

# Volatility: Low, yet up for a change

Nordea Research, 26 October 2016

*Volatility has declined during the past month, yet key events lurk on the horizon. In particular certain segments of the EUR vol grid have declined markedly. We review three key events to the vol market ahead of year end and recommend a 3M10Y atmf payer swaption.*

## Volatility hovering just above all time low

In the past week we have noted a significant drop in volatility, in particular in the swaption volatilities with short expiries (chart 1). As a consequence of declining volatilities, volatility positions are surprisingly cheap ahead of focal events in the near future. The general trend has been that volatilities in the top right corner of the volatility grid have declined during the previous weeks (table 1, red cells). Z-scores in bracket also point to relative cheapness of volatility when compared with the previous 90 days.

**Chart 1: Implied bpVol on EUR swaptions**



Source: Bloomberg (SMKO)

## The trade – 3m10y atmf swaption

We find the current pricing of the top right corner of the EUR vol grid to be very cheap, reflecting the move during the past week (table 1). As we view the risk to be skewed to the upside we particularly like the 3m10y payer swaption (ATMF strike of 0.44). The pricing suggests that the 10Y swap only needs to sell off by

around 9bp for being in the money. Such a “minor“ move could be caused even without an isolated driver. The strong move on Bloomberg’s ECB taper story caused a surprisingly stark selloff of 10bp which continued another 5bp during the following days just shows that the markets can react in an irrational fashion with low liquidity, despite no new info.

Table 1: Vol surface. 1w bpVol change and 90d z-scores in brackets

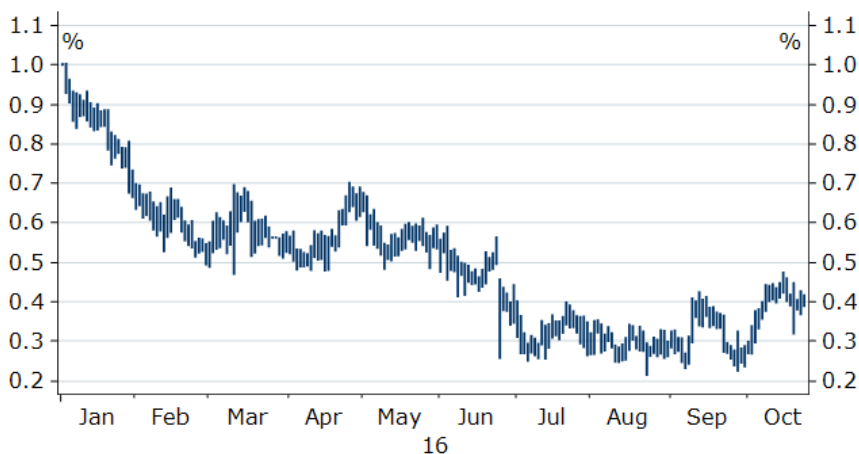
		Tenor						
		1Y	2Y	5Y	7Y	10Y	20Y	30Y
Expiry	1M	-1.4 (-1.1)	-1.3 (-1.1)	-3.3 (-1.5)	-3.9 (-1.5)	-4.0 (-1.3)	-4.1 (-1.2)	-4.4 (-1.0)
	3M	-0.4 (-0.8)	0.0 (-0.8)	-1.5 (-1.2)	-1.7 (-1.2)	-1.2 (-1.0)	-0.5 (-0.9)	-0.5 (-0.7)
	6M	0.2 (-0.3)	0.7 (-0.4)	-0.4 (-0.4)	-0.5 (-0.5)	-0.4 (-0.7)	-0.1 (-0.7)	-0.4 (-0.8)
	1Y	1.5 (0.2)	1.7 (-0.3)	0.8 (-0.3)	0.4 (-0.4)	0.2 (-0.7)	0.4 (-0.8)	0.4 (-1.0)
	2Y	1.2 (-0.3)	1.0 (-0.5)	0.9 (-0.5)	0.7 (-0.6)	0.5 (-0.7)	0.9 (-0.6)	0.9 (-0.9)
	3Y	1.3 (-0.6)	1.3 (-0.5)	0.9 (-0.7)	0.7 (-0.8)	0.8 (-0.8)	0.9 (-0.6)	1.0 (-0.8)
	5Y	0.3 (-0.9)	0.6 (-0.7)	0.8 (-0.9)	1.0 (-0.9)	1.2 (-0.9)	1.3 (-0.5)	1.4 (-0.6)
	7Y	0.9 (-0.5)	0.9 (-0.3)	0.9 (-0.9)	1.0 (-1.0)	1.3 (-0.8)	1.3 (-0.2)	1.2 (-0.2)
	10Y	1.2 (-0.4)	1.2 (-0.4)	0.9 (-0.7)	0.9 (-0.8)	1.0 (-0.8)	1.1 (0.0)	1.3 (0.1)
	20Y	1.1 (-0.4)	1.1 (-0.3)	0.9 (-0.6)	0.9 (-0.8)	1.0 (-0.9)	1.1 (-0.3)	1.1 (-0.2)
	30Y	1.0 (-0.6)	1.0 (-0.4)	0.8 (-0.7)	0.7 (-0.8)	0.8 (-0.9)	0.8 (-0.5)	0.9 (-0.4)

### The background

Volatility in the euro rates markets declined during the past weeks. In fact, on Friday the 10Y EUR swap rate traded in a very narrow intraday band of less than 3bp (Chart 2). This has only happened three times earlier this year.

Historical low volatility is likely to rebound higher as several key events in the near future can stir up volatility until year end and possibly into early January.

