

Summertime and the carry is easy

New mid-curve trades that should work while you don't

Because of the stellar performance of our turbo-carry (mid-curve calendar spread or [link](#)) programme (a total return of 9.77% since the start of the programme in September 2013), we will continue with our regular trade recommendations. Our focus is on both 1-month and 3-month expiries in EUR, because of the low-for-longer expectations, and only on 1-month USD recommendations, which should benefit from the summer lull, but expire before the more likely to be eventful September FOMC meeting. We focus on three trades, EUR 1m1y2y and 3m1y2y, and USD 1m3y2y.

Trade Ideas: (scaled for a target carry of ~\$250k per trade)

EUR 1m1y2y 0.43%: Buy €680mn 13m2y receivers, sell €680mn 1m1y2y receivers, both struck at 1y2y spot rates ("spot", ref 43bp) for a package offer price of 15.5ct. The expected carry is 2.7ct.

EUR 3m1y2y 0.43%: Buy €390mn 15m2y receivers, sell €390mn 3m1y2y receivers, both struck at 1y2y spot rates ("spot", ref 43bp) for a package offer price of 13.5ct. The expected carry is 4.7ct.

USD 1m3y2y 2.89%: Buy \$145mn 37m2y receivers, sell \$145mn 1m3y2y receivers, both struck at 3y2y spot rates ("spot", ref 2.89%) for a package offer price of 108.5ct. The expected carry is 17.4ct.

Turbo-carry new trades

We focus on high carry trades with relatively wide breakevens. Our criterion for choosing these trades has evolved and focuses on the use of the spot measure (a *physical* measure that has a normal density centred on spot at the time of expiry, using $\text{spot-vol} \times \sqrt{\text{expiry}}$, where the spot-vol has been adjusted for implied/realised ratios). Although we do not explicitly calculate the expected payoff under the spot measure, we approximate a number of ways and focus on the probability of staying within the breakeven boundary. In general, we would also use the recent stability of the trading range (i.e., the historical probability of staying within the breakevens), although this measure is more meaningful in the US, where rates have been relatively range bound since about July 2013, while in EUR, since the ECB meeting, rates are settling into a new range.

Our goal is to maximise carry being cognisant of risks of a breakout. With recent data releases in the US, further market movers over the next month, as the summer wears on there are less likely. We do not consider 3-month trades entirely because we do not wish to have a short gamma position around the September FOMC meeting. Meanwhile, in EUR, with ECB President Draghi announcing changes to the ECB meeting schedule and the publication of minutes, this is likely to be a modest vol dampener and keep rates in a further contained range.

That being said, we have 1m1y2y and 3m1y2y for our EUR recommendations. The two trades are both struck at 1y2y forward (ref. 0.43%). In Figure 1, we plot the profiles of net

Global Markets Research

10 July 2014

Research analysts

Quantitative Strategies

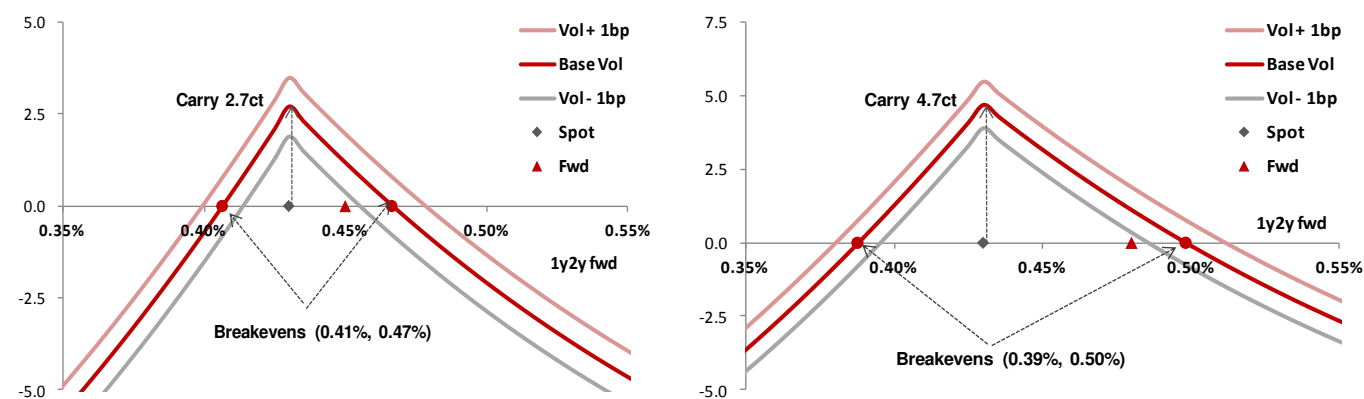
Nick Firoozye - Nlplc
nick.firoozye@nomura.com
+44 20 7102 1660

