



Strategy Research Sweden: On the radar

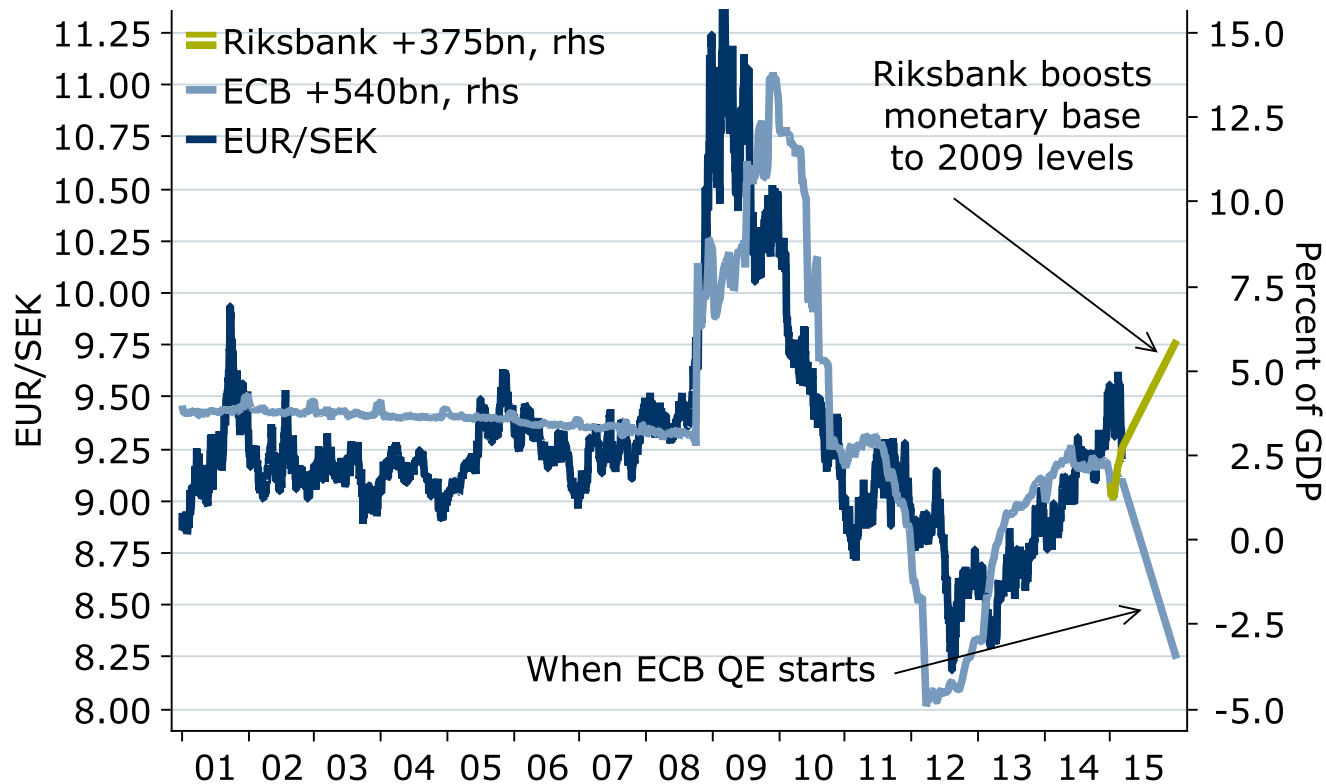
This publication is a summary of interesting market related topics and observations that have been covered and discussed within the Strategy Research Sweden group, but not necessarily yet formalized in form of a specific view or trading idea...

Themes in this edition:

- ***EURSEK:*** game over for the Riksbank?
- ***SEK rates:*** smells like a QE test balloon
- ***SEK macro:*** an energy boost on the upside
- ***SEK rates:*** breaking down break-evens
- ***SEK rates:*** a quadratic curiosity in liability management
- ***SEK rate vol:*** payer steepener 1y5y/1y10y

9th March 2015

Chart of the week: smells like QE spirit...



IF ECB's QE sends EURSEK significantly lower, Riksbank may feel the need to respond with more bond buying...

Trades on the radar

Strategy statement on direction and curve: no reversal of monetary policy in sight, rather the opposite. Near-term value in 0-5y. Higher rates 5y+ in the pipe line for H2 on back of improved business cycle. We prefer 5/10y steepeners over flatteners.

