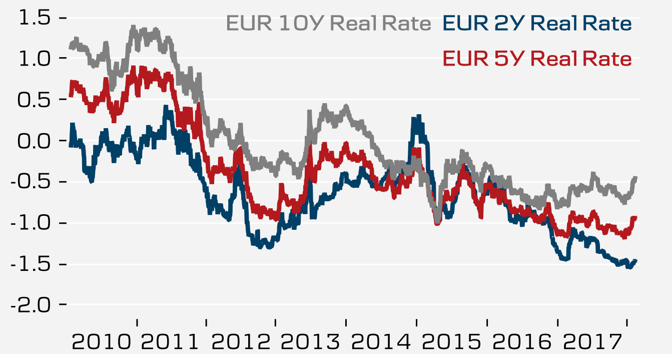
…but 5Y5Y is still well below the level seen 5 years ago



Source: Bloomberg, Macrobond Financial

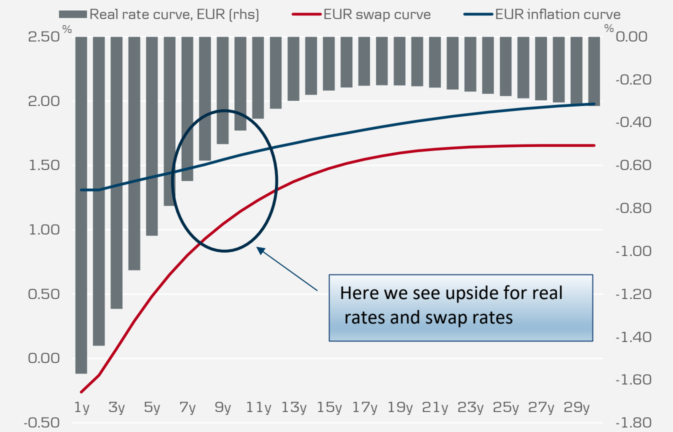
Also important is how real rates have developed. Here we look at 2Y, 5Y and 10Y EUR real rates based on EUR inflation swaps. We have seen a move higher in real rates but the move is still relatively modest. If real rate expectations started to move higher, it would pose yet another risk factor for global nominal yields. Not least, this is a concern for the pricing of the EUR swap curve as US real rates have already moved into positive territory, as shown in the chart below right.

Real rates are low…but they have slowly started to move higher (based on swaps)



Source: Danske Bank

Upside for real rates in the 10Y segment



Source: Danske Bank

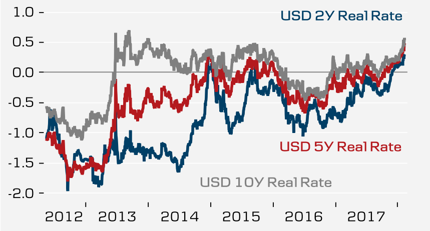
Conclusion: risk on the upside for 10Y yields and steeper 5Y10Y curve

The combination of the global synchronic recovery, focus on US fiscal policies in 2018 and 2019 and global central banks turning less dovish has been a toxic mix for global fixed income markets. The result has been a significant underperformance for the 5Y segment of the EUR curve.

The market is pricing in both the ECB and Fed relatively aggressively but there is still room to price in a higher term premium due to higher volatility, higher inflation expectations and a higher real rate. Hence, we argue that the upside risk to yields is moving further out on the yield curve. If the fixed income market comes under further pressure, the 10Y segment would be the most exposed point on the curve. The latter is the main reason we have revised higher our 12-month forecasts for both US and European 10Y rates and yields.

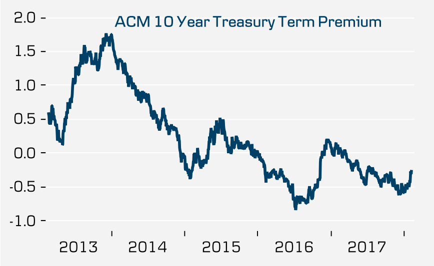
We now forecast that 10Y US Treasury yields will rise to 3.30% (previously 2.90%) on a 12-month horizon. We forecast that German 10Y Bund yields will rise to 1.20% (previously 1.0%) on a 12-month horizon.

USD real rates are already at a higher level (based on swaps)



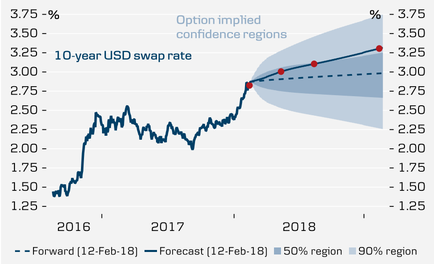
Source: Danske Bank

We expect a higher term premium in 2018...



