

# FX Alpha

16 July 2013

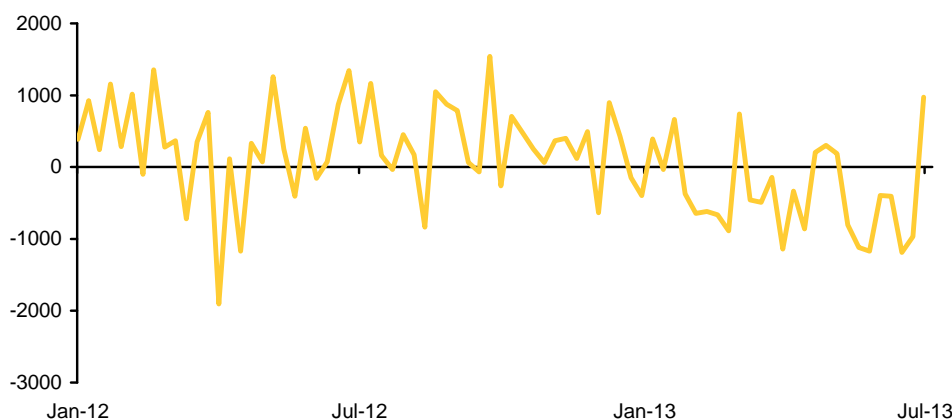
## JPY – Even more to be worried about?

**JPY – Even more to be worried about?** Purchases of foreign bonds by Japanese investors are not a risk to JPY exchange rates. However a slowdown in emerging market economies most definitely is.

**CHART 1: Finally some bond buying!**  
Japanese foreign bond purchases in JPY billion

**CONTENTS**

**JPY- EVEN MORE TO BE WORRIED ABOUT? ..... 2**  
**G10 HIGHLIGHTS ..... 3**  
**FX METRICS ..... 4**  
**EM HIGHLIGHTS..... 5**  
**TACTICAL TRADE RECOMMENDATION6**  
**TECHNICAL ANALYSIS..... 7**  
**EVENT CALENDAR ..... 8**



Sources: Bloomberg L.P., Commerzbank Research

**G10 Highlights.** The market is waiting for Fed guidance. Japan needs more yen weakness. Chances of another RBA rate cut have decreased.

**FX Metrics.** We use correlation forecasts to construct optimized carry trades. Based on this we outline a trade idea on carry trades.

**EM Highlights.** The key event risk for ZAR this week is Thursday’s MPC meeting. Markets also hope to get more clarity about further rate increases in Brazil from the minutes.

**Tactical trade recommendations.** Long USD-JPY risk reversal.

**Technical Analysis.** US Dollar expected to consolidate short term, longer term bias still bullish.

**Event calendar.** Markets waiting for guidance from Fed chairman Bernanke’s testimonies on Wednesday and Thursday.

## JPY- Even more to be worried about?

**Purchases of foreign bonds by Japanese investors are not a risk to JPY exchange rates. However a slowdown in emerging market economies most definitely is.**

Author:

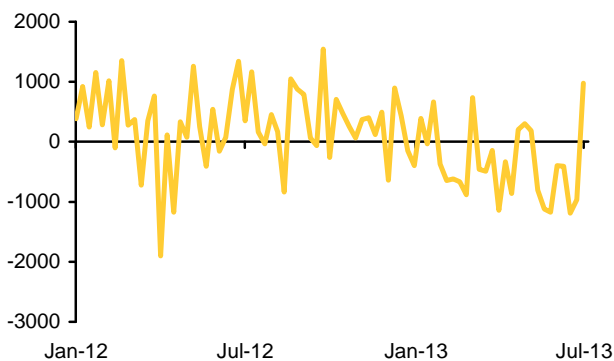
Peter Kinsella  
+44 20 7475 3959  
peter.kinsella@commerzbank.com

Last week the FX market was thrown into turmoil following Bernanke's comments regarding the outlook for monetary policy in the US. The reaction in USD-JPY was unforgiving, falling by 3 big figures from 101.50 towards 98.50. However, what investors seemingly missed was that in the same week, Japanese investors finally bought foreign bonds to the tune of 973 billion JPY. The question is whether this development marks the beginning of the so called wall of money and what are the implications for JPY exchange rates.

