



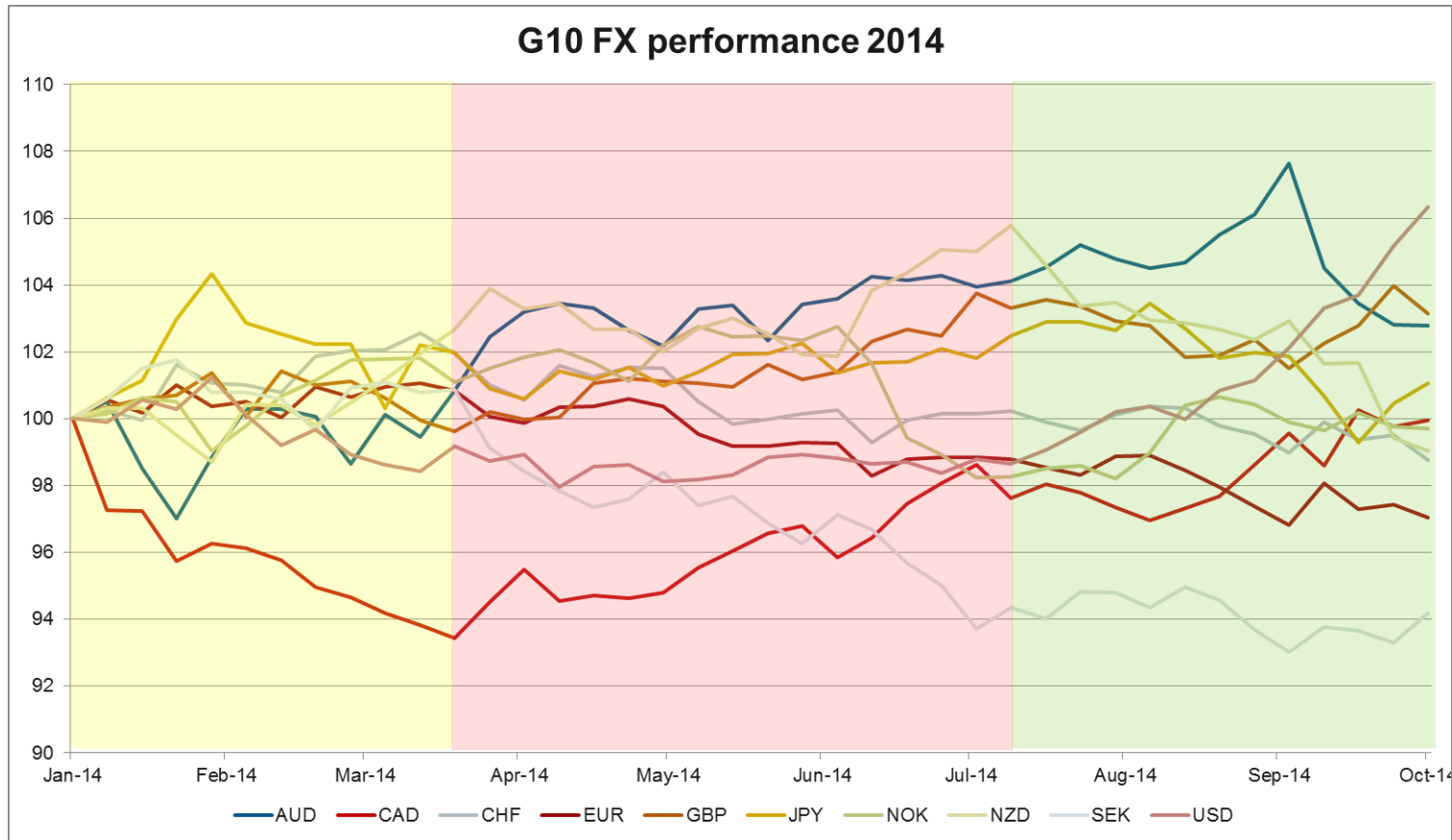
FX from a quant perspective

Presentation for ECB FXCG

Friday, 07 November 2014

Making it possible

G10 FX in 2014 – a traffic light perspective



Source: Bloomberg. Note: Correlation-Weighted Currency Indices

Is market activity returning or is it another false dawn?