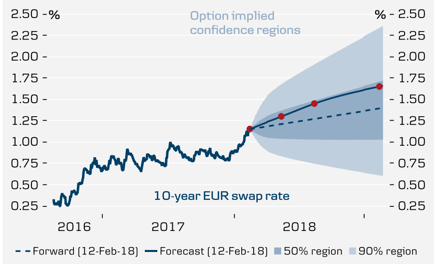
Source: Macrobond Financial

...which would tend to push 10Y US rates higher, especially as fiscal policy is pro-cyclical



Source: Danske Bank

Europe should also see higher 10Y EUR rates as QE ends and the term premium rises throughout 2018



Source: Danske Bank

Contents and contributors

Eurozone forecasts

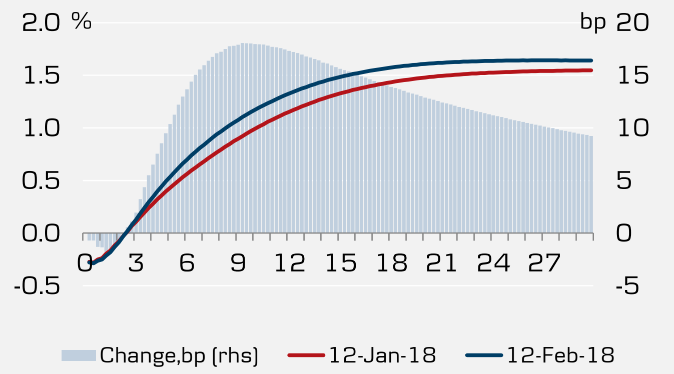
- Continued strong PMIs and economic confidence at the highest level in 17 years point to an ongoing expansion in the euro area and we forecast growth of 2.0% in 2018 and 1.8% in 2019, with risks on the upside. Despite the strong economic momentum, inflation pressures remain subdued, with January headline inflation dipping to 1.3% due to weaker energy price inflation, while core inflation remains around 1%.
- Supported by the closing output gap, we expect core inflation to stay marginally above 1% for most of 2018 but also not to accelerate much further from here without higher wage growth. In its latest forecast update, the ECB again lowered its 2018 core inflation projection to 1.1%, which is now in line with our forecast. This said, in light of the strong growth, the ECB's Governing Council is becoming increasingly more confident that inflation will eventually increase and meet the inflation objective.
- We continue to expect a steeper EUR yield curve for the 2Y10Y in 2018. The ECB still maintains a relatively tight grip on the short end of the curve. However, this is not the case for the 5Y and 10Y segment of the curve, which we expect to be pushed by higher US yields, the end of QE from the ECB and the pricing of rate hikes in 2019 and 2020. Higher interest rate volatility and a higher term premium work in the same direction. We have a 12-month 1.2% forecast for 10Y Germany, up from 1.0% previously.

EUR forecasts summary

12/02/2018	--- Forecast ---				--- Fcst vs Fwd in bp ---		
EUR	Spot	+3m	+6m	+12m	+3m	+6m	+12m
				Money market			
Refi	0.00	0.00	0.00	0.00	-	-	-
Deposit	-0.40	-0.40	-0.40	-0.40	-	-	-
3M	-0.33	-0.33	-0.33	-0.33	-1	-2	-11
				Government bonds			
2-year	-0.57	-0.55	-0.50	-0.30	-	-	-
5-year	0.11	0.25	0.30	0.40	-	-	-
10-year	0.76	0.90	1.00	1.20	-	-	-
				Swap rates			
2-year	-0.13	-0.05	0.00	0.20	+1	-3	-5
5-year	0.49	0.75	0.80	0.90	+17	+13	+5
10-year	1.15	1.30	1.45	1.65	+9	+18	+25