To be brief, the assumption underlying the 'wall of money' is that the BoJ will purchase JGB's from Japanese investors, who will then invest the proceeds of the sale in higher yielding foreign assets and in so doing a wave of JPY selling will take place. From a theoretical point of view this is problematic in that one is assuming that quantitative easing by the BoJ is equivalent to wealth creation, which in this case is exported to purchase foreign assets. Second, the rationale was perhaps even more valid one year ago when trade weighted JPY was trading close to all time highs, yet no large scale foreign asset purchases took place. It also assumes that foreign investors paid in JPY will be content to sit and hold JPY, whilst the BoJ increases its balance sheet. More likely than not, investors will simply reverse the flow and purchase Japanese assets. In the end, any increase in JPY money supply will end up back in Japan. At the margin of course one can expect portfolio rebalancing effects. But to expect a significantly weaker JPY as a result of this alone is naive. So, investors should not get too excited with one data release from what is already a rather volatile series.

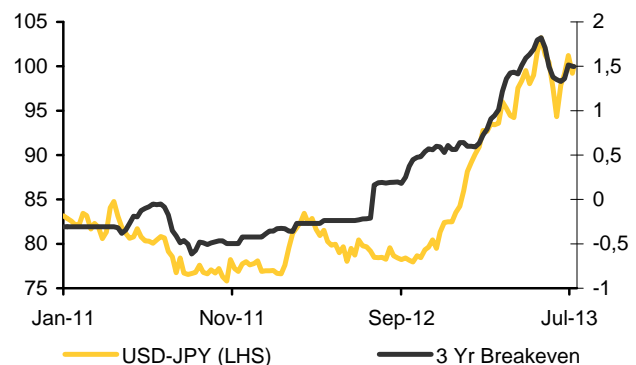
Perhaps the greatest (as yet unrecognised) risk to JPY exchange rates stems from developments in emerging markets. Japan currently sends nearly 40% of its exports to emerging market countries, with China alone accounting for 20%. Last week Finance Minister Lou Jiwei stated that 6.5% growth for China 'wouldn't be a problem'. This suggests that the bar towards stimulus measures in China is quite high. Any significant slowdown in China and EM generally could herald an even greater stimulus response by the BoJ, which in the context of balance sheet contraction by the other major central banks does not augur well for JPY exchange rates. One way of thinking about USD-JPY performance year to date is to look at the development of inflation expectations. Given that breakevens have rallied to close to 1.5% from negative levels only 1 year ago, one could argue that a large part of the idiosyncratic JPY weakening is now done. Breakevens will be unlikely to move substantially above 2% in the absence of a realised pickup in inflation, hence any substantial upmove in USD-JPY will be due to a stronger USD and / or higher global interest rates. Both of these factors seem to be manifesting, to a greater or lesser degree. The bottom line is that there are plenty of reasons to hold a bearish view towards JPY, just that the 'wall of money' is not one of them.

**CHART 2: Finally some bond buying!**  
Japanese foreign bond purchases in JPY billion



Sources: Bloomberg L..P.Commerzbank Research

**CHART 3: Keep an eye on inflation expectations**  
USD-JPY spot, 3 Yr Breakeven in %



Sources: Bloomberg L..P.Commerzbank Research

## G10 Highlights

**The market is waiting for Fed guidance. Japan needs more yen weakness. Chances of another RBA rate cut have decreased.**

**EUR-USD:** Ahead of Fed chairman Ben Bernanke's semi-annual testimony in front of the House (Wednesday) and the Senate (Thursday) players are reluctant to enter new positions. They are keen on "guidance" from the Fed on QE3 tapering. The recent swing between 1.2760 and 1.3209 in the wake of the FOMC minutes is likely to have washed out most EUR short positions. Therefore, current positioning is likely to be rather neutral and nobody wants to go out on a limb ahead of the key event this week. We think Bernanke will stick to its view, trying to keep US 10y yields under control, and may sound rather dovish to the market, although his assessment hasn't changed. This risks pushing EUR-USD again to 1.32. The bigger surprise would be some slightly more hawkish comments, though, triggering a new rally in the USD.