**Chart 2: Intraday trading range on EUR 10Y swap**



Source: Nordea Markets and Bloomberg

**We therefore find that there are three distinct triggers that could spur significant volatility:**

*1) POTUS - The 8 November US presidential election (8 Nov):*

The current polls point to a Clinton win in the upcoming US election although a Trump win would spike volatility. We believe it is too soon to call the election as lessons from the Brexit vote from late June showed that polls are not always conclusive. Note that in case of a Trump win, receiver swaption positions would be preferred, unlike the position proposed above.

*2) ECB meeting - The monetary policy meetings in December by the ECB (8 Dec):*

There is no clear consensus on the upcoming changes from the ECB's monetary policy meeting in December. A recent Bloomberg poll from prior to the ECB meeting last week among economist only forms a consensus on an extension of the asset purchase programme (Chart 3). Last week's meeting did not provide new evidence of changes to the ECB programme. Note that in the 17 October survey, around 60% of economists expects a removal of the deposit floor restriction (not shown in chart).

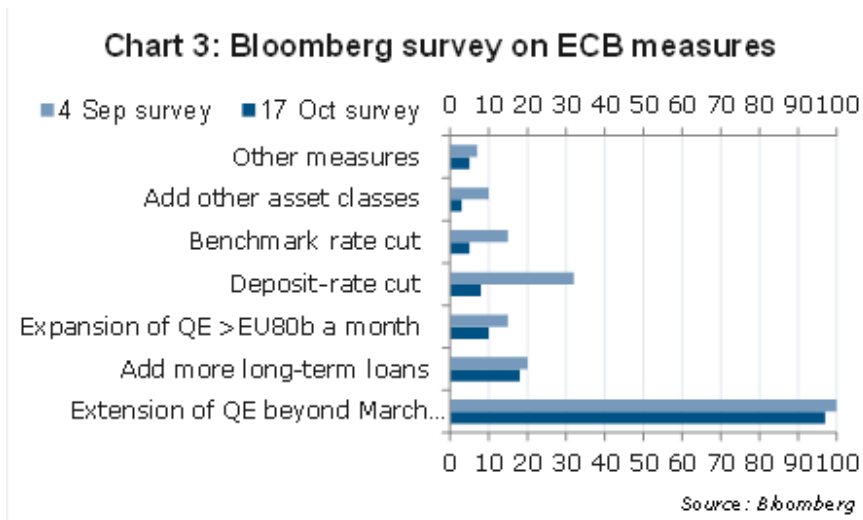
*3) FOMC meeting - The Fed's equivalent 14 Dec, table below. On top of that, year-end effects could also play an important role for volatility (14 Dec):*

The final focal event of the year is the FOMC meeting on 14 December. Fed fund futures point to around 70% probability of a hike, but the focal point will also be the communication of the central bank. In particular the dot plot which has recorded significant revisions during the previous meetings.

Date	Event
02-Nov-16	FOMC meeting
08-Nov-16	US presidential election
04-Dec-16	Italian constitutional referendum
08-Dec-16	ECB meeting
14-Dec-16	FOMC meeting

## **Year-end effects**

Despite the obvious triggers above, recall the year-end effects approaching in a low liquidity market. As liquidity has dried up, quotes could likely be somewhat wider than historical patterns. History shows that volatility tends to drop in the final month of the year compared to the previous 11 months, but as we have crucial ECB and FOMC meetings one should be cautious to rely on these results.



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Recommendation	Distribution	Definition
Buy	16.3%	Recommendation to buy
Sell	8.7%	Recommendation to sell
Hold	2.9%	Recommendation to hold
Other	72.1%	Recommendations that include buying and/or selling more than one financial instrument

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## Recommendation changes in the past 12 months

Author(s)	Date issued	ISIN	Recommendation	Entry price	Price target	Valid until
Piet Philip Christiansen	01/07/2016		Buy 5y5y EUR vs. Sell 5y5y USD	92	115	
Piet Philip Christiansen	13/07/2016		Buy EUR 5y5y swap vs. EUR 15y5y swap	38	64	
Piet Philip Christiansen	18/07/2016		Buy EUR 5Y3Y swap vs. EUR 15Y10Y swap	49	80	
Piet Philip Christiansen	29/07/2016		Sell EUR 2y5y 0.40% payer swaption Buy EUR 2y30y 0.90% payer swaption Sell EUR 2y30y 1.32% payer swaption			
Piet Philip Christiansen	09/08/2016	FI4000197959, FR0013131877	Buy: France 5/26 at 0.151% Sell: Finland 4/26at 0.033% Spread 11.8bp	11.8	6	
Piet Philip Christiansen	18/08/2016	FR0013131877, BE0000337460	Buy: France 5/26 at 0.151% Sell: Belgium 6/26 at 0.133%	-1.8	2	
Piet Philip Christiansen	24/08/2016		Pay 2y1y EONIA			
Piet Philip Christiansen	26/08/2016		Sell 1Y10Y 0.1% receiver and buy 1Y10Y 0.5% 0.775% payer spread (ref atm: 0.408%)			
Piet Philip Christiansen	16/09/2016		Sell SGBi 3109 BEI at 1.44% Buy DBRi 0.5% 26 BEI 0.77% Ref: BEI spread at 0.67%			
Piet Philip Christiansen	21/09/2016	Receive 1Y2Y EURSEK	Buy	24.5		
Piet Philip Christiansen	07/10/2016		Pay 5y5y USD swap vs. receive 5y5y EUR swap	104	120	
Piet Philip Christiansen	26/10/2016		Payer ATMF swaption on upcoming events until year end			
Piet Philip Christiansen	26/10/2016		Payer ATMF swaption, in case of a Trump win in US presidential election			