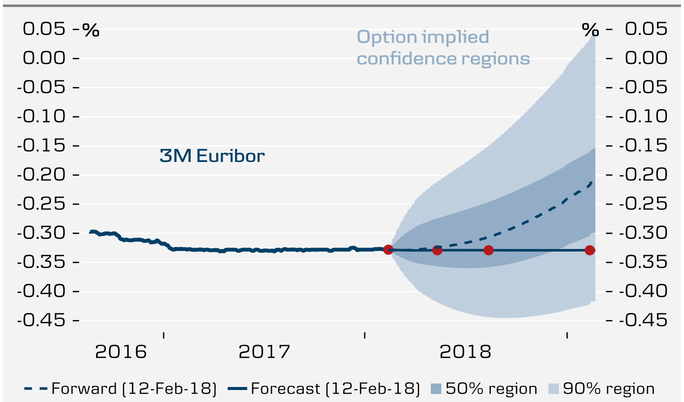
Source: Danske Bank

EUR swap curve – one-month change



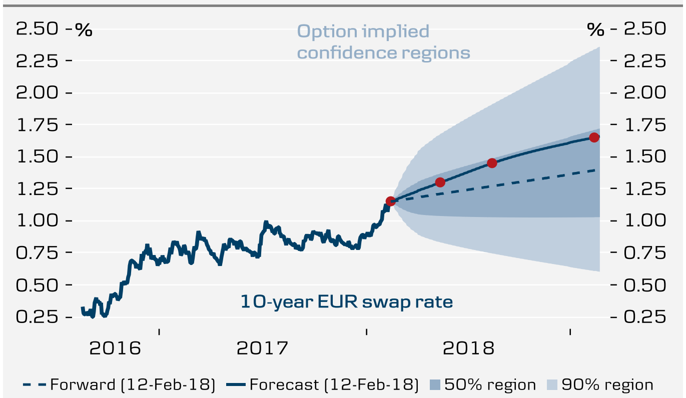
Source: Danske Bank

3M Euribor



Source: Macrobond Financial, Danske Bank

10Y EUR swap rates



Source: Macrobond Financial, Danske Bank

US forecasts

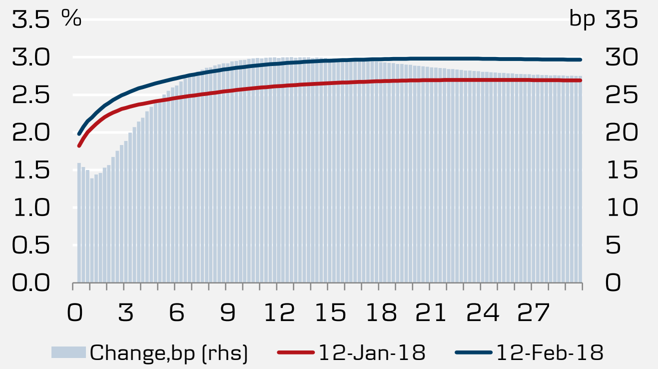
- Based on the last FOMC meeting, it seems as though the Fed has become more confident in its economic outlook (including its three Fed hikes a year strategy) and not more hawkish despite signs that inflation pressure may be building up. More interesting is whether the budget deal including higher government spending will make the Fed more hawkish, as both tax cuts and government spending are now stimulating the economy.
- We expect the Fed to hike three times this year, with the first hike coming at the March meeting. Markets more or less think the hiking cycle will finish by the end of 2018 or early in 2019, as only one additional hike is priced for 2019. We disagree and think the hiking cycle has a little further to go and still see at least two further hikes in 2019, which would bring the Fed funds rate to the longer run dot of 2.75%. The question is whether the Fed wants to overshoot it, if it thinks the economy is running too fast. This might be the case with more expansionary fiscal policy in a situation where the output gap is nearly closed.
- We still see a case for a Fed repricing in 2019, pushing 2Y yields higher. We continue to expect a flattening of the curve for the 2Y10Y on a 12-month horizon. However, we now see the 10Y US treasury yield at 3.30% (previously 2.90%), as we see a further repricing of the US term premium given the risk of higher interest rate volatility.

USD forecasts summary

12/02/2018		--- Forecast ---			--- Fcst vs Fwd in bp ---		
USD	Spot	+3m	+6m	+12m	+3m	+6m	+12m
			Money market				
Fed Funds	1.50	1.75	2.00	2.25	-	-	-
3M	1.82	2.10	2.17	2.42	-4	-9	+4
			Government bonds				
2-year	2.08	2.25	2.40	2.65	-	-	-
5-year	2.56	2.70	2.80	3.05	-	-	-
10-year	2.86	3.00	3.10	3.30	-	-	-
			Swap rates				
2-year	2.36	2.50	2.65	2.90	+3	+11	+23
5-year	2.65	2.80	2.90	3.15	+9	+14	+32
10-year	2.87	3.00	3.10	3.30	+10	+17	+32