**JPY:** If nothing happens USD-JPY moves up. While EUR-USD was more or less paralysed yesterday, USD-JPY was temporarily able to appreciate to 100.50. In my view this proves that everything we saw in USD-JPY over the last few weeks was either USD strength or weakness. If the greenback does not provide any momentum what we see is the underlying trend of JPY weakness again. Unfortunately this is far too often overshadowed by the general USD weakness. But does anyone really think that the yen was already weak enough? Real exports in Japan (adjusted by exchange rate and price effects) have only risen by 4.8% since the low in December and are still 7.1% below last year's level. And I do not want anyone to say that the global economic environment is so difficult. German exports are only 2.7% below last year's level – despite the recession in many of Germany's major trading partners in Southern Europe. No, the yen weakness is simply not sufficient to counterbalance the structural weakness of the Japanese export sector and the deteriorating terms of trade. Japan needs more yen weakness!

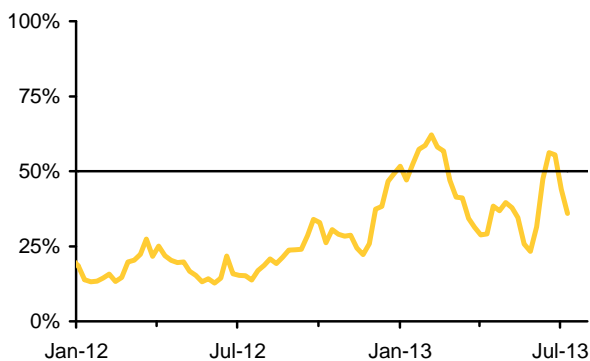
**AUD:** Surprise! The RBA is always good for one, as is the case today with the minutes of its meeting on 2<sup>nd</sup> July. Of course the RBA remains cautious and maintains its dovish approach, but the depreciation of the AUD is expected "to add to inflation over time" according to the RBA and the depreciation could continue. As a result it is raising its inflation forecast slightly. "The effects of lower interest rates [previous cuts] were apparent across a range of indicators" and the process has further to run. "Given the exchange rate adjustment that was occurring and with the substantial degree of monetary stimulus already in place" the current stance of policy was "appropriate" according to the RBA. "The inflation outlook, although slightly higher because of the exchange rate depreciation, could still provide some scope for further easing". In other words: the chances of a further rate cut have fallen. We have been always more cautious in our rate expectations than the market and see the possibility of rates not falling any further. As a result 0.90 is likely to hold in AUD-USD unless Fed President Bernanke sounds unexpectedly hawkish in his semi-annual statements tomorrow and the day after.

Author:

**Antje Praefcke**  
+49 69 136 43834  
antje.praefcke@commerzbank.com

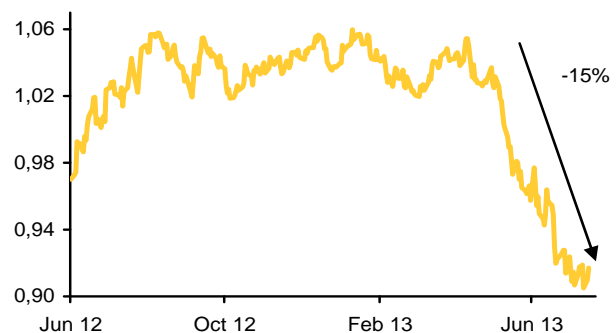
**Ulrich Leuchtmann**  
+49 69 136 23393  
ulrich.leuchtmann@commerzbank.com

**CHART 4: Before FOMC minutes market was short EUR**  
Share of EUR shorts in percent of directional EUR positions of non-commercial IMM traders, as of July 9th



Sources: Bloomberg L..P.Commerzbank Research

**CHART 5: Depreciating AUD takes pressure off the RBA**  
AUD-USD spot rate, daily data



Sources: Bloomberg L..P.Commerzbank Research

# FX Metrics

## G10 carry trade indices

The portfolio weighting of a common carry trade strategy often simply corresponds to the ranking of the interest rate levels. Moreover the number of investment positions is usually fixed at the outset. However, such a strategy does not effectively exploit the benefits of diversifying across different investments. We therefore suggest a portfolio strategy that optimizes the diversification effect and significantly reduces the downside risk entailed in carry trades using “mean-variance” optimization.

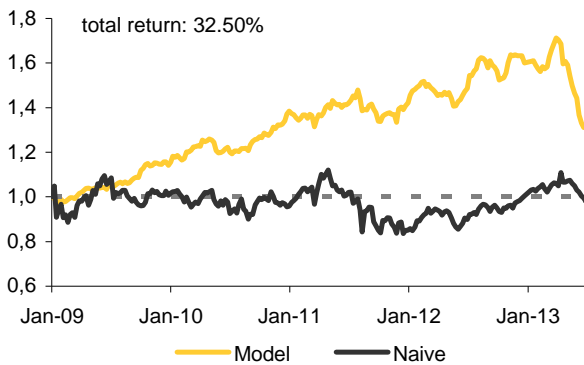
Below we illustrate an example of a mean-variance optimised carry trade portfolio on a selected currency basket with a pre-set risk level. For the optimization the variance has been chosen randomly and can be adjusted as required.