Qilong Zhang - NIHK
qilong.zhang@nomura.com
+852 2252 6191

payoff for the two trades. As EUR volatility has been largely compressed since the June ECB meeting, the breakeven range becomes relatively tight after stochastic vol adjustment: 0.41% - 0.47% for 1m1y2y, and 0.39% - 0.50% for 3m1y2y. However, we think possible moves in the EUR are likely to be muted near term, because of the ECB's "rates low for a long time" commitment. In particular, Mr Draghi said at the ECB meeting last week, that he doesn't plan on synchronising the ECB meetings with the Fed's or any other central bank. This suggests a disconnection of EUR rates from their US counterparts, and the EUR curve is likely to be less affected by developments in US rates in coming months.

Fig. 1: P&L profile (cts) at expiry for EUR 1m1y2y 0.43% (left) and 3m1y2y 0.43% (right)

Long vega exposure and wide breakeven range

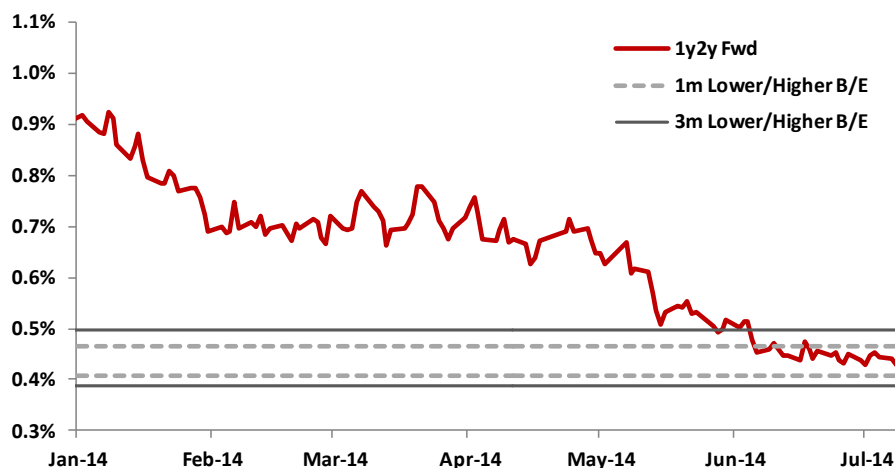


Source: Nomura Research

Figure 2 shows the recent history of EUR 1y2y forwards overlaid with breakevens. Our breakeven band has largely covered most of the extremes since the June ECB meeting, and should provide a decent buffer against either a sell-off or rally.

Fig. 2: Historical EUR 1y2y fwd vs lower/higher breakevens

After the ECB's June action, an event-light summer would help EUR 1y2y fwd settle into a relatively narrow range

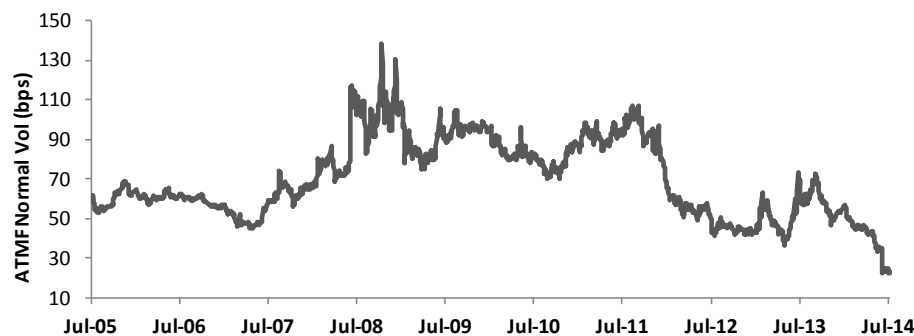


Source: Nomura Research

EUR 1y2y volatility has been falling since last July, and collapsed in June to its all-time low (see Figure 3). Speaking of an entry point, we think the two EUR trades are less likely to be affected by any further drop in vol, but benefit the most from any potential rally in vol.