ASW – extend wideners from 1047 to 1058. Impossible to nail down a “fair-value” for Swedish ASWs after Riksbank’s QE announcement. Liability managers’ natural paying interest in 7-10y segment, covered bond issuers natural receiving interest in 4-6y and real money investors preference for positive yielding bonds should mean that SGB 1058 ASW should have better potential than SGB 1047 ASW to widen from this juncture.

Municipals – go long versus govies. Municipals have not richened in the same way as govies, and is higher yielding alternative level 1 asset.

Inflation – extend from SGBi 3110 to 3102 or 3108. The new 4y linker bond SGBi 3110 looks rich on the curve. We see value in extending to longer tenors such as 3102.

Inflation – go for higher 5y5y real rate. Go short a proxy of the forward real rate through buying 3102 and selling any of the bonds SGBi 3108/3109/3104. Forwards price either too low trend growth or too stimulative monetary policy.

FX – go long 1m EURSEK straddle. Implied vol looks “cheap” relative realized after the big move in EURSEK after the GDP print. The dip in the EURSEK ATM term structure around the 1M tenor still stands out as low, given that it covers the Norges Bank meeting and that Riksbank has hinted intermeeting action is possible. Fair value of EURSEK given rates around 9.45 and around 9.60 if the Riksbank would cut to -25bps in April. Any rebound to these levels should push vols higher.

Rate volatility – SEK payer steepener 1y5y/1y10y. Reversal of monetary policy way off while volatility in risk-premias creates a wider probability space for 10y rates compared to 5y rates. Spike in volatility with 5y underlying may be exploited through selling payers while using the premium to buy payers with 10y underlying.

Previous edition (3rd March)

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Municipals – go long versus govies. Municipals have not richened in the same way as govies, and is higher yielding alternative level 1 asset. We do not exclude the possibility that an extension of the QE program may include municipals.

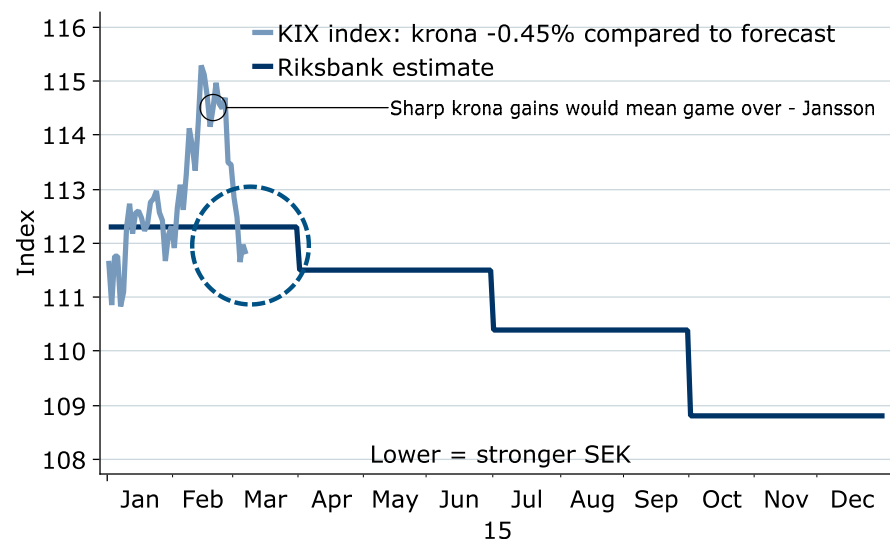
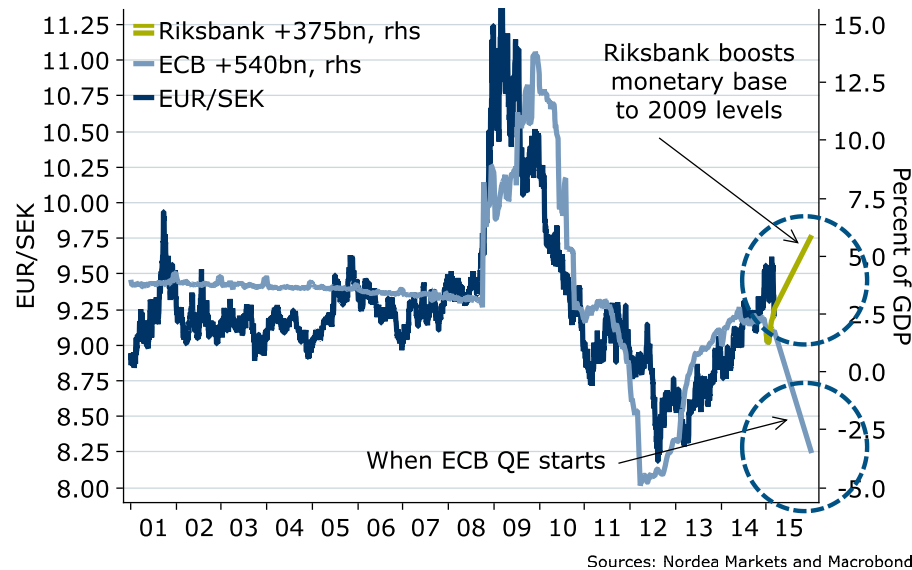
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EURSEK: game-over for the Riksbank?

