

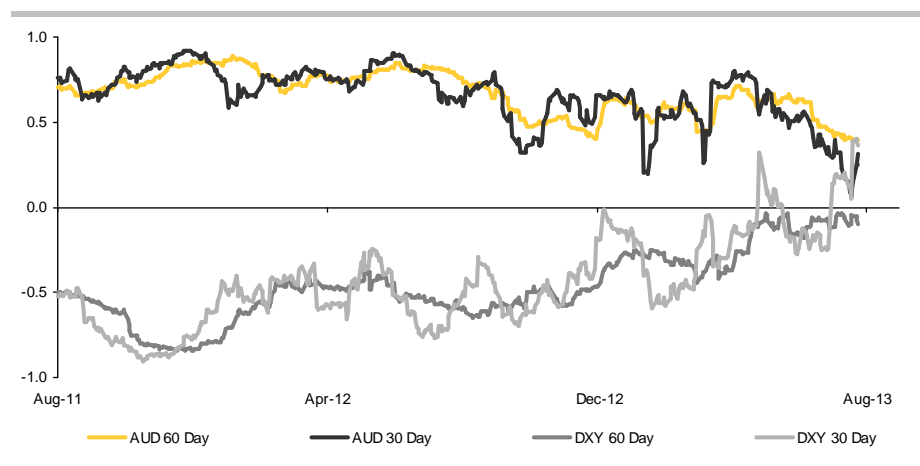
# FX Alpha

3 September 2013

## The end of Risk on – Risk off?

**The end of Risk on - Risk off.** Although all eyes are on current account risks in emerging markets, within the G10 complex there has been a complete breakdown of the Risk on – Risk off regime.

CHART 1: **Correlation breakdown**  
DXY and AUD TWI correlation to S&P index



Source: Commerzbank Research, Bloomberg, ICE

### CONTENTS

THE END OF RISK ON – RISK OFF..... 2  
 G10 HIGHLIGHTS..... 3  
 FX METRICS..... 4  
 EM HIGHLIGHTS..... 5  
 TACTICAL TRADE RECOMMENDATION6  
 TECHNICAL ANALYSIS ..... 7  
 EVENT CALENDAR ..... 8

**G10 Highlights.** RBA stays on hold. GBP benefits from better data, ignore the Verizon hype. USD to benefit from better data.

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

**EM Highlights.** NBP to remain neutral. Mexican central bank to stay on hold. CBRT stays put – for now?

**Tactical trade recommendation.** Enter into EUR-GBP downside seagulls

**Technical Analysis.** EUR-GBP has started to erode its 2012 -2013 uptrend

**Event calendar.** Central bank meetings and US Non Farm Payrolls are the highlights this coming week.

## The end of Risk on – Risk off

**Although all eyes are focussed upon current account risks in emerging markets, within the G10 complex there has been a complete breakdown of the risk on – risk off regime**

Over the last 6 years investors in G10 have become used to the risk on – risk off trading regime where higher yielders outperform during periods of increasing risk appetite whilst lower yielding currencies tended to depreciate and vice versa. What is notable is that there was little differentiation of such currencies along fundamental lines; higher yielders simply appreciated en masse, while lower yielding currencies lost ground. The cause of this dynamic lay with central bank liquidity policies. By flooding markets with abundant liquidity and effectively mitigating tail risks (think of the ECB's LTRO policy) volatility term structures flattened to lower and lower levels with consequent appreciation of higher yielding currencies. Investors did not have to concern themselves with differentiation. Until now that is.

Since April of this year the old risk on – risk off correlation has broken down (Chart 2). If this was just a case of one leg (high yielding currencies) exhibiting a breakdown of correlations it would not be such an issue, after all idiosyncratic factors have a role to play. The fact that lower yielders also exhibit a change in behaviour indicates a more profound adjustment is underway. Investors therefore have to prepare for a different style of trading currencies in an environment characterised by decreasing liquidity, increasing volatility and more directional trends.