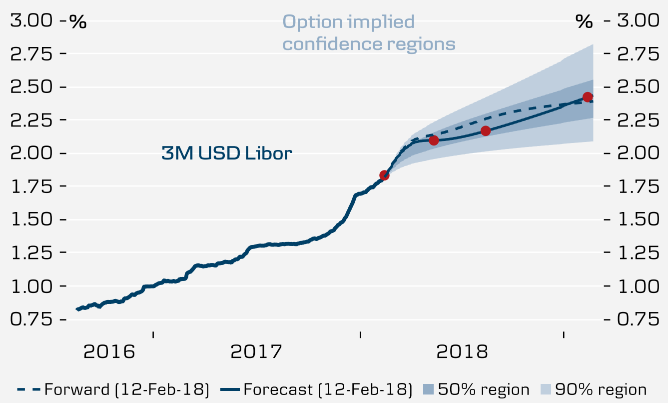
Source: Danske Bank

USD swap curve – one-month change



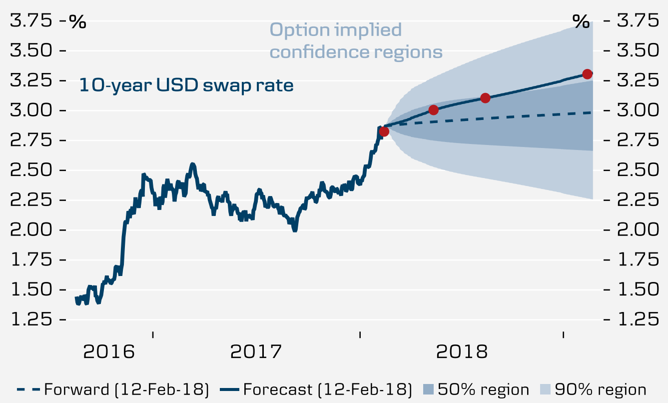
Source: Danske Bank

3M USD Libor rates



Source: Macrobond Financial, Danske Bank

10Y USD swap rates



Source: Macrobond Financial, Danske Bank

UK forecasts

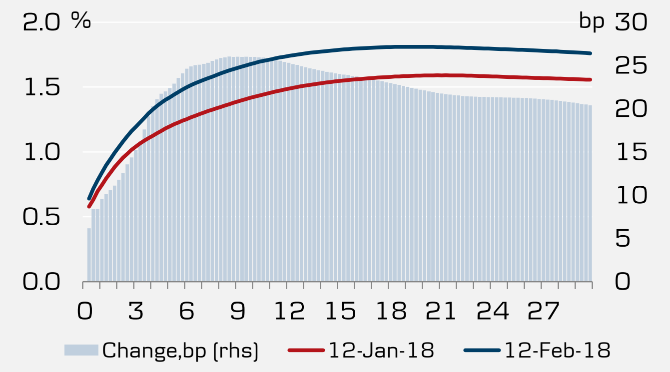
- Based on the hawkish signal from the Bank of England's (BoE) 8 February MPC meeting we now expect the bank to hike the Bank Rate to 0.75% as early as May (previously February 2019). As this seems like the beginning of a hiking cycle, we expect another BoE hike to follow in November, taking the Bank Rate to 1.00% by the end of 2018.
- The BoE has previously said it would not start unwinding its balance sheet before the Bank Rate reached 2.0% so 'quantitative tightening' in the UK is likely to be more a 2019 story than a theme for this year.
- The market is now pricing in 72% probability of a rate hike in May (18bp priced), while a full 25bp rate hike is priced in August. While we now expect the BoE to hike in May, we think the market's pricing is a bit too hawkish. There is still a long time until the May meeting and many important key figures to be released before then: hence, we see little room for higher rates in the coming month.
- Further out, the market prices in much less than a 'two hikes per year hiking cycle', so we expect the UK money-market curve to steepen gradually. We have raised our yield forecast higher across the curve and with the BoE now expected to lift the front end much faster, we look for a gradual flattening of the 2-10 and 5-10 yield curves. We now forecast yields on 2Y gilt at 1.30% in 12 months (up from 0.75%) and target yields on 10Y gilts at 2.10%.

UK forecasts summary

12/02/2018		--- Prognose ---			Afvigelse fra forward i bp		
GBP	Spot	+3m	+6m	+12m	+3m	+6m	+12m
				Pengemarked			
Base rate	0.50	0.75	0.75	1.00	-	-	-
3M	0.54	0.78	0.79	1.04	+8	-4	+0
				Statsobligationer			
2-årig	0.70	0.90	1.00	1.30	+2	+6	+22
5-årig	1.11	1.30	1.40	1.70	+2	+6	+27
10-årig	1.62	1.75	1.85	2.10	+2	+7	+23
				Swaprenter			
2-årig	1.00	1.20	1.30	1.60	+10	+10	+25
5-årig	1.41	1.60	1.70	2.00	+13	+17	+37
10-årig	1.68	1.80	1.90	2.15	+8	+14	+33