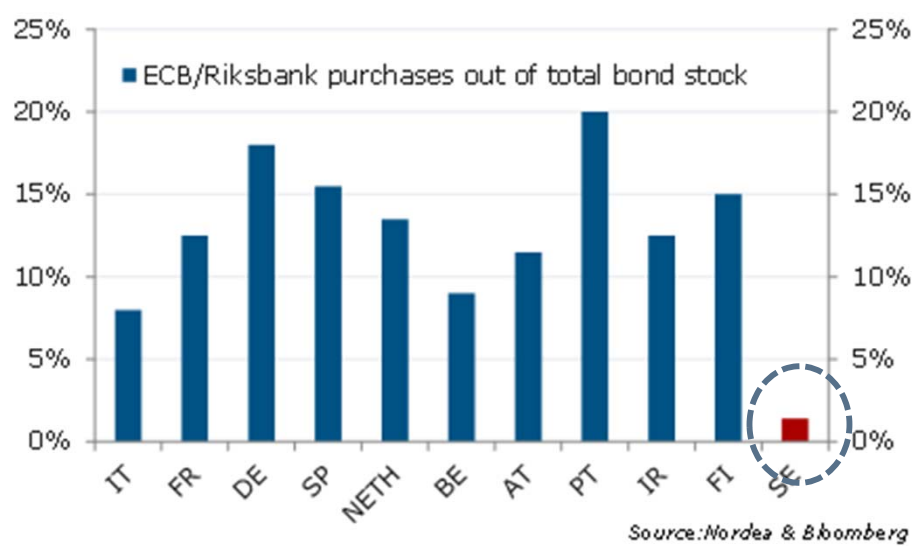
Riksbank worries ECB QE will prompt SEK strength. Indeed, ECB QE hints at EUR/SEK at 8.25. If this was to (start to) materialize, Riksbank would likely take further unconventional easing steps.



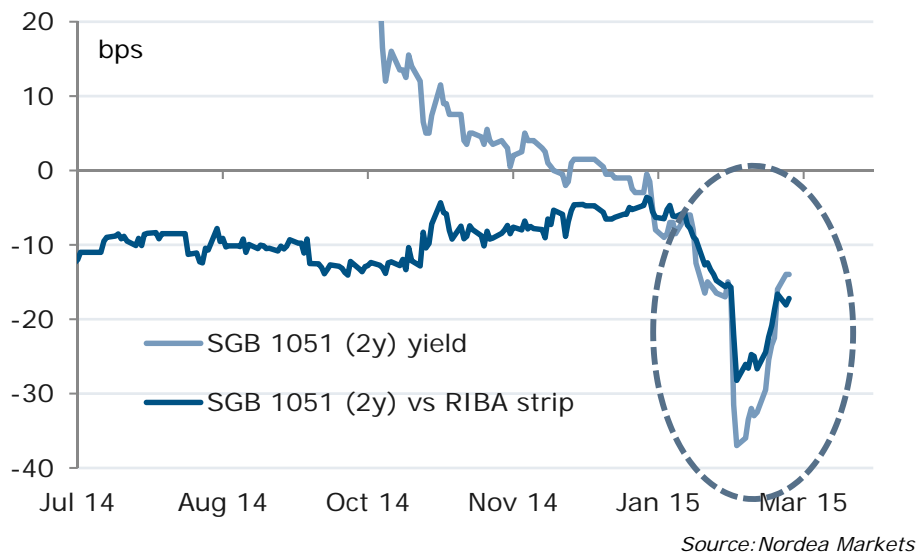
- The Riksbank was aggressive in February, cutting rates to -10bp, launching a QE program while warning it could make policy more expansionary even between its ordinary meetings
- **The Riksbank is worried** that ECB QE could prompt unwarranted SEK strength
- While you would think ECB QE would mostly be in the price by now, it could be argued it's hard to discount something no one fully understands
- Indeed, **EUR/SEK is hinted at 8.25 this year**, given ECB QE and no more Riksbank QE
- The Riksbank officially expects the krona to strengthen by 2.5% by Q4 (we'd venture that its *unofficial* forecast is weaker than that)
- **SEK would strengthen at least by 5%** in trade-weighted (KIX) terms if EUR/SEK plunges to 8.25
- **The Riksbank will counteract such FX strength**, via more QE, repo rate cuts or LTROs
- If the Riksbank was to expand the monetary base to 2009 levels, the "QE fair value" of EUR/SEK would rise 9.50 despite the ECB