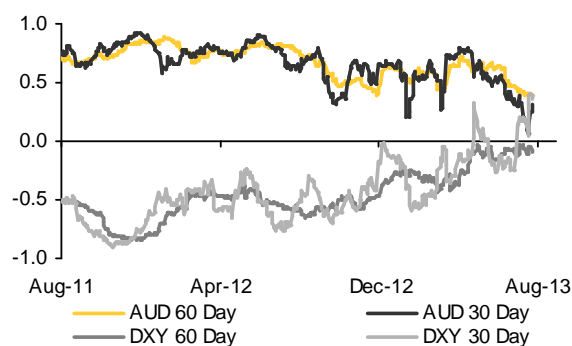
We have two possibilities when thinking about how G10 moves will tend to pan out. Either we revert to a risk on / risk off profile, albeit with less extreme moves, or we move towards a different paradigm where currencies trade in line with fundamental developments. Consider a return to the risk on / off regime. As central banks cease their ultra accommodative monetary policies and start to eventually withdraw excess liquidity this will increase volatility which should lead to the underperformance of carry trades. That being the case it is instructive to look at carry to risk ratios (Chart 3). While the drop in the AUD ratio this year was mainly due to the fall in local interest rates, any increase in volatility will have a further deleterious impact upon these ratios (i.e. larger denominator). Given that offsetting increases in base rates look unlikely over the short to medium term it stands to reason that higher yielding currencies will not benefit to the same extent as in previous instances.

The tricky part for investors in G10 will be in differentiating amongst the lower yielders such as USD, JPY and CHF. Perhaps the clearest trend to be seen lies with the development of USD exchange rates, which show the USD has outperformed against most G10 and EM currencies year to date. The question for investors is how to trade JPY and CHF; which of the two will lose the most ground?

Author:

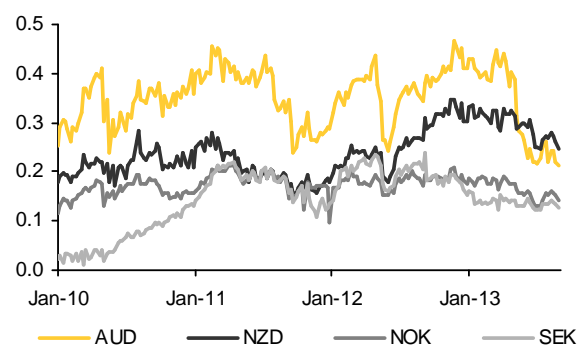
Peter Kinsella  
+44 207 475 3959  
peter.kinsella@commerzbank.com

**CHART 2: Correlation breakdown**  
AUD TWI and DXY correlation to S&P index



Source: Commerzbank Research, Bloomberg LP, ICE

**CHART 3: Passed the point of no return**  
3 Month Carry to Risk ratio



Sources: Commerzbank Research, Bloomberg LP

## G10 Highlights

**RBA stays on hold. Sterling benefits from better data, ignore the Verizon hype. USD to benefit from better data.**

**AUD:** As expected by a majority of analysts overnight the RBA left rates on hold at 2.50%. In a notable development the RBA removed the phrase of there being 'scope' to ease policy further, which effectively means that the RBA no longer has a clear easing bias. AUD rallied in the immediate aftermath of the statement moving towards levels around 0.9050. Positioning remains heavily short AUD so there is some scope for a short squeeze as marginal positions come under pressure. In the near term that means investors should keep an eye on EUR-AUD, which could grind lower coming into the US NFP release this Friday.

**GBP:** Yesterday the pound appreciated against most of the majors following better than expected Manufacturing PMI data. This wasn't a case of merely beating already low expectations as the series reached its highest level in nearly 2 years. To a certain extent the pound has underperformed in recent months relative to the improvement in underlying UK economic data, but this can be explained largely by the BoE's forward guidance announcements, which seek to prevent a premature tightening of financial conditions. The remainder of the week will be rather busy in terms of data releases with Construction and Services PMI set to be revealed, along with the BoE meeting on Thursday where we expect rates and asset purchases to remain unchanged at 0.5% and £375 billion respectively.

One story doing the rounds will be the impact of the Verizon deal upon the pound as already some market commentators expect that this will lead to appreciation pressure. To be clear about this, we don't see this as being newsworthy. A £60 billion deal is of course big news, but in the context of typical weekly GBP volume of £800 billion it is difficult to argue that any effect can be anything other than transitory. The bottom line is that there are decent reasons to expect the pound to trade somewhat more robustly, albeit that the Verizon deal is not one of them.