Are central banks "doing the right thing"?

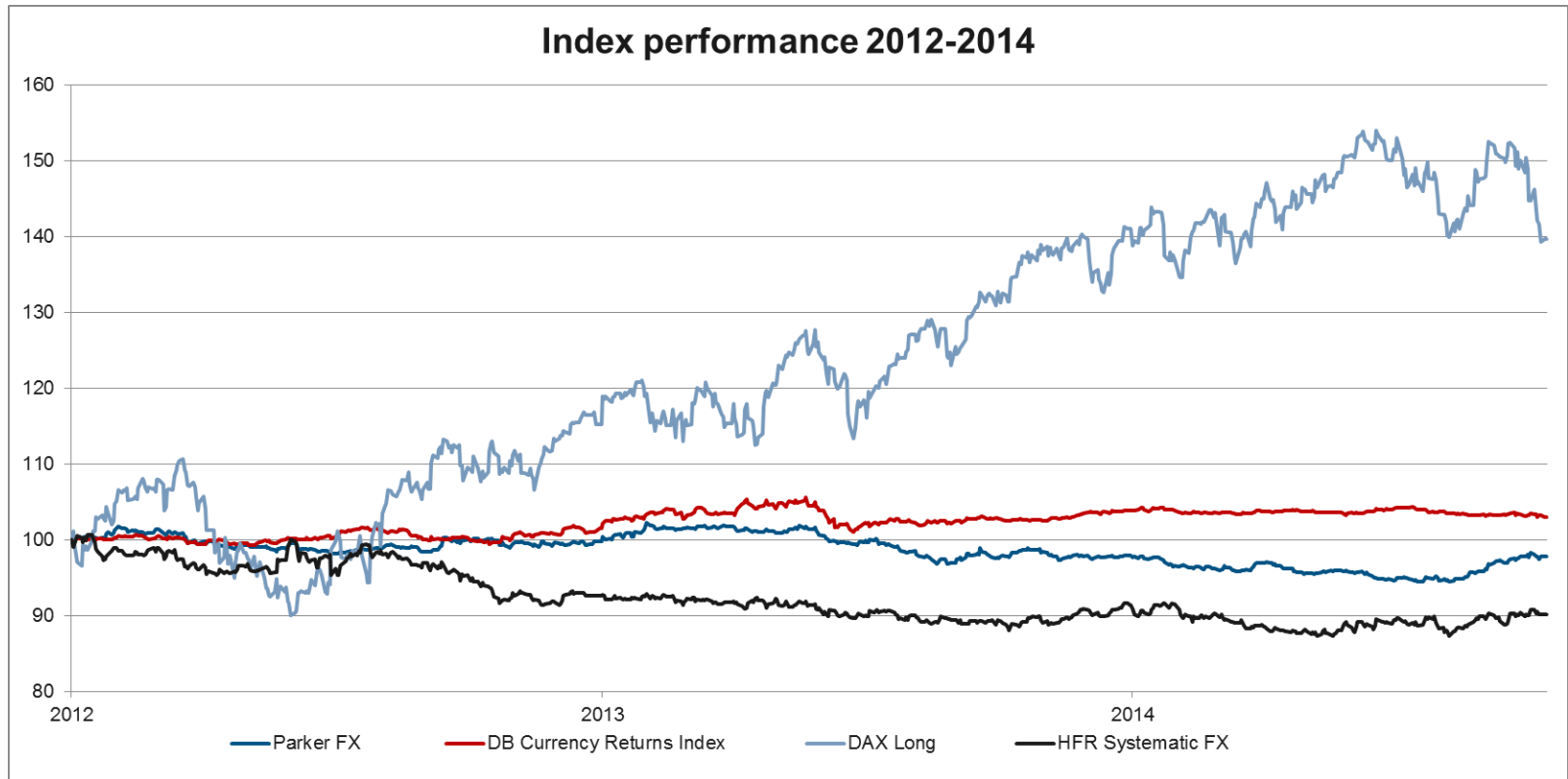
What about SEK and NOK in a time of QE / "QT" / normalization?