SEK rates: quacks like a QE test balloon...

Riksbank's 10 bn QE was never framed as a test balloon; but if it looks like a duck, swims like a duck and quacks like a duck... An enlargement of the program before the April meeting is on the cards.



- The **Swedish government bond market has for long been considered too small for implementation of a meaningful QE program**. The risk of a bond squeeze, reduced functioning in the secondary market, misleading break-even inflation and stress in the pension sector have been some of the uncertainties.
- Naturally the decision by the Riksbank to launch a QE program into this market must have been preceded by some sort of risk assessment.
- Since it is very hard to have a firm view on the risk factors mentioned above, the **only prudent way to go about it may have been to first launch a test program and then study the impact. If deemed successful, the QE program may be scaled up according to the needs**. As showed in the chart to the left, the initial swift richening of bonds bought back has eased and auctions have run smoothly. No practical hurdles seems to be evident so far.
- The current program has many features that **remind of a test program**:
 - **Small size** (current QE: only amounts to 2 % of outstanding stock)
 - **Few occasions and front-loaded** in order to minimize damage if market would become dysfunctional (current QE: 3 reversed auctions, the whole program over in just 2 weeks. Last auction this week, 12th March)
 - **Concluded well ahead of events that may trigger need of enlargement**. (Current QE: finishes in early stage of ECB QE and ends around the release of next major inflation expectation survey, 11th March).
- Since the QE program has a design that makes it look like a “test balloon” and the Riksbank explicitly has stated that it may adjust policy intermeeting, an enlargement of the program seems to be on the cards (remember that the fixed-rate repos back in 2009 was launched in three tranches). **The 10 bn in bond buying could very well be expanded to 20 bn before the April meeting.**