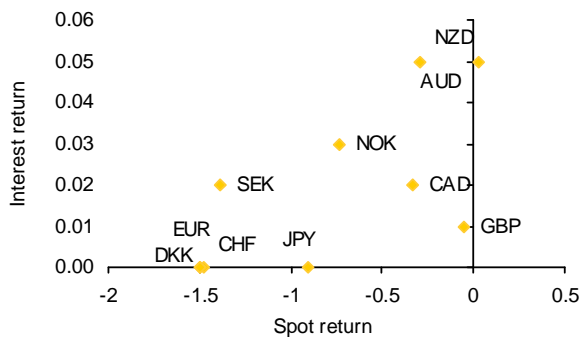
**USD:** The key event risk this week will of course be the NFP release on Friday. Coming into the release markets seem to have priced in Fed tapering of QE3. US 10 yr yields now trade around 2.8% and EUR-USD has rejected levels above 1.34 to trade closer to 1.32. Expectations are for a print of 180k, which although not a staggeringly high number, it is still indicative of job growth (which is more than the euro zone can say). In any case a decent number should put the nail in the coffin as far as market expectations are concerned for an early taper. All told there are more and more compelling reasons to expect meaningful USD appreciation in the coming quarters.

Author:

**Peter Kinsella**  
+44 207 475 3959  
Peter.kinsella@commerzbank.com

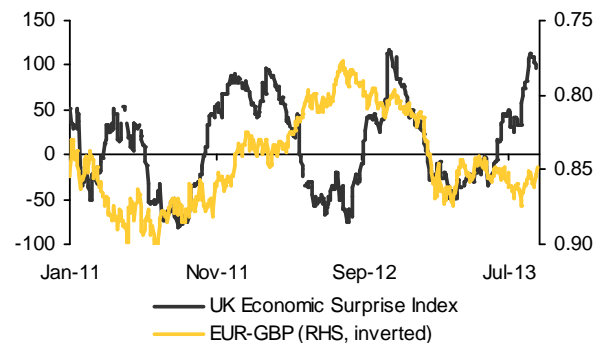
**Antje Praefcke**  
+49 69 136 43834  
antje.praefcke@commerzbank.com

**CHART 1: USD making ground**  
% Gain / Loss Vs. USD since 26<sup>th</sup> August



Source: Commerzbank Research

**CHART 2: GBP underperforms data improvement**  
EUR-GBP spot, UK Economic Surprise Index



Source: Commerzbank Research, Bloomberg LP, Citi

# 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.

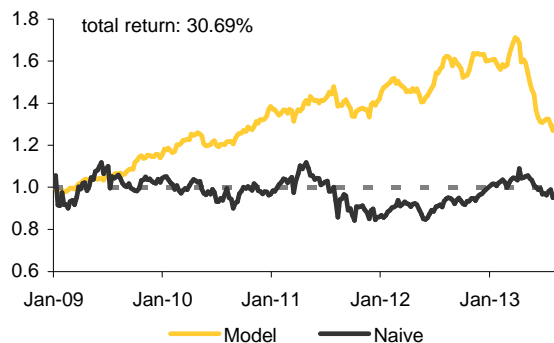
Below we illustrate an example of a mean-variance optimised carry trade portfolio on a selected currency basket with a pre-set risk level. For the optimization the variance has been chosen randomly and can be adjusted as required.

Author:

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

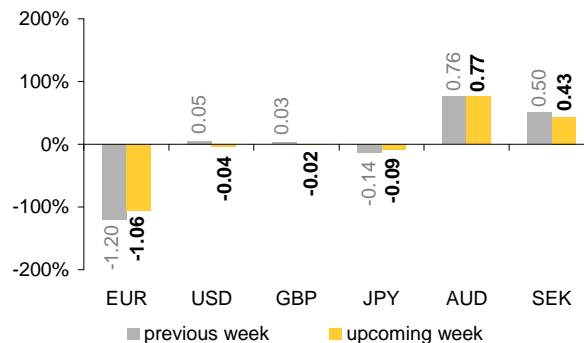
**CHART 3: Historic performance of optimized Carry Trade Portfolio**

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 4: Portfolio weights for week 3 Sep to 10 Sep**  
 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

### NBP to remain neutral. Mexican central bank to stay on hold. CBRT stays put – for now?

**PLN:** The PLN along with its Central Eastern European peers has been outperforming within the EM currency universe. One reason is without a doubt the recently better than expected economic data from Poland (strong industrial production, retail sales and PMI) as well as the euro zone. This has made it all clear that the central bank will leave key rates unchanged until year end. As inflation has recently picked up the market is even starting to factor in rate hikes in the foreseeable future. We expect the NBP to however remain cautious and to highlight that there are still growth risks lying ahead, particularly stemming from the euro zone. Those betting on a particularly hawkish NBP are likely to be disappointed. Nonetheless we expect the PLN to continue outperforming as the Polish economy is increasingly improving.