- Quiet start of the year...
- FX vol declining
- CAD data disappoints

- Vol declines further!
- Flow favours AUD and NZD
- Relative rates move against SEK

- US-EU monetary divergence finally priced
- FX vol rises, albeit from extremely low levels

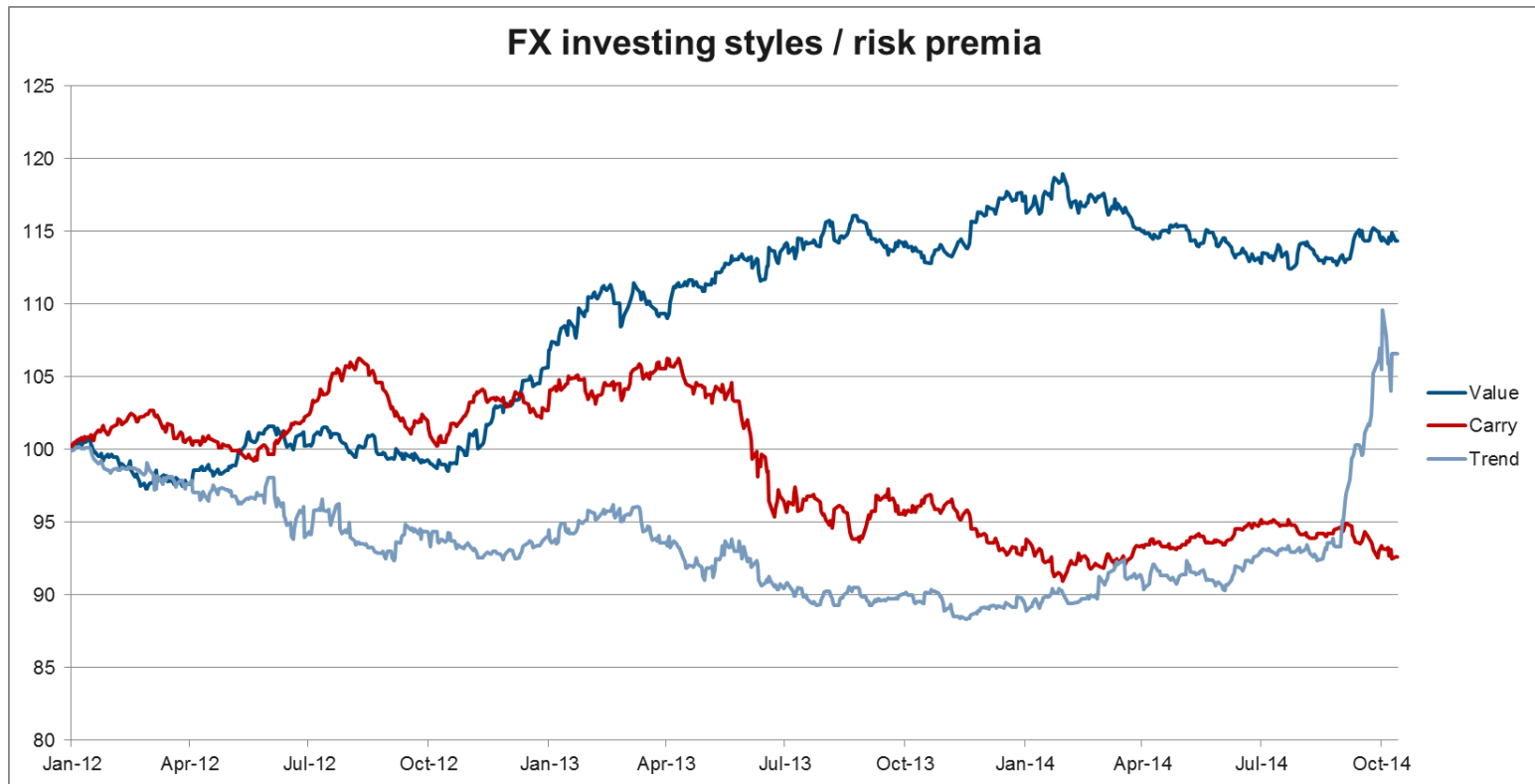
FX as an asset class



Source: Bloomberg. Note: Parker FX (CEXTI2 Index), DC Currency Index (DBCUSI Index), DAX Long (DBEEFU2 Index), HFR Systematic FX (HFRXSDV Index)