Author:

**Thu Lan Nguyen**  
 +49 69 136 82878  
 thulan.nguyen@commerzbank.com

**CHART 6: Historic performance of optimized Carry Trade Portfolio**

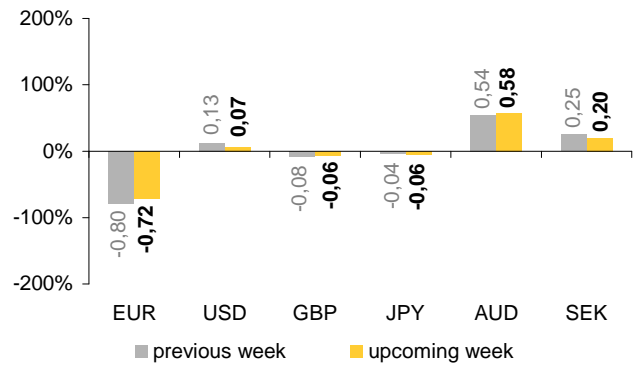
Cumulative return<sup>1</sup> since 6 January 2009, weekly rebalancing, target variance: 6%; Naïve strategy: B&H strategy, 3 high yielders long, 3 low yielders short; Currency basket: EUR (base), USD, GBP, JPY, AUD, SEK, CHF (excluded after Sept 2011)



Source: Commerzbank Research

**CHART 7: Portfolio weights for week 16 July to 23 July**

Currency basket: EUR (base), USD, GBP, JPY, AUD, SEK; weights in %



Source: Commerzbank Research

### Methodology

Our optimized strategy considers the correlation of the exchange rates in the portfolio weighing decision, i.e. the good old “mean-variance” optimisation according to Harry M. Markowitz. For the carry trade portfolio this means investing in carries in such a manner that an optimum relation between carry and the risk assumed is achieved. Needless to say, the more accurate the estimate of the correlation matrix the larger the advantage of the portfolio optimisation. For our portfolio we therefore use a trend model to forecast the relevant correlations on a weekly basis. In particular, the forecast is based on a linear trend over the weekly correlations of the last month. This trend is then extrapolated to the coming week to yield a forecast. Subsequently, the trend is rolled over on a weekly basis. This trend-based forecast therefore uses more timely input which ultimately increases forecast accuracy.

<sup>1</sup> Returns are based on Tuesdays' London opening

## EM Highlights

The key event risk for ZAR this week is Thursday's MPC meeting. Markets also hope to get more clarity about further rate increases in Brazil from the minutes.

**ZAR:** The key event risk for ZAR this week is Thursday's MPC meeting where SARB is expected to maintain benchmark rates at 5%. Given the mix of a large current account deficit and relatively high inflation prints, the central bank really has no room for manoeuvre, at least in the short term. Coming into the meeting USD-ZAR has fallen from levels around 10.30 towards current levels at 9.90, whilst implied volatilities have also fallen considerably. Yields on benchmark 10 year bonds have also retraced considerably, falling from highs of 8% in mid June to current levels around 7.60%. The fall in risk premia have little to do with domestic developments, but are a reflection of the broader risk environment within the emerging market complex. Our view is that it remains far too early to initiate long ZAR positions. Developments in US treasury yields argue against getting too bullish about EM FX for the foreseeable future and given that ZAR is the worst performing EMEA currency year to date, it stands to reason that as US yields increase over the course of 2013, with a consequently stronger USD, ZAR should continue to trade with an offered bias.