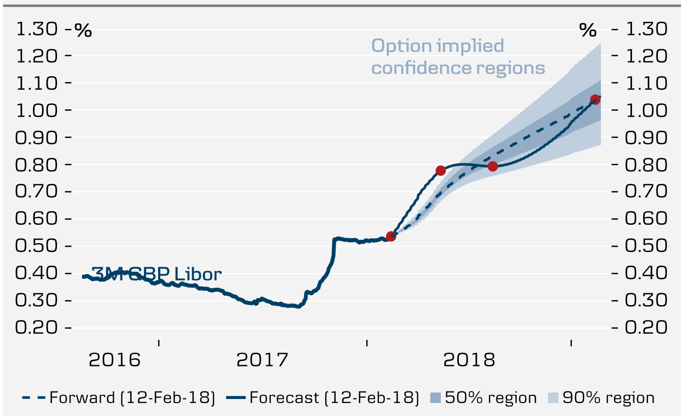
Source: Danske Bank

UK swap curve – one-month change



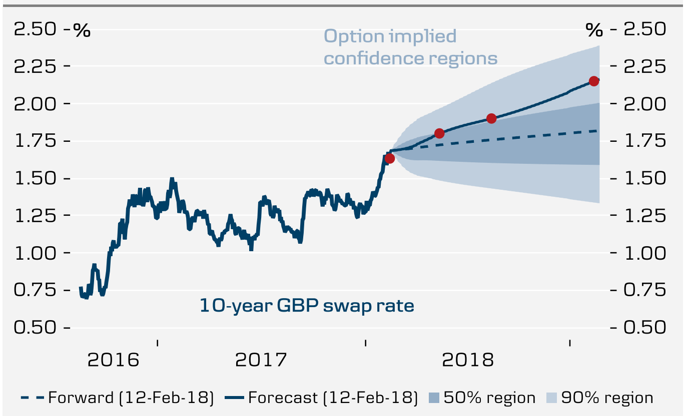
Source: Danske Bank

3M GBP Libor rates



Source: Macrobond Financial, Danske Bank

10Y UK swap rates



Source: Macrobond Financial, Danske Bank

Denmark forecasts

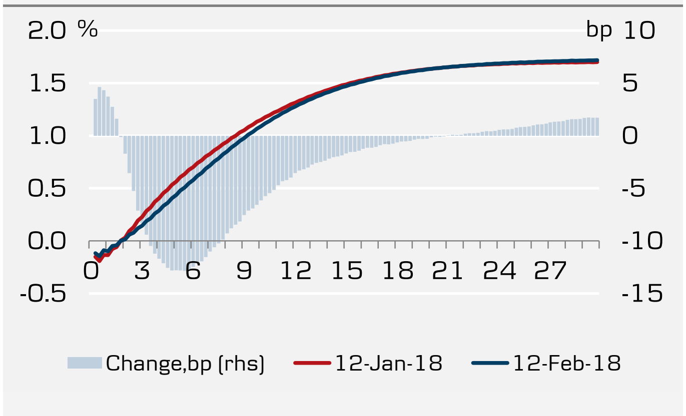
- We do not expect rate changes from the Danish central bank over the next 12 months. If anything, we could see the central bank intervening in the market to weaken the DKK, as fundamentals such as the significant current account surplus still tend to strengthen the DKK. The 3M Cibor-Euribor tightened in 2017. High liquidity in the money market is dragging Cita rates lower and Cibor fixings down. We expect DKK fixings to remain at the current level or fall to a slightly lower level for the time being. In 2017, we also saw that DKK swap rates continued to tighten versus EUR swap rates – 10Y and 5Y5Y spreads in particular have tightened.
- However, in 2018, the developments from 2017 have reversed somewhat. Underperformance for Danish mortgage bonds as global yields have moved higher has spilled over to both the Danish swap and government bond market and we have seen a spread widening versus German government bonds and EUR swaps. There is a risk the widening will continue if global yields move significantly higher over a short time. However, if yields move higher in an orderly fashion, we would expect spreads to stabilise around the current level or slightly lower.

DKK forecasts summary

12/02/2018		--- Forecast ---			--- Fcst vs Fwd in bp ---		
DKK	Spot	+3m	+6m	+12m	+3m	+6m	+12m
			Money market				
CD	-0.65	-0.65	-0.65	-0.65	-	-	-
Repo	0.05	0.05	0.05	0.05	-	-	-
3M	-0.30	-0.30	-0.30	-0.30	-2	-4	-15
6M	-0.15	-0.15	-0.15	-0.12	-6	-9	-15
			Government bonds				
2-year	-0.34	-0.35	-0.30	-0.10	-	-	-
5-year	0.28	0.40	0.45	0.55	-	-	-
10-year	0.84	0.95	1.05	1.25	-	-	-
			Swap rates				
2-year	0.01	0.10	0.15	0.35	+1	-3	-6
5-year	0.66	0.90	0.95	1.05	+16	+11	+2
10-year	1.34	1.45	1.60	1.80	+5	+13	+21

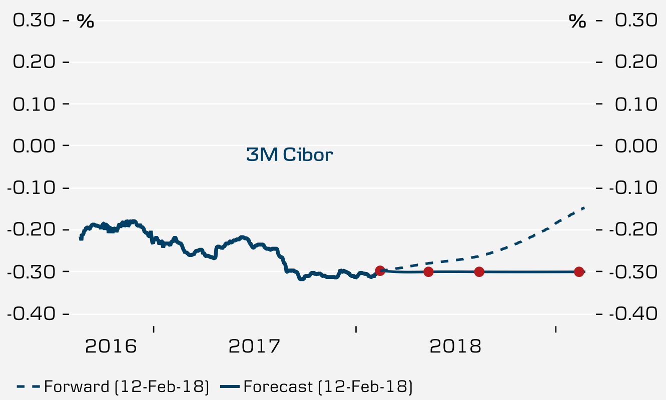
Source: Danske Bank

DKK swap curve – one-month change



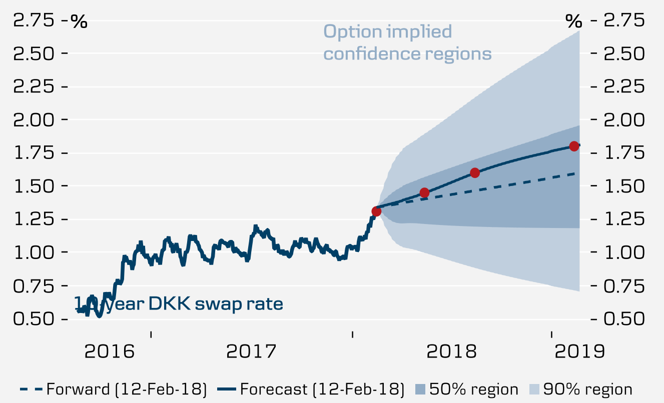
Source: Danske Bank

3M Cibor rate



Source: Macrobond Financial, Danske Bank

10Y DKK swap rates



Source: Macrobond Financial, Danske Bank

Sweden forecasts

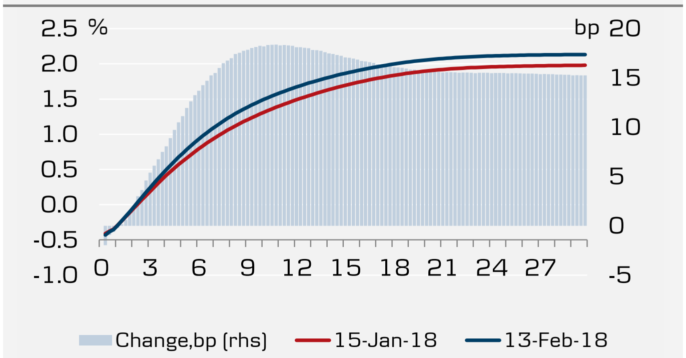
- The Swedish yield curve out to five years has steepened over the past few weeks, as the market has become more convinced about a more hawkish Riksbank. A similar move has been seen in many other bond markets. The next Riksbank policy announcement is due on Wednesday 15 February. In our view, the most probable outcome is that there will be no meaningful changes to either the projected rate path (with gradual hikes starting in Q2 next year) or the underlying story. However, the risk in our minds is asymmetric on the soft side. First, the Riksbank's inflation forecast with a continual rise in core inflation throughout this year is at odds with most other forecasts, including ours. Second, it is apparent, at least to us, that activity in the housing market (construction volumes) will decline along a steeper path in the coming couple of years and, from this perspective, the Riksbank is too optimistic on the growth outlook.
- While we see the yield curve out to two years as overly steep, the opposite is the case beyond five years. Term premiums are too low in longer yields. There are fundamental reasons for this. One factor is the Riksbank's bond purchases, which we expect to prevail for another year. Another is very low global longer term rates. However, in this case, there are good reasons to expect a reversal, not least looking at US rates, considering possibly higher inflation, increasing budget deficits and the Fed's gradual balance sheet reduction. Normalisation of term premiums in the US curve typically triggers a similar effect in Sweden.