	Parker FX	DB Currency Returns Index	DAX Long	HFR Systematic FX
Total return	-2.17	3.08	39.74	-9.86
Ann return	-0.78	1.10	14.28	-3.54
Ann vol	3.15	2.82	20.78	5.84
Sharpe	-0.25	0.39	0.69	-0.61

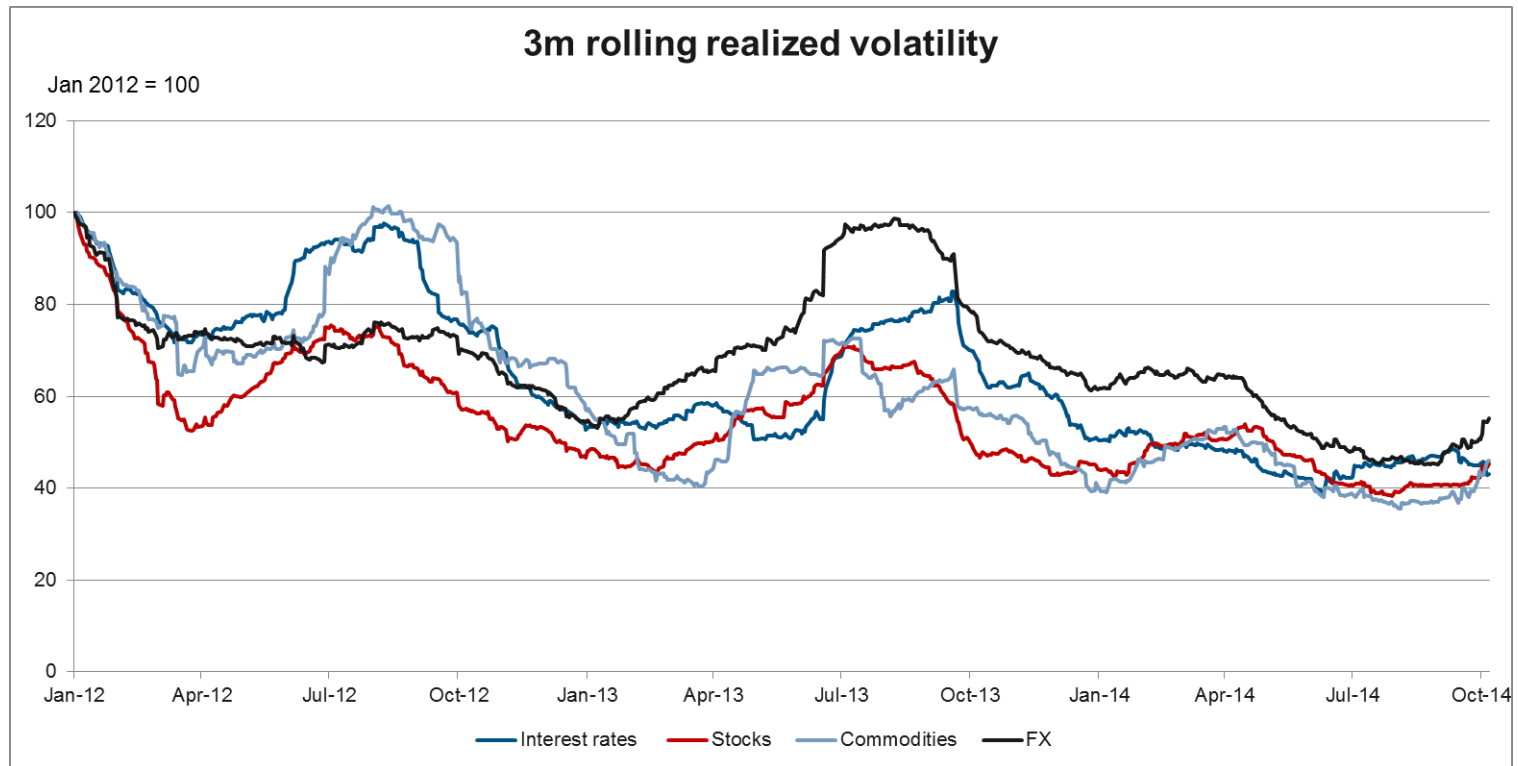
FX investing styles / risk premia



Source: Bloomberg. Note: Barclays FX Value Euro TR Index (BXIIVTEU Index), Barclays Intelligent Carry EUR index (BXIICIEU Index), Barclays cross-asset trend index – Developed FX (BXIIXTDP Index),

- Value was previously the only risk premium in vogue. 2014 has been different.