**MXN:** Although economic data disappointed recently and consumer price inflation came down in the past months the central bank is likely to keep its rates unchanged on its decision on Friday. However, speculations are rising that the central bank might cut its rates in one of its next meetings. We expect the central bank to stay on hold for the time being, though, as we expect the economy to be in much better shape in the second half of the year due to an improved US economy and Mexican reforms. Additionally, against the background of a weaker peso we do not see much room for the central bank to ease monetary policy. While we remain generally optimistic regarding the peso the environment for EM currencies is unfavourable at present. The uncertainty about the US monetary policy is high and in addition there are geopolitical risks. Moreover there are no unambiguous signals from the Mexican economy yet which would clearly prove that the situation in Mexico really is improving. As a result it is a difficult moment to bet on a stronger peso. We therefore prefer to remain on the side-lines.

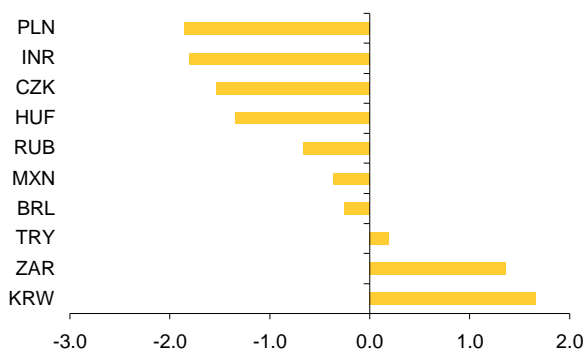
**TRY:** USD-TRY has come off its recent all time highs on the back of more benign global sentiment. As a result the CBRT has so far not delivered any previously announced further tightening measures (apart from the regular FX auction and cancellation of 1-week-repo auctions) as it apparently does not see the need to act just yet. However, considering that there are plenty of event risks lying ahead which could shake up market sentiment quickly (e.g. ECB rate meeting, US labour market report etc), it would be in the CBRT's interest not to strain the market's patience too much. Should the CBRT decide to stay put in the following days, a renewed spike of USD-TRY towards 2.08 could be well on the cards.

Author:

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

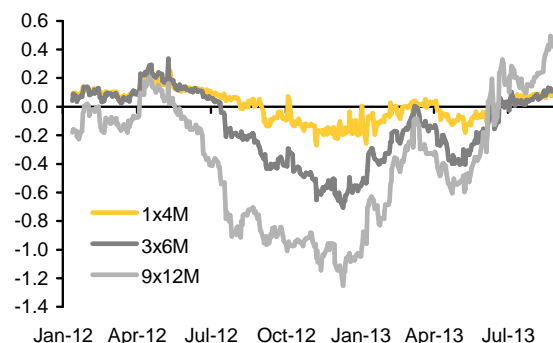
**You-Na Park**  
+49 69 136 42155  
you-na.park@commerzbank.com