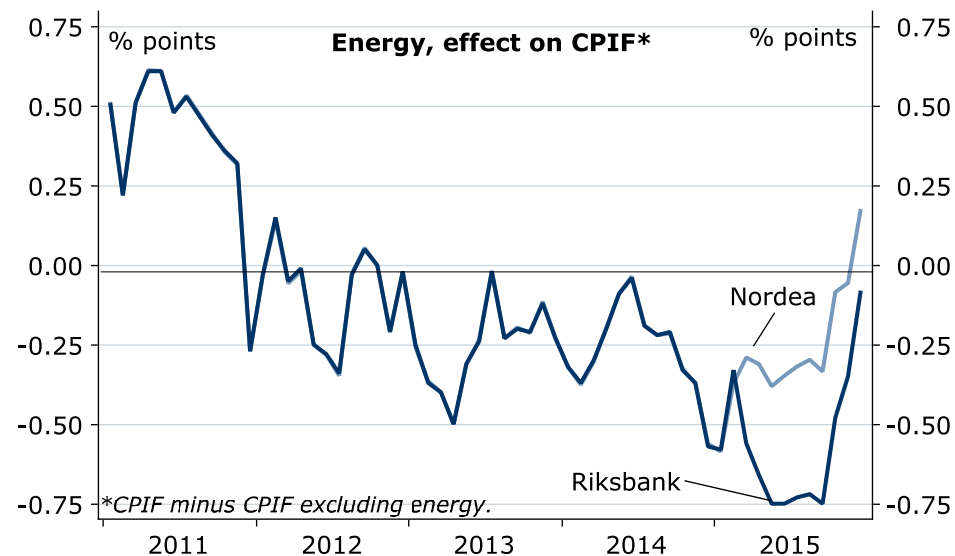


SEK macro: near-term CPI: an energy boost on the upside

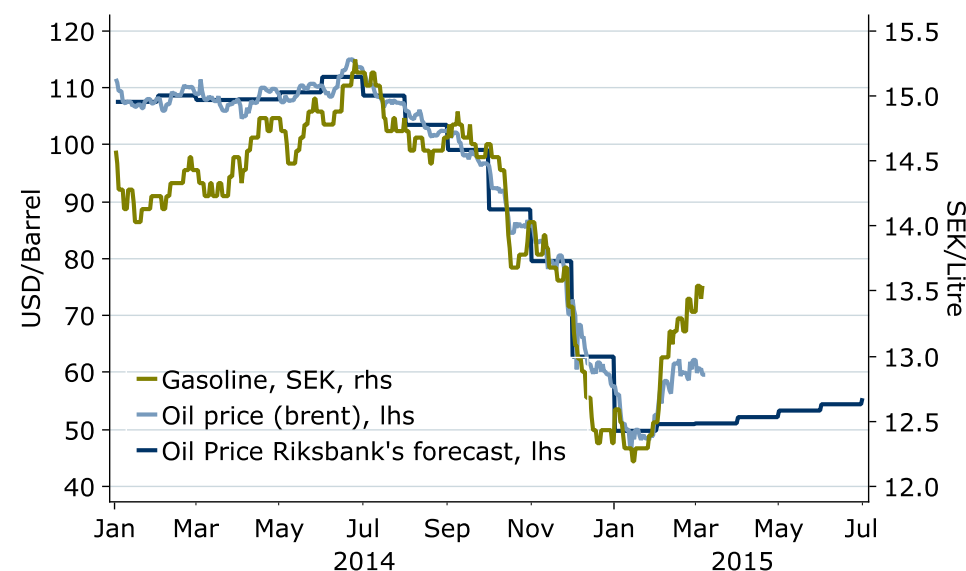
Contributed by our Chief Macro Analyst Torbjörn Isaksson

- Although this week's CPI release for February should be in-line with Riksbank's forecast (read more in our macro comment: ["Swedish CPI preview: fuel prices rebounding"](#), 6th March), the next couple of months are of more interest.
- Fuel prices rose in February and have continued to rise in March. They lifted the CPI by somewhat more than 0.2% point in February, and staying at today's level they will add additional 0.1% point in March. This is in turn an important reason to why we see CPIF inflation at 1.1% in March, 0.25% points above the Riksbank's call.
- Riksbank's forecasts on oil and energy versus the recent development are shown in the charts to the right.

	Weight, %	Change, % m/m February 2015E	Contribution m/m, % points:	
			Feb. 2015E	Feb. 2014
Food	13.7	0.7	0.09	0.09
Clothing and footwear	5.2	3.3	0.17	0.20
Rents	11.5	0.2	0.02	0.03
Mortgage rates	4.8	-1.4	-0.06	-0.07
Fuel, heating oil	4.1	5.2	0.21	0.04
Electricity	4.3	-0.2	-0.01	-0.05
Other goods and services	56.5	0.3	0.18	0.18
CPI, total	100.0	0.60	0.60	0.42



Källor: Nordea Markets och Macrobond



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SEK rates: breaking down break-evens