- Carry continues to perform poorly – carry attractiveness remains low
- Trend has recently sky-rocketed – are we entering a new regime?

Volatility is low across asset classes



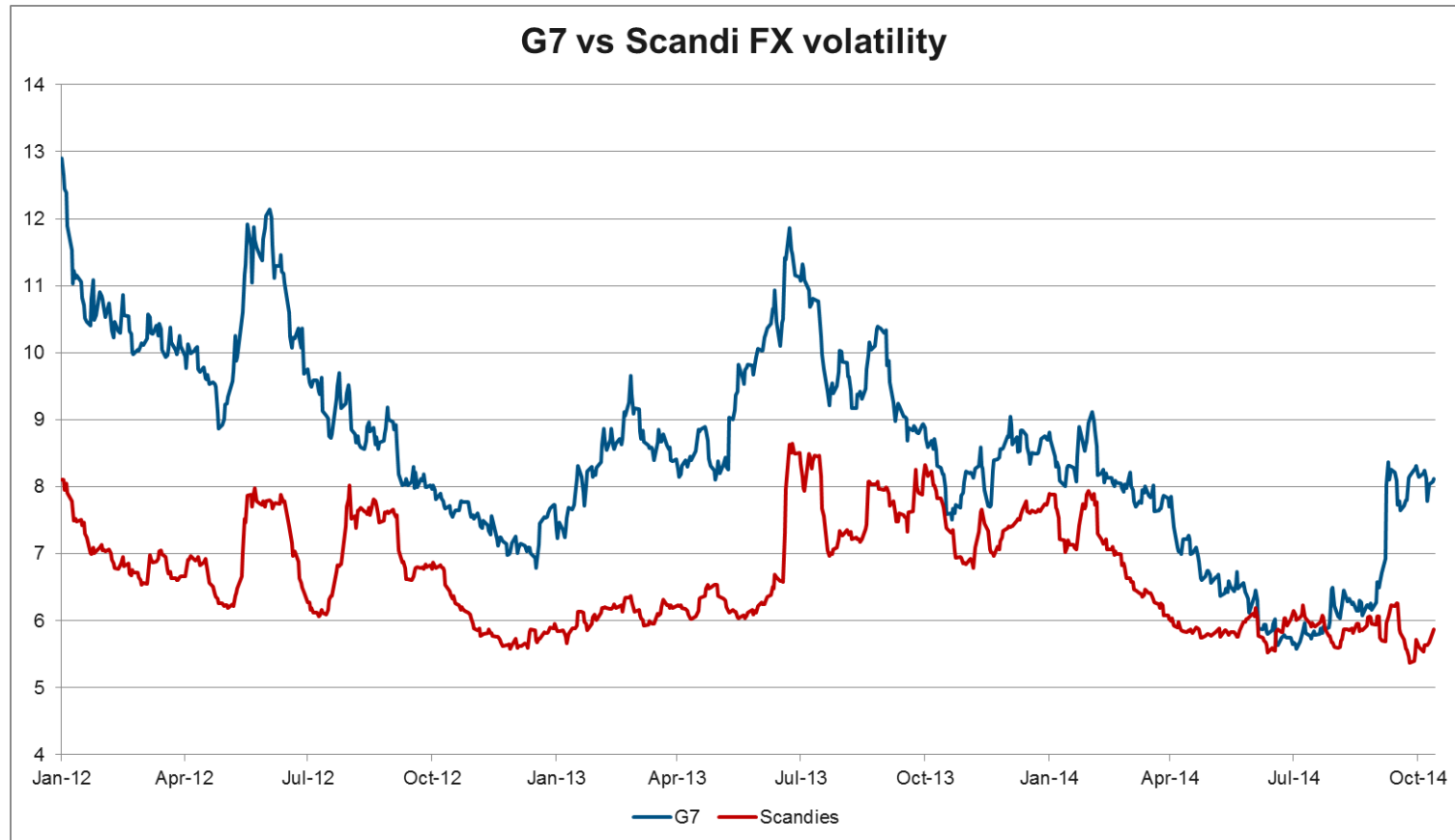
Source: Bloomberg. Note: Interest rates: Average G10 1Y rolling 2Y swap volatility. Stocks: Average G10 1Y rolling volatility in leading stock indices. Commodities: 1Y rolling volatility in Bloomberg Commodity Index (formerly known as Dow Jones UBS Commodity Index)