**CHART 8: PLN outperforming**  
% Gain / Loss Vs. USD since 27<sup>th</sup> August 2013



Source: Commerzbank Research

**CHART 9: Poland: rate hikes on the horizon**  
Difference 3M Wibor and FRAs of different maturities



Source: Commerzbank Research

# Tactical trade recommendation

## Enter into EUR-GBP downside seagulls

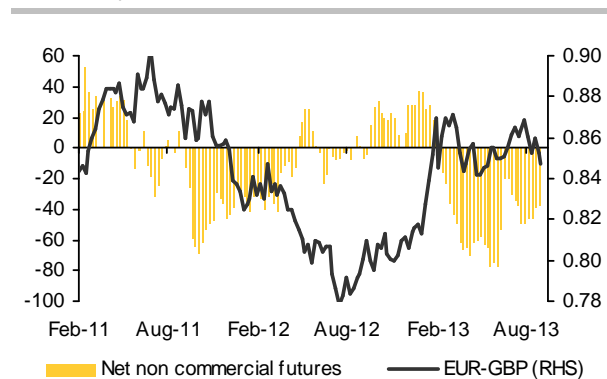
Yesterday's Manufacturing PMI confirmed the cyclical improvement in UK economic data. Indeed since the beginning of the summer UK economic data have shown a steady improvement; whilst the pound has traded with a slightly offered bias in large part due to the BoE's forward guidance policy. By some measures the pound has underperformed relative to the improvement in underlying data and hence there could be scope for sterling to play catch up.

Coming into the fourth quarter EUR-USD will likely trade with a downside bias as the market starts to price in Fed tapering and as such the soft side of EUR-GBP will be to the downside. Positioning is still short the pound hence there could be some short covering which could lead to an aggressive move in the coming weeks. We recommend investors to enter into 6 week downside seagulls by selling 0.86 calls, buying 0.845 EUR puts and selling 0.8250 EUR puts for a cost of approx 0.25% of notional.

Author:

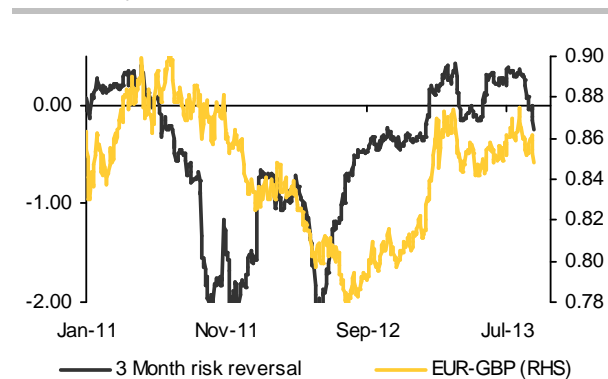
**Peter Kinsella**  
+44 20 7475 3959  
peter.kinsella@commerzbank.com

**CHART 5: Positioning still short GBP**  
EUR-GBP spot, IMM net non commercial futures



Sources: Commerzbank Research, Bloomberg LP, CFTC

**CHART 6: Risk reversal points to the downside**  
EUR-GBP spot, 3 Month Risk Reversal in % vol



Sources: Commerzbank Research, Bloomberg LP

**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%	-0.21%	0.89%	Open
12.03.2013	Sell CAD-MXN risk reversal 13.00 / 11.90	12.09.2013	2m x 1m	0.28%	0.05%	-0.23%	Open
28.05.2013	Buy USD-CHF risk reversal 0.94 / 1.00	28.08.2013	1m x 1m	0.23%	-1.50%	-1.73%	Open
08.07.2013	Sell GBP-USD risk reversal 1.51 / 1.46	08.10.2013	1m x 1m	0.01%	-3.60%	-3.61%	Open
20.08.2013	Buy AUDp-JPYc 87.00	19.09.2013	1m	0.42%	0.69%	0.27%	Open
03.09.2013	EUR-GBP seagull 0.86, 0.845, 0.825	14.10.2013	1m x 1m x 1m	0.25%	0.16%	-0.09%	Open

Sources: Bloomberg L.P., Commerzbank Research

# Technical Analysis

## EUR/GBP has started to erode its 2012-2013 uptrend.

EUR/GBP came under increasing downside pressure throughout August and this has culminated in a break below the 2012-2013 up trend at 0.8523 this morning. We have seen the market head back to its 200 day ma at 0.8481 and while it is possible that we will see some consolidation around this zone, the recent move lower has been damaging.

The market appears to have recently failed at the top of a 4 year down channel, which is currently located at .8750. This coupled with the break of the 2012-2013 uptrend is viewed as extremely negative from a longer term perspective.

Beyond some consolidation, the risks have increased that we will see further weakness. The initial downside target is the 0.8399/0.8367 zone; this is the low that we saw in April and the 200 week moving average. Just above here at .8402 is the 38.2% retracement of the move up from the 0.7757. This .8402/0.8366 zone is expected to act as a major break down zone. Failure here will trigger losses to 0.8155 and eventually head back to the 2012 low at 0.7757 and potentially to the base of the channel, currently at 0.7590. The 2012 low of approximately 0.7750 is achievable by the end of 2014.