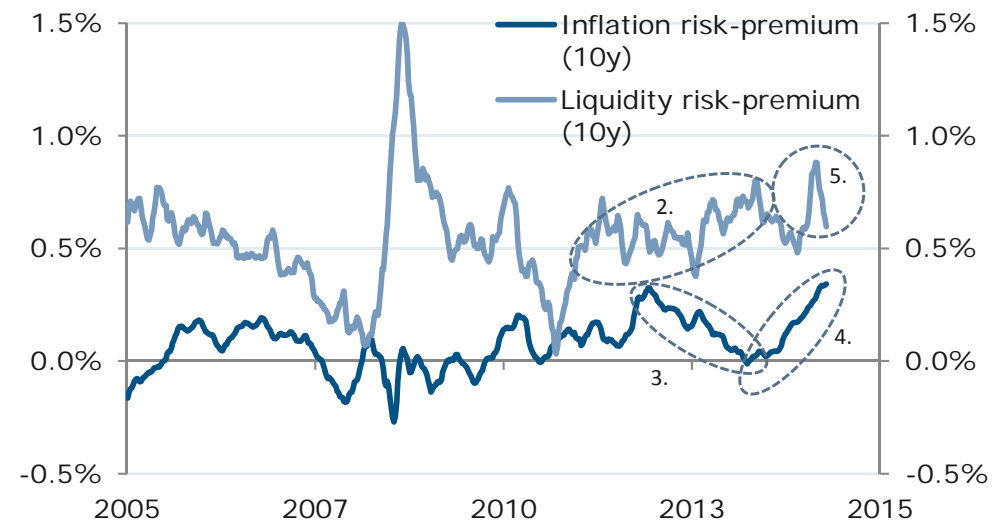
A decomposition of break-even inflation suggests that expected inflation is yet to turn up while the inflation risk-premium is increasing ... so a mixed result of Riksbank's "emergency actions" so far

- The naive way to consider the yield spread between an index-linked and a nominal bond as an estimation of expected average inflation over the life time of the bond may lead to erroneous conclusions as neither inflation risk-premium or relative liquidity-premium between linkers and nominals are taken into account.
- It is common knowledge that liquidity-premium is a major factor in driving BEIs in periods of high risk-aversion as nominal bonds gain safe-haven status and linkers typically do not.
- Therefore, we have implemented a term structure model* that allows both inflation risk-premium and liquidity-premium to be explicitly estimated. Output from the model can be viewed in the charts to the right.
- Some observations:
 - 1.) Strong macro has increased inflation expectations.
 - 2.) Increased linker supply
 - 3.) Riksbank talks about house prices
 - 4.) FSA gets macro prudential responsibility and Riksbank gradually starts to focus solely on inflation
 - 5.) Roller-coaster induced by oil prices, EURSEK and ECB QE expectations

* Based on the models described in the article "Tips from TIPS: the informational content of Treasury Inflation protected Security prices" (D'Amico, Kim & Wei 2010) and later referred to by Ben Bernanke ("Long-Term Interest Rates", 2013) we have adapted one of the models for the Swedish market. Time series of the nominal and index-linked curves together with CPI have been used to fit a 5-factor model where both inflation risk-premium and a liquidity premium can be isolated. The premium we have chosen associated to liquidity could also be a reflection of general supply/demand factors that may differ between the index-linked and nominal bond markets.



Source: Nordea Markets



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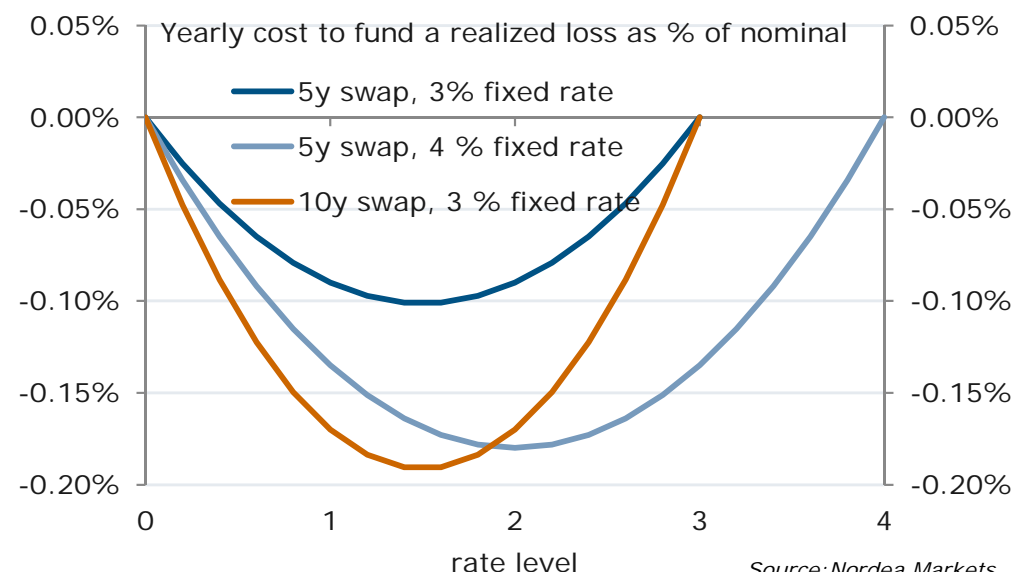
SEK rates: Quadratic curiosity in liability management