- Volatility halved since beginning of 2012
- Common / global driver of volatility across asset classes

Why is volatility so low across asset classes?

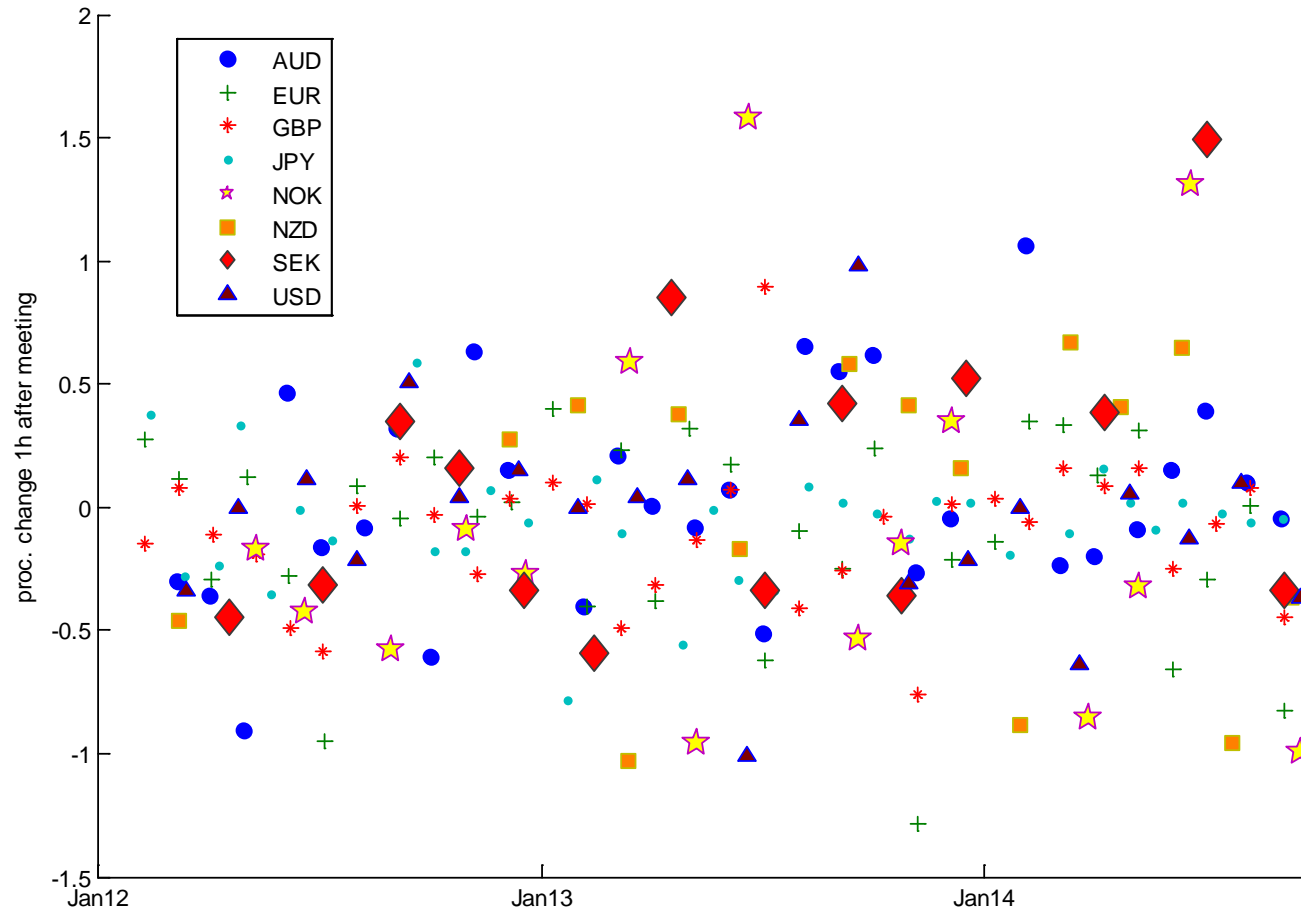
- Expansionary central bank policy
 - Forward guidance / zero lower bound
 - CB policies become "passive", i.e. under-reacting on inflation / growth shocks
 - Forward guidance makes CB policies independent from marginal shocks
 - Quantitative Easing (QE)
 - CB conducting QE take risky assets off markets
 - Enforcement of high levels of low-yielding, low-risk excess reserves
- Lower commercial market activity
 - Economic conditions foster little natural turnover
 - Global outlook is bleak (e.g. IMF 2014)
- Lower speculative market activity
 - Risk aversion structurally higher
 - Speculative players absent compared to previously