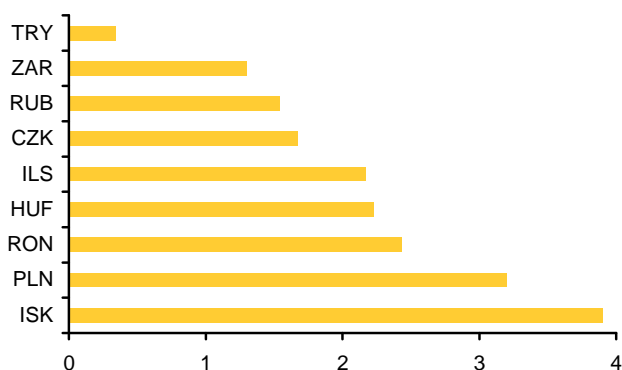
**BRL:** Last week the central bank raised the Selic by 50 bps to 8.50% as expected. Since the accompanying statement was quite brief market participants are hoping for more clarity about the central bank's future moves from the meeting minutes, which will be released on Thursday. It is clear that rates will rise further, the question is how far. According to the Brazilian central bank's weekly poll among economists the expectation for rates are 9.25% at the end of this year with another 25 bps rate hike expected next year. However, the signals given by the central bank are not that clear yet, so it will be interesting to see if the meeting minutes will confirm markets expectations. We doubt, though, that the real will be able to benefit from hawkish minutes. As the weekly poll showed there are growing concerns about GDP growth. A more aggressive monetary policy is an additional risk for the economy. On the other hand, a less aggressive monetary policy would not bring any relief on the inflation front. Difficult times for the real. While we see less scope for a move in USD-BRL to the downside a move to the upside is also limited as the central bank will intervene further to support the real. However, should US central bank governor Bernanke surprise markets on Wednesday by re-kindling tapering speculation the Brazilian central bank will be unlikely to stop rising USD-BRL prices.

Author:

**Peter Kinsella**  
+44 20 7475 3959  
peter.kinsella@commerzbank.com

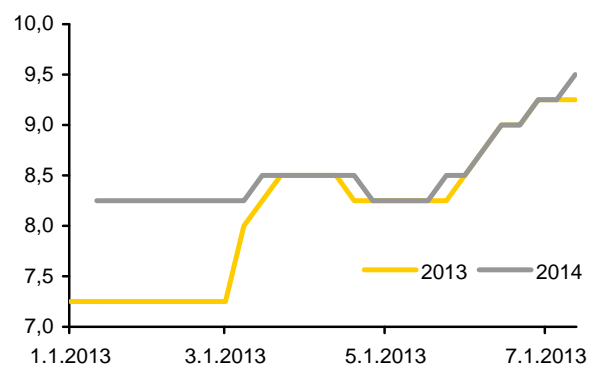
**You-Na Park**  
+49 69 136 42155  
you-na.park@commerzbank.com

CHART 8: All up against the USD week on week  
% Gain / Loss Vs. USD since 9<sup>th</sup> July 2013



Sources: Bloomberg L.P., Commerzbank Research

CHART 9: Rising expectations for year-end Selic  
Expectations for the Brazilian Selic (year-end) according to weekly central bank poll among economists



Sources: Bloomberg L.P., Commerzbank Research

# Tactical trade recommendation

## Long USD-JPY risk reversal.

We recommend investors to establish long USD-JPY positions via longer dated risk reversals, by selling 6 month 92.00 puts and buying 108 calls, in equal amounts. This is a zero cost structure.

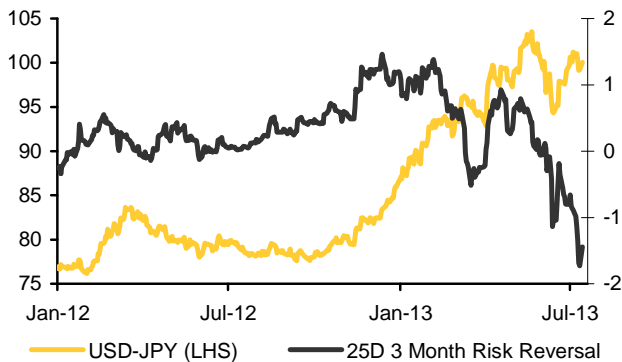
We remain of the view that USD-JPY will trade significantly higher over the remainder of this year. The rationale behind our view rests upon the clearly divergent monetary policy outlooks for the Fed and BoJ respectively. The Fed are set to taper QE3 by the end of 2013, whilst the BoJ are set to expand their balance sheet with monthly purchases of JGB's with a value of nearly \$75 billion per month. On a relative basis this is significantly more than the Fed expanded its balance sheet by, hence our view that USD-JPY will trade significantly higher.

As described above, developments in emerging markets will be important for the BoJ, given that nearly 40% of Japanese exports go to EM countries. In the case of a negative surprise to EM growth the BoJ might be forced to engage in further measures, which would of course be a negative development for JPY exchange rates.