- A liability manager that uses swaps to adjust duration in a debt portfolio is likely to have a negative present value in some paid fixed-rate swaps as market rates have plunged during the last couple of years.
- If an existing swap with a negative NPV would be closed and replaced with a new swap at market rate, a loss would be realized. Since rates are record-low, it is cheaper than ever to fund such a loss with new debt.
- The relationship between the yearly cost to fund a realized loss in a swap with negative NPV and the current market rates is non-linear. Actually it is quadratic:

$$[\text{realized loss}] \sim ([\text{fixed rate original swap}] - [\text{market rate}]) * dv01$$

$$[\text{cost to fund loss}] = [\text{market rate}] * [\text{realized loss}] = -dv01 * [\text{market rate}]^2 + dv01 * [\text{fixed rate original swap}] * [\text{market rate}]$$

- That low rates increase attractiveness of leverage in an asset portfolio is obvious. It is also obvious that one way of increasing leverage is through replacing existing payer swaps with negative NPV with new swaps at market rates (increase debt to realize losses). What is not obvious is that there is a quadratic relationship between market rates and benefit of restructuring a swap portfolio.
- The reasoning above highlights the fact that liability managers, like so many other agents in the economy, should be increasingly on their toes to increase debt and duration of debt as rates approach zero.

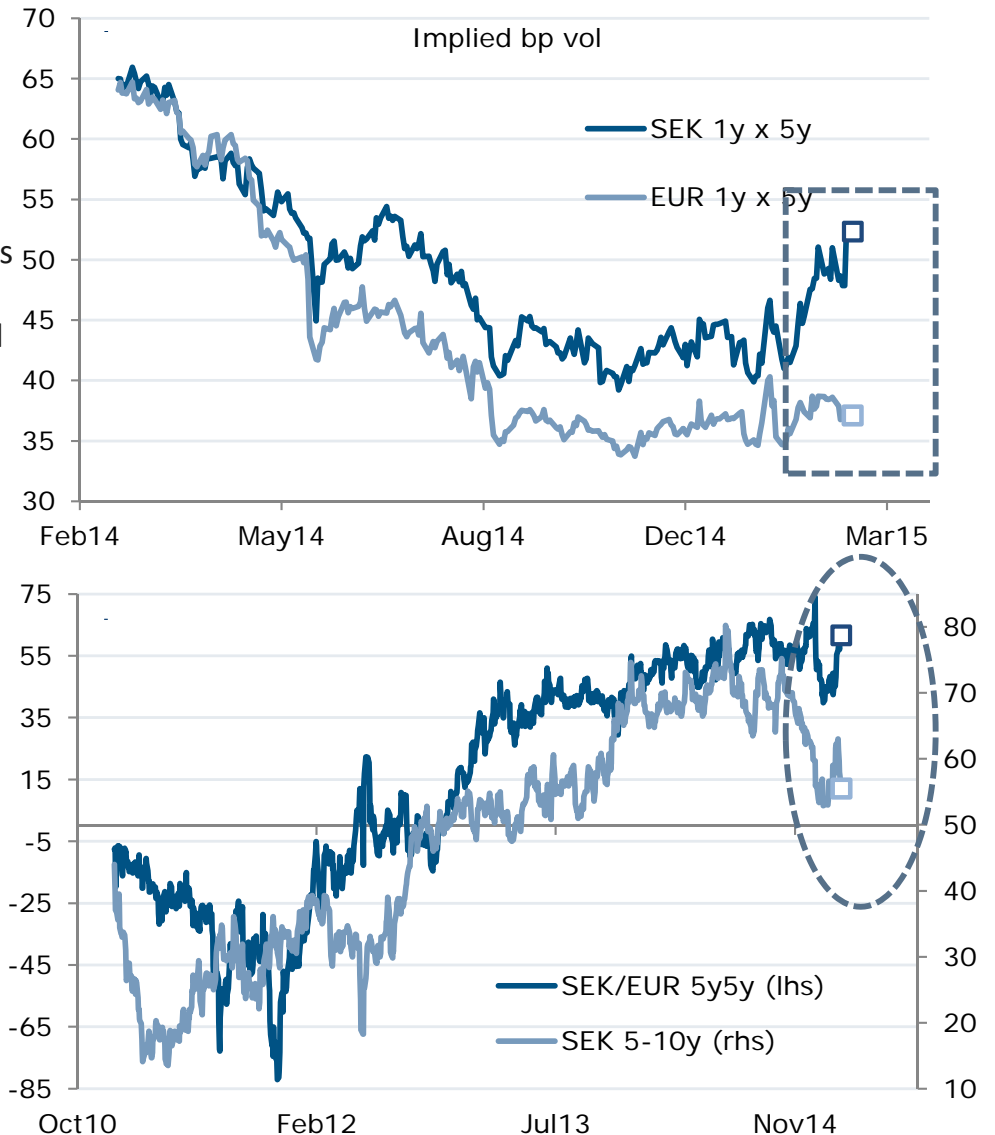
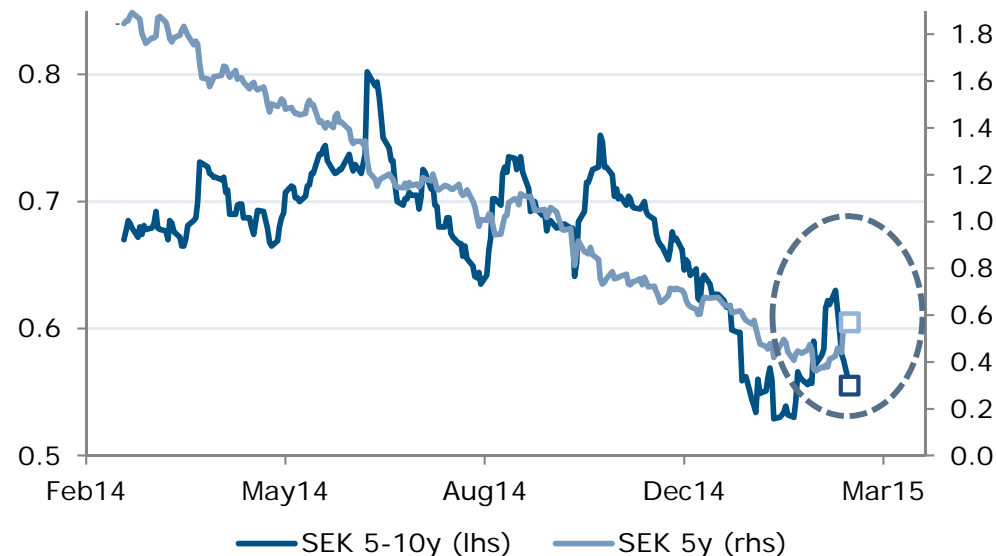


	Debt funded with 5y swap at 3 %	With realized loss and new swap at 2 %
Yield on investment	6	6
Funding cost	3	2
Realized loss on debt portfolio		-4.50%
Debt	200	209
Equity	100	100
Leverage	2	2.09
Return on equity	6	8.36

SEK rate vol: payer steepener 1y5y/1y10y

Have a look at betting against bear flattening through exploiting spike in 1y5y vol. Also a reasonable hedge for those received in SEK 5y5y if market flips out on the upside.

- SEK rates have bounced on the back of better macro data, more issuance from debt office and a scrapped fiscal surplus target
- At the same time, the 5-10y curve has bear flattened and 1y5y rate vol has spiked relative Eurozone.
- Despite some better turn-outs of Swedish data it is unlikely that the Riksbank will make any trend changes in policy near-term. In February they made more or less an "all-in" on inflation expectations and if anything more QE and lower rate is on the cards.
- Therefore we see an opportunity to exploit the spike in 1y5y vol and the recent bear flattening through 1y5y/1y10y payer steepeners. Either one sets the strikes amtf and pay a premium for the package or one sets the strike in the 1y10y otm for zero-cost.



Thank You!

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