Author:

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

**CHART 7: EUR/GBP weekly**  
 Eroding the 2012-2013 uptrend



Source: CQG, Commerzbank Research

## Event Calendar

Date	Time (GMT)	Region	Release	Unit	Period	Survey	Prior	
04 September	07:00	RON	Net wages	yoy	JUL	-	3.5	
	07:00	HUF	GDP	yoy	2Q F	-	0.5	
	07:00	RON	GDP	yoy	2Q P	-	1.3	
	07:55	GER	PMI Services (Markit)		AUG F	52.4	52.4	
	08:00	EUR	PMI Services (Markit)		AUG F	51.0	51.0	
	08:30	GBP	PMI Services (Markit)		AUG	59.7	60.2	
	09:00	EUR	Retail sales	mom	JUL	0.2	-0.5	
				yoy	JUL	-0.3	-0.9	
	09:00	EUR	GDP	qoq	2Q P	0.3	0.3	
				yoy	2Q P	-0.7	-0.7	
	-	PLN	Interest rate decision	%	SEP 4	2.50	2.50	
	11:00	USA	MBA Mortgage Applications	%	AUG 30	-	-2.50	
	12:00	RUB	CPI weekly year to date	%	SEP 2	-	4.5	
	12:30	USA	Trade balance	USD bn	JUL	-38.8	-34.2	
	14:00	CAD	Interest rate decision	%	SEP 4	1.00	1.00	
05 September	07:00	CZK	Trade balance	CZK bn	JUL	28.5	33.0	
	07:30	SEK	Interest rate decision	%	SEP 5	1.00	1.00	
	10:00	GER	New orders	mom	JUL	-1.0	3.6	
				yoy	JUL	2.9	4.3	
	-	JPY	BoJ Target Rate	%	SEP 5	-	0.10	
	11:00	GBP	Interest rate decision	%	SEP 5	0.50	0.50	
	11:00	RUB	FX and gold reserves	USD bn	AUG 30	-	508.1	
	11:45	EUR	ECB Interest rate decision	%	SEP 5	0.50	0.50	
	12:15	USA	ADP report	K	AUG	185	200	
	12:30	USA	Initial jobless claims	K	AUG 31	330	331	
	14:00	USA	New orders	mom	JUL	-3.5	1.5	
	14:00	USA	ISM non-manufacturing		AUG	55.0	56.0	
	06 September	05:00	JPY	Leading Index CI		JUL P	107.9	107.2
				Coincident Index CI		JUL P	106.9	105.5
		07:00	HUF	Industrial production	mom	JUL P	-	1.2
				yoy	JUL P	-	1.7	
07:00		CZK	Industrial production	yoy	JUL	2.0	-5.3	
07:15		CHF	Consumer prices	mom	AUG	0.0	-0.4	
				yoy	AUG	0.0	0.0	
08:00		NOK	Industrial production	mom	JUL	-	0.5	
				yoy	JUL	0.0	-5.5	
08:30		GBP	Industrial production	mom	JUL	0.2	1.1	
				yoy	JUL	-1.7	1.2	
10:00		GER	Industrial production	mom	JUL	-0.5	2.4	
				yoy	JUL	0.9	2.0	
12:30		USA	Nonfarm Payrolls	K	AUG	180	162	
			Unemployment rate	%	AUG	7.4	7.4	
08 September	23:50	JPY	GDP	qoq	2Q F	-	2.6	
09 September	07:00	CZK	Consumer prices	mom	AUG	-0.1	-0.2	
				yoy	AUG	1.4	1.4	
	07:00	TRY	Industrial production	yoy	JUL	-	4.2	
	07:15	CHF	Retail sales	yoy	JUL	-	2.3	
	08:30	EUR	Sentix		SEP	-	-4.9	
14:00	HUF	Budget balance	bn, ytd	AUG	-	-851		
10 September	23:01	GBP	RICS housing market index		AUG	-	36.0	
	05:30	CNY	Industrial production	yoy	AUG	9.9	9.7	
	07:30	SEK	Industrial production	mom	JUL	-	3.0	
				yoy	JUL	-	-4.0	
	08:00	NOK	Consumer prices	mom	AUG	-	0.4	
			yoy	AUG	-	3.0		



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