Author:

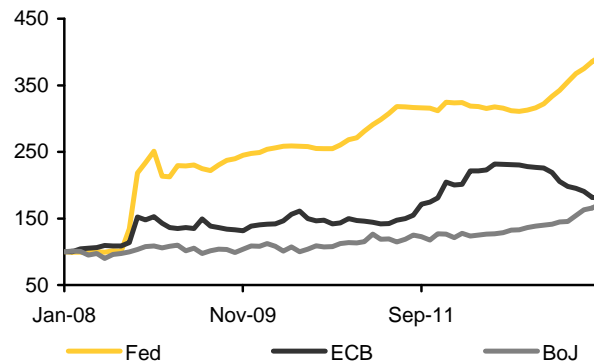
**Peter Kinsella**  
+44 20 7475 3959  
peter.kinsella@commerzbank.com

**CHART 10: Riskies skewed to the downside**  
USD-JPY spot, 25D 3 Month risk reversals in % volatility



Sources: Bloomberg L.P., Commerzbank Research

**CHART 11: BoJ have room to expand balance sheet**  
Balance sheets rebased, 100 = 1<sup>st</sup> Jan 2008



Sources: Bloomberg L.P., Commerzbank Research

**TAB. 1: Discretionary Option Trade Recommendations (base currency EUR)**

Trade date	Strategy	Expiry	Size	Premium	Value	P&L	Open / Closed
04.02.2013	Short EURp-CHFc 1.2050	04.12.2013	1m	+1.10%	-0.31%	0.79%	Open
26.02.2013	Sell AUDc-USDp 1.06 Buy AUDp-USDc 1.00	22.08.2013	2m x 1m	0.28%	7.28%	7.00%	Open
12.03.2013	Sell CAD-MXN risk reversal 13.00 / 11.90	12.09.2013	2m x 1m	0.28%	-0.20%	-0.48%	Open
22.04.2013	Sell EUR-USD risk reversal 1.33 / 1.28	22.07.2013	1m x 1m	0.20%	0.43%	0.23%	Open
28.05.2013	Buy USD-CHF risk reversal 0.94 / 1.00	28.08.2013	1m x 1m	0.23%	-0.04%	-0.27%	Open
19.05.2013	EUR-GBP put spread 0.84 / 0.81	19.08.2013	1m x 1m	0.98%	0.20%	-0.78%	Open
06.05.2013	Buy MXN-JPY risk reversal 8.00 / 8.40	06.08.2013	2m x 1m	0.005%	-0.23%	-0.235%	Open
08.07.2013	Sell GBP-USD risk reversal 1.51 / 1.46	08.10.2013	1m x 1m	0.01%	-0.23%	-0.24%	Open

Sources: Bloomberg L.P., Commerzbank Research

# Technical Analysis

## US Dollar expected to consolidate short term, longer term bias still bullish

We highlighted last week that corrections in the US yields were likely to spill over into the US dollar and we felt that GBP-USD was unlikely to sustain a break of 1.4832 and AUD-USD was unlikely to sustain a break below 0.9000 at this juncture and this is essentially what we have seen last week.

EUR-USD also found support at the 1.2740 April low last week before briefly shooting back up to the 1.3200 region. It is possible that the market has already topped here, but even if this is not to be the case, EUR-USD is expected to remain below the 2011-13 resistance line and 55 week ma at 1.3386/1.3422.

Loss of 1.3000 should undermine near term stability and re-focus attention onto the 1.2740 support. For now we expect it will consolidate over the next week or so. Below 1.2740 we target the 1.2661 November low en route to the 1.2052 200 month ma.

Author:

**Karen Jones**  
 +44 20 7475 1425  
 Karen.jones@commerzbank.com

CHART 12: EUR-USD weekly chart

Tested and held the 1.2740 low



Source: CQG, Commerzbank Research



## Event Calendar

Date	Time	Region	Release	Unit	Period	Survey	Prior	
<b>16 July</b>	13:00	PLN	Wages	mom	JUN	3,4	-3,4	
				yoy	JUN	2,1	2,3	
	13:00	PLN	Core rate	mom	JUN	0,0	-0,1	
				yoy	JUN	0,9	1,0	
	13:30	USA	Consumer prices	mom	JUN	0,3	0,1	
				yoy	JUN	1,6	1,4	
			core rate	mom	JUN	0,2	0,2	
				yoy	JUN	1,6	1,7	
	14:00	USA	Tic data	USD bn	MAY	-25,0	-37,3	
	14:15	USA	Industrial production	mom	JUN	0,3	0,0	
	14:15	USA	Capacity utilization	%	JUN	77,7	77,6	
	15:00	USA	NAHB Housing Market Index		JUL	51	52	
	<b>17 July</b>		GBP	Unemployment rate	%	MAY	7,8	7,8
		10:00	CHF	ZEW business expectations		JUL	-	2,2
12:00		USA	MBA Mortgage Applications	%	JUL 12	-	-4,00	
13:00		PLN	Producer price index	mom	JUN	0,2	0,1	
				yoy	JUN	-1,8	-2,5	
13:00		RUB	CPI weekly year to date	%	JUL 15	-	4,0	
13:00		PLN	Sold Industrial Output	mom	JUN	1,0	-0,7	
				yoy	JUN	1,5	-1,8	
13:30		USA	Housing Starts	K	JUN	960	914	
			Housing Permits	K	JUN	1000	985	
15:00	CAD	Interest rate decision	%	JUL 17	1,00	1,00		
<b>18 July</b>	09:30	GBP	Retail sales	mom	JUN	0,3	2,1	
				yoy	JUN	1,7	1,9	
	-	ZAR	Interest rate decision	%	JUL 18	5,00	5,00	
	12:00	RUB	FX and gold reserves	USD bn	JUL 12	-	505,0	
	13:30	USA	Initial jobless claims	K	JUL 13	345	360	
	15:00	USA	Philadelphia Fed Index		JUL	8,0	12,5	
<b>19 July</b>	15:00	USA	Leading indicator CB		JUN	0,3	0,1	
					JUN	0,3	0,1	
		JPY	Leading Index CI		MAY F	0,0	110,5	
			Coincident Index CI		MAY F	-	105,9	
		GER	Producer price index	mom	JUN	-0,1	-0,3	
				yoy	JUN	0,6	0,2	
13:30	CAD	Consumer prices	mom	JUN	0,1	0,2		
			yoy	JUN	1,2	0,7		
<b>22 July</b>	15:00	USA	Existing Home Sales	mn	JUN	5,24	5,18	
				mom	JUN	1,2	4,2	



This document has been created and published by the Corporates & Markets division of Commerzbank AG, Frankfurt/Main or Commerzbank's branch offices mentioned in the document. Commerzbank Corporates & Markets is the investment banking division of Commerzbank, integrating research, debt, equities, interest rates and foreign exchange.

The author(s) of this report, certify that (a) the views expressed in this report accurately reflect their personal views; and (b) no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or views expressed by them contained in this document. The analyst(s) named on this report are not registered / qualified as research analysts with FINRA and are not subject to NASD Rule 2711.

**Disclaimer**

This document is for information purposes only and does not take account of the specific circumstances of any recipient. The information contained herein does not constitute the provision of investment advice. It is not intended to be and should not be construed as a recommendation, offer or solicitation to acquire, or dispose of, any of the financial instruments mentioned in this document and will not form the basis or a part of any contract or commitment whatsoever.

The information in this document is based on data obtained from sources believed by Commerzbank to be reliable and in good faith, but no representations, guarantees or warranties are made by Commerzbank with regard to accuracy, completeness or suitability of the data. The opinions and estimates contained herein reflect the current judgement of the author(s) on the data of this document and are subject to change without notice. The opinions do not necessarily correspond to the opinions of Commerzbank. Commerzbank does not have an obligation to update, modify or amend this document or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

The past performance of financial instruments is not indicative of future results. No assurance can be given that any opinion described herein would yield favourable investment results. Any forecasts discussed in this document may not be achieved due to multiple risk factors including without limitation market volatility, sector volatility, corporate actions, the unavailability of complete and accurate information and/or the subsequent transpiration that underlying assumptions made by Commerzbank or by other sources relied upon in the document were inapposite.

Neither Commerzbank nor any of its respective directors, officers or employees accepts any responsibility or liability whatsoever for any expense, loss or damages arising out of or in any way connected with the use of all or any part of this document.

Commerzbank may provide hyperlinks to websites of entities mentioned in this document, however the inclusion of a link does not imply that Commerzbank endorses, recommends or approves any material on the linked page or accessible from it. Commerzbank does not accept responsibility whatsoever for any such material, nor for any consequences of its use.