SEK forecasts summary

13/02/2018	--- Forecast ---				--- Fcst vs Fwd in bp ---		
SEK	Spot	+3m	+6m	+12m	+3m	+6m	+12m
				Money market			
Repo	-0.50	-0.50	-0.50	-0.50	-	-	-
3M	-0.47	-0.45	-0.40	-0.40	-5	-11	-35
				Government bonds			
2-year	-0.34	-0.30	-0.30	-0.30	-	-	-
5-year	0.32	0.30	0.25	0.20	-	-	-
10-year	0.94	1.10	1.20	1.30	-	-	-
				Swap rates			
2-year	-0.10	0.00	0.00	0.05	-2	-16	-39
5-year	0.67	0.65	0.60	0.60	-14	-31	-54
10-year	1.47	1.60	1.70	1.70	+5	+8	-7

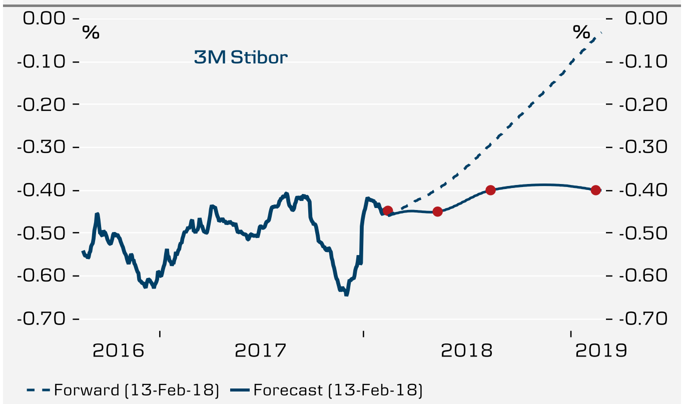
Source: Danske Bank

SEK swap curve – one-month change



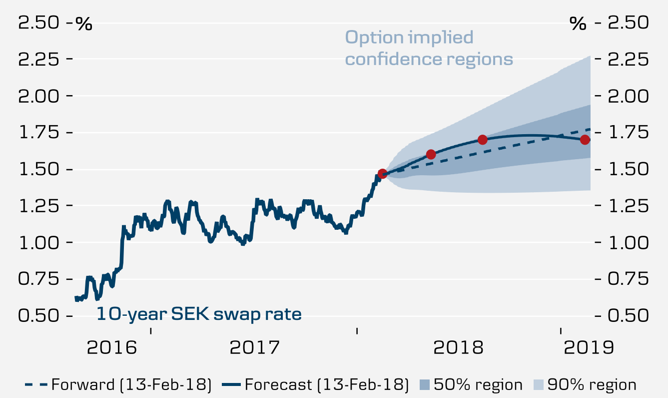
Source: Danske Bank

3M Stibor rate



Source: Macrobond Financial, Danske Bank

10Y SEK swap rates



Source: Macrobond Financial, Danske Bank

Norway forecasts

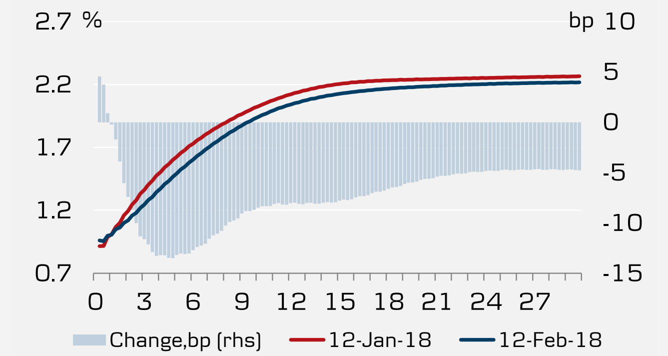
- Norges Bank turned more hawkish in the 14 December Monetary Policy Report 4/17. It moved the first hike in the sight deposit rate from mid-2019 to the end of 2018. A weak NOK is a key factor for the upward revision, while the uncertainty related to the effects of monetary policy implies that it will follow ‘a cautious approach in the interest rate setting’. We expect the first hike in December 2018. However, the case for an even earlier hike has strengthened lately.
- Recent data confirm the recovery case for the Norwegian economy. Q4 mainland GDP grew 0.6% q/q, i.e. in line with growth in the rest of 2017. Growth is broad based and only high import growth keeps domestic production from growing at a higher rate. Core CPI for January was as low as 1.1%, due partly to the volatile transport sector.
- Mortgage market regulations, introduced early in 2017, seem to be cooling the housing market. However, recent months’ revised data indicate some stabilisation. We do not expect the recent slowdown in the housing market to have any significant effect on monetary policy, as so far it is in line with Norges Bank’s expectations. We expect 5Y and 10Y yields to be stable versus peers in 2018, as the Norwegian economy is improving slowly. However, on a 12M horizon, we could see a modest widening versus peers.