Fig. 3: EUR 1y2y volatility has been falling to an all-time low

Long vol exposure will benefit when EUR 1y2y vol bounces back from its all-time low



Source: Nomura Research

We note the risks to the trade in Figure 4, where we highlight the risk to vega, where a 10bp increase in vol underlying the 1y2y forward will raise the package price by 5.5ct for the 1-month trade and 4.4ct for the 3-month trade. In terms of time value, they gain approximately 0.08ct and 0.04ct per day for 1-month and 3-month trades, respectively.

Fig. 4: Risks to EUR turbo carry trades

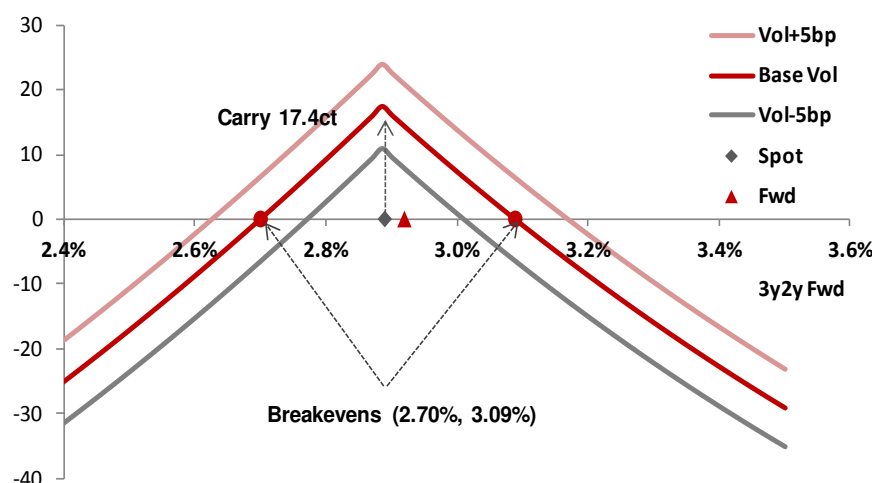
Package Name	Fwd (%)	Spot (%)	Strike (%)	Delta (ct/bp)	Gamma (ct/bp2)	Vega (ct/bp)	Theta (ct/day)
EUR 1m1y2y	0.450	0.430	0.430	-0.28	-0.08	0.55	0.08
EUR 3m1y2y	0.480	0.430	0.430	-0.32	-0.03	0.44	0.04

Source: Nomura Research

On USD, our favoured trade is 1m3y2y struck at 2.89%. In a similar way, we plot the payoff profiles in Figure 5 for current vol and up/down vol scenarios, noting that the long vega position means that the payoff profile shifts up in a rising vol environment and correspondingly shifts down in a falling vol environment. We calculate the vol-adjusted breakevens as being 2.70% - 3.09%, at a full 39bp wide, giving some protection against the rally, while maintaining a decent margin for sell-offs.

Fig. 5: P&L profile (cts) at expiry for USD 1m3y2y 2.89%

Long vega exposure and wide breakeven range (lower B/E 2.70 %, higher B/E 3.09%)



Source: Nomura Research

Figure 6 overlays the breakevens with the recent history of USD 3y2y forwards. We note that our breakeven band has covered most of the extremes since Fed tapering expectations began in May 2013, and should provide decent protection against either a sell-off or rally. Although trade MTMs may vary based on a number of factors, the terminal payoffs are simple and we believe it should have decent positive P&L if forwards expire within these bands in one month's time.

Fig. 6: Historical USD 3y2y fwd vs. lower/higher breakevens

Wide breakeven range gives the trade a large margin against market moves



Source: Nomura Research

For the USD 1m3y2y trade, we show the risks in Figure 7. Again, we highlight in particular the risk to vega, where a 10bp increase in the vol underlying the 3y2y forward will raise the package price by 10.3ct. The trade gains approximately 0.36ct per day in terms of time value alone.

Fig. 7: Risks to USD 1m3y2y 2.89%

Package Name	Fwd (%)	Spot (%)	Strike (%)	Delta (ct/bp)	Gamma (ct/