This document is for the use of the addressees only and may not be reproduced, redistributed or passed on to any other person or published, in whole or in part, for any purpose, without the prior, written consent of Commerzbank. The manner of distributing this document may be restricted by law or regulation in certain countries, including the United States. Persons into whose possession this document may come are required to inform themselves about and to observe such restrictions. By accepting this document, a recipient hereof agrees to be bound by the foregoing limitations.

**Additional notes to readers in the following countries:**

**Germany:** Commerzbank AG is registered in the Commercial Register at Amtsgericht Frankfurt under the number HRB 32000. Commerzbank AG is supervised by the German regulator Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), Marie-Curie-Strasse 24-28, 60439 Frankfurt am Main, Germany.

**United Kingdom:** This document has been issued or approved for issue in the United Kingdom by Commerzbank AG London Branch. Commerzbank AG, London Branch is authorised by Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) and subject to limited regulation by the Financial Conduct Authority and Prudential Regulation Authority. Details on the extent of our regulation by the Financial Conduct Authority and Prudential Regulation Authority are available from us on request. This document is directed exclusively to eligible counterparties and professional clients. It is not directed to retail clients. No persons other than an eligible counterparty or a professional client should read or rely on any information in this document. Commerzbank AG, London Branch does not deal for or advise or otherwise offer any investment services to retail clients.

**United States:** This document has been approved for distribution in the US under applicable US law by Commerz Markets LLC ("Commerz Markets"), a wholly owned subsidiary of Commerzbank AG and a US registered broker-dealer. Any securities transaction by US persons must be effected with Commerz Markets. Under applicable US law; information regarding clients of Commerz Markets may be distributed to other companies within the Commerzbank group. This report is intended for distribution in the United States solely to "institutional investors" and "major U.S. institutional investors," as defined in Rule 15a-6 under the Securities Exchange Act of 1934. Commerz Markets is a member of FINRA and SIPC.

**Canada:** The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, solicitation of an offer to buy securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. In Canada, the information contained herein is intended solely for distribution to Permitted Clients (as such term is defined in National Instrument 31-103) with whom Commerz Markets LLC deals pursuant to the international dealer exemption. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities may not be conducted through Commerz Markets LLC. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence.

**European Economic Area:** Where this document has been produced by a legal entity outside of the EEA, the document has been re-issued by Commerzbank AG, London Branch for distribution into the EEA.

**Singapore:** This document is furnished in Singapore by Commerzbank AG, Singapore branch. It may only be received in Singapore by an institutional investor as defined in section 4A of the Securities and Futures Act, Chapter 289 of Singapore ("SFA") pursuant to section 274 of the SFA.

**Hong Kong:** This document is furnished in Hong Kong by Commerzbank AG, Hong Kong Branch, and may only be received in Hong Kong by 'professional investors' within the meaning of Schedule 1 of the Securities and Futures Ordinance (Cap.571) of Hong Kong and any rules made there under.

**Japan:** Commerzbank AG, Tokyo Branch is responsible for the distribution of Research in Japan. Commerzbank AG, Tokyo Branch is regulated by the Japanese Financial Services Agency (FSA).

**Australia:** Commerzbank AG does not hold an Australian financial services licence. This document is being distributed in Australia to wholesale customers pursuant to an Australian financial services licence exemption for Commerzbank AG under Class Order 04/1313. Commerzbank AG is regulated by Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) under the laws of Germany which differ from Australian laws.

© Commerzbank AG 2013. All rights reserved. Version 9.15

**Commerzbank Corporates & Markets**

**Frankfurt**

Commerzbank AG  
DLZ - Gebäude 2, Händ-  
lerhaus  
Mainzer Landstraße 153  
60327 Frankfurt  
Tel: + 49 69 13621200

**London**

Commerzbank AG  
London Branch  
PO BOX 52715  
30 Gresham Street  
London, EC2P 2XY  
Tel: + 44 207 623 8000

**New York**

Commerzbank AG  
2 World Financial Center,  
31st floor  
New York,  
NY 10281  
Tel: + 1 212 703 4000

**Singapore Branch**

Commerzbank AG  
71 Robinson Road, #12-01  
Singapore 068895  
Tel: +65 63110000

**Hong Kong Branch**

Commerzbank AG  
29/F, Two IFC  
8 Finance Street  
Central Hong Kong  
Tel: +852 3988 0988