NOK forecasts summary

12/02/2018		--- Forecast ---			--- Fcst vs Fwd in bp ---		
NOK	Spot	+3m	+6m	+12m	+3m	+6m	+12m
				Money market			
Deposit	0.50	0.50	0.50	0.75	-	-	-
3M	0.87	0.80	0.80	1.10	-14	-17	-5
				Government bonds			
2-year	0.58	0.65	0.80	1.10	-	-	-
5-year	1.43	1.55	1.60	1.80	-	-	-
10-year	1.89	2.05	2.20	2.45	-	-	-
				Swap rates			
2-year	1.26	1.30	1.45	1.75	-5	-	+8
5-year	1.80	1.95	2.00	2.20	+7	+4	+8
10-year	2.27	2.45	2.60	2.85	+13	+23	+39

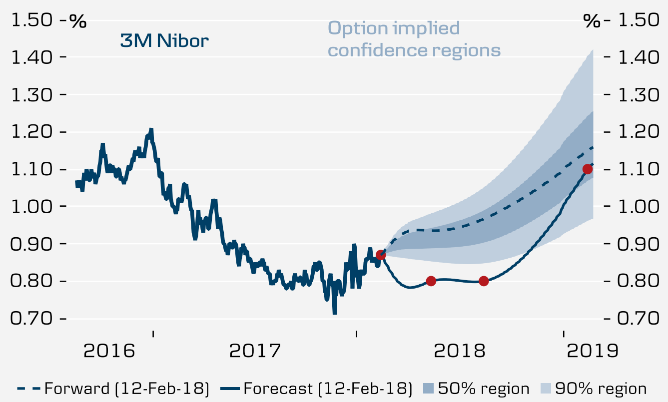
Source: Danske Bank

NOK swap curve – one-month change



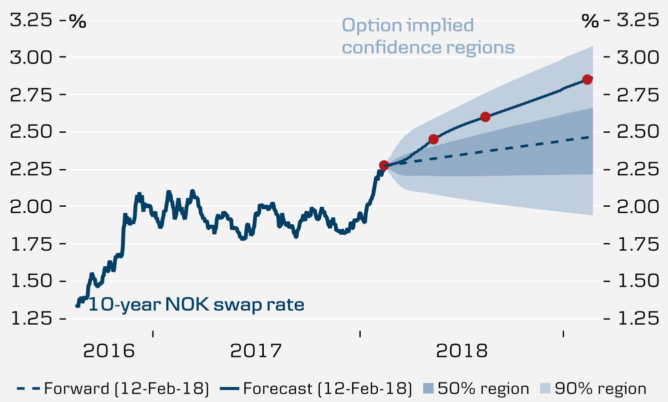
Source: Danske Bank

3M Nibor rate



Source: Macrobond Financial, Danske Bank

10Y NOK swap rates



Source: Macrobond Financial, Danske Bank

Forecasts

Forecasts

	Horizon	Policy rate	3m xlbor	2-yr swap	5-yr swap	10-yr swap	2-yr gov	5-yr gov	10-yr gov
USD	Spot	**1.50**	**1.82**	**2.36**	**2.65**	**2.87**	**2.08**	**2.56**	**2.86**
	+3m	1.75	2.10	2.50	2.80	3.00	2.25	2.70	3.00
	+6m	2.00	2.17	2.65	2.90	3.10	2.40	2.80	3.10
	+12m	2.25	2.42	2.90	3.15	3.30	2.65	3.05	3.30
EUR*	Spot	**-0.40**	**-0.33**	**-0.13**	**0.49**	**1.15**	**-0.57**	**0.10**	**0.75**
	+3m	-0.40	-0.33	-0.05	0.75	1.30	-0.55	0.25	0.90
	+6m	-0.40	-0.33	0.00	0.80	1.45	-0.50	0.30	1.00
	+12m	-0.40	-0.33	0.20	0.90	1.65	-0.30	0.40	1.20
GBP	Spot	**0.50**	**0.54**	**1.00**	**1.41**	**1.68**	**0.70**	**1.11**	**1.62**
	+3m	0.75	0.78	1.20	1.60	1.80	0.90	1.30	1.75
	+6m	0.75	0.79	1.30	1.70	1.90	1.00	1.40	1.85
	+12m	1.00	1.04	1.60	2.00	2.15	1.30	1.70	2.10
DKK	Spot	**-0.65**	**-0.30**	**0.01**	**0.66**	**1.34**	**-0.34**	**0.28**	**0.84**
	+3m	-0.65	-0.30	0.10	0.90	1.45	-0.35	0.40	0.95
	+6m	-0.65	-0.30	0.15	0.95	1.60	-0.30	0.45	1.05
	+12m	-0.65	-0.30	0.35	1.05	1.80	-0.10	0.55	1.25
SEK	Spot	**-0.50**	**-0.46**	**-0.10**	**0.67**	**1.45**	**-0.34**	**0.33**	**0.94**
	+3m	-0.50	-0.45	0.00	0.70	1.60	-0.30	0.35	1.10
	+6m	-0.50	-0.40	0.00	0.60	1.70	-0.30	0.25	1.20
	+12m	-0.50	-0.40	0.05	0.60	1.70	-0.30	0.20	1.30
NOK	Spot	**0.50**	**0.87**	**1.26**	**1.80**	**2.27**	**0.58**	**1.43**	**1.89**
	+3m	0.50	0.80	1.30	1.95	2.45	0.65	1.55	2.05
	+6m	0.50	0.80	1.45	2.00	2.60	0.80	1.60	2.20
	+12m	0.75	1.10	1.75	2.20	2.85	1.10	1.80	2.45