Low FX volatility – also in SEK and NOK



Source: Bloomberg. Note: G7: Average of 3-month implied EUR/USD, USD/JPY, 0.5*EUR/GBP, 0.5*GBP/USD, AUD/USD, NZD/USD and USD/CAD volatility. Scandies: Average of 3-month implied EUR/SEK and EUR/NOK volatility.

G10 rate decisions vs. exchange rate movements (2012-14)

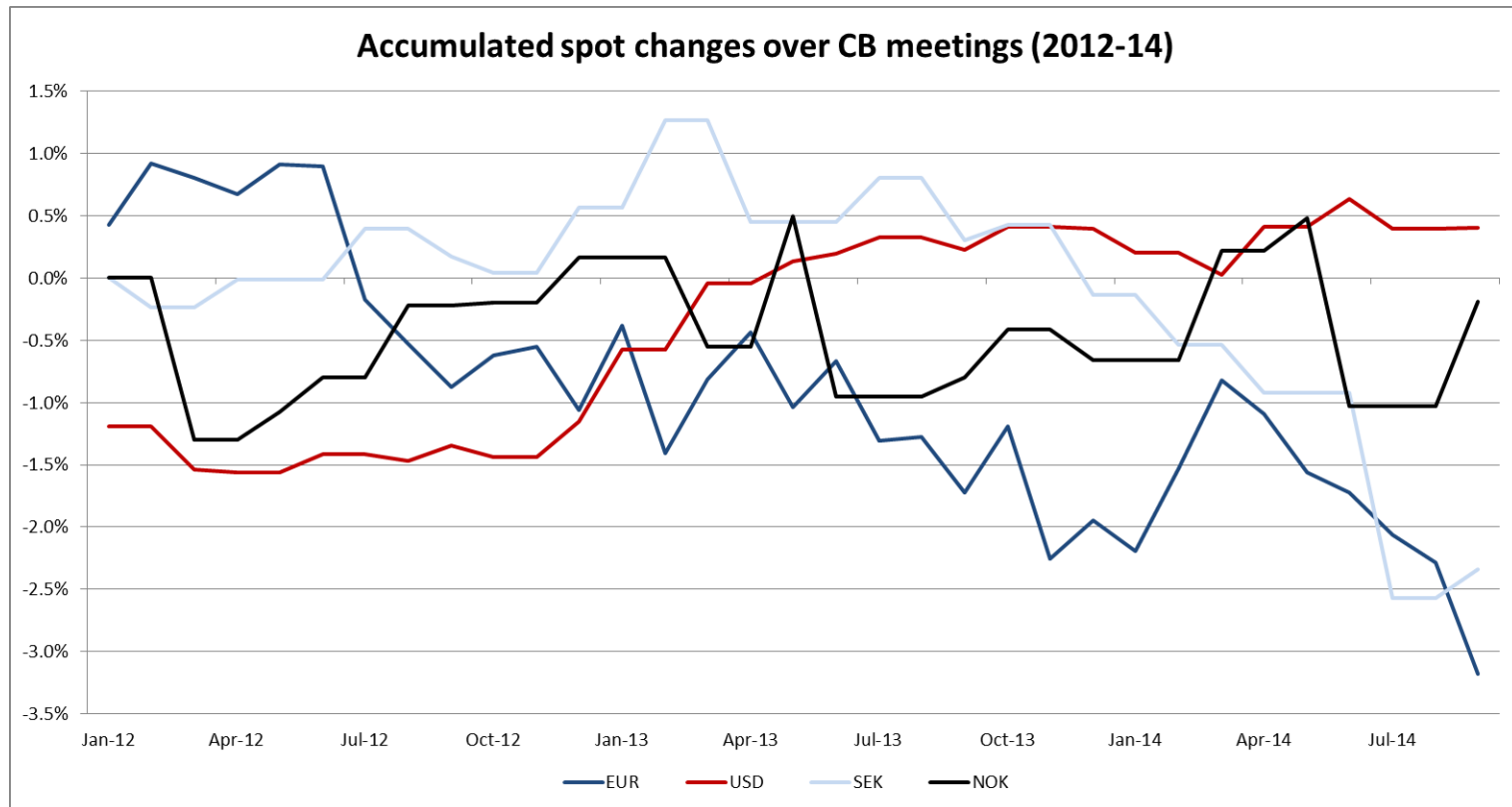


Source: OneTick, Bloomberg, Nordea calculations

”Currency war” not over?

- USA
 - Fed Minutes: Concerns of “further appreciation of the dollar” (8 October)
- Eurozone
 - Draghi asked whether euro weakness could continue: “Our monetary policy will stay accommodative through time for an extended period of time while other countries' monetary policies may gradually acknowledge that recovery is taking place in their countries“ (24 September)
- Sweden
 - Krugman: ”Sadomonetarism”, creating a deflationary spiral similar to Japan.
 - Former Finance Minister, Anders Borg: “Riksbank should make sure the krona doesn’t climb in an “unreasonable way” to avoid damaging the export-reliant economy”.
 - Social Democrats: Talk of dual-mandate for Riskbank to include target for labour market.
- Norway
 - Governor Olsen: “[...] the weakening krone through 2013 was “important” for the economy”.
 - The Economist: ”The [central] bank’s strategy is deliberately targeted at keeping the krone competitive and motivated by the potential implications of a projected substantial fall in offshore oil and gas investment spending in 2015”.

Reality check: Currency war - quantified



Source: Bloomberg. Note: Chart shows spot changes ½ hour before CB rate decision to 1½ hour after, total 2 hours. EUR measured vs USD, USD measured vs. EUR, SEK measured vs. EUR, NOK measured vs. EUR.

- Recently, the euro has weakened around ECB rate decisions
- The SEK has also depreciated when Riksbanken has announced results on the monetary decision
- USD and NOK haven't systematically moved in any direction around monetary policy meetings.

Summary

- Activity in FX is picking up – albeit from low levels
- Traditional FX drivers have lacked signal strength
- Recently, trend has started to perform. Carry and value are flat at best.
- Expansionary central bank policy may partly explain why volatility on average is low across asset classes
- Central banks add to exchange rate volatility around rate decisions – but far from equally
- The “currency war” may not be over

Thank You!

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