** German government bonds are used, EUR swap rates are used*

Source: Danske Bank

Disclosures

This research report has been prepared by Danske Bank A/S ('Danske Bank'). The authors of this research report are Arne Lohmann Rasmussen, Chief Analyst, and Morten Ehlers, Assistant Analyst.

Analyst certification

Each research analyst responsible for the content of this research report certifies that the views expressed in the research report accurately reflect the research analyst's personal view about the financial instruments and issuers covered by the research report. Each responsible research analyst further certifies that no part of the compensation of the research analyst was, is or will be, directly or indirectly, related to the specific recommendations expressed in the research report.

Regulation

Danske Bank is authorised and subject to regulation by the Danish Financial Supervisory Authority and is subject to the rules and regulation of the relevant regulators in all other jurisdictions where it conducts business. Danske Bank is subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority (UK). Details on the extent of the regulation by the Financial Conduct Authority and the Prudential Regulation Authority are available from Danske Bank on request.

Danske Bank's research reports are prepared in accordance with the recommendations of the Danish Securities Dealers Association.

Conflicts of interest

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 Danske Bank's research policies. Employees within Danske Bank's Research Departments have been instructed that any request that might impair the objectivity and independence of research shall be referred to Research Management and the Compliance Department. Danske Bank's Research Departments are organised independently from, and do not report to, other business areas within Danske Bank.

Research analysts are remunerated in part based on the overall 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.

Financial models and/or methodology used in this research report

Calculations and presentations in this research report are based on standard econometric tools and methodology as well as publicly available statistics for each individual security, issuer and/or country. Documentation can be obtained from the authors on request.

Risk warning

Major risks connected with recommendations or opinions in this research report, including as sensitivity analysis of relevant assumptions, are stated throughout the text.

Expected updates

Monthly.

Date of first publication

See the front page of this research report for the date of first publication.

General disclaimer

This research report has been prepared by Danske Bank (a division of Danske Bank A/S). It is provided for informational purposes only. It does not constitute or form part of, and shall under no circumstances be considered as, an offer to sell or a solicitation of an offer to purchase or sell any relevant financial instruments (i.e. financial instruments mentioned herein or other financial instruments of any issuer mentioned herein and/or options, warrants, rights or other interests with respect to any such financial instruments) ('Relevant Financial Instruments').

The research report has been prepared independently and solely on the basis of publicly available information that Danske Bank considers to be reliable. While 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 Danske Bank, its affiliates and subsidiaries accept no liability whatsoever for any direct or consequential loss, including without limitation any loss of profits, arising from reliance on this research report.

The opinions expressed herein are the opinions of the research analysts responsible for the research report and reflect their judgement as of the date hereof. These opinions are subject to change and Danske Bank does not undertake to notify any recipient of this research report of any such change nor of any other changes related to the information provided herein.

This research report is not intended for, and may not be redistributed to, retail customers in the United Kingdom or the United States.

This research report is protected by copyright and is intended solely for the designated addressee. It may not be reproduced or distributed, in whole or in part, by any recipient for any purpose without Danske Bank's prior written consent.

Disclaimer related to distribution in the United States

This research report was created by Danske Bank A/S and is distributed in the United States by Danske Markets Inc., a U.S. registered broker-dealer and subsidiary of Danske Bank A/A, pursuant to SEC Rule 15a-6 and related interpretations issued by the U.S. Securities and Exchange Commission. The research report is intended for distribution in the United States solely to 'U.S. institutional investors' as defined in SEC Rule 15a-6. Danske Markets Inc. accepts responsibility for this research report in connection with distribution in the United States solely to 'U.S. institutional investors'.

Danske Bank is not subject to U.S. rules with regard to the preparation of research reports and the independence of research analysts. In addition, the research analysts of Danske Bank who have prepared this research report are not registered or qualified as research analysts with the NYSE or FINRA but satisfy the applicable requirements of a non-U.S. jurisdiction.

Any U.S. investor recipient of this research report who wishes to purchase or sell any Relevant Financial Instrument may do so only by contacting Danske Markets Inc. directly and should be aware that investing in non-U.S. financial instruments may entail certain risks. Financial instruments of non-U.S. issuers may not be registered with the U.S. Securities and Exchange Commission and may not be subject to the reporting and auditing standards of the U.S. Securities and Exchange Commission.

Report completed: 13 February 2018, 15:37 CET
Report first disseminated: 13 January 2018, 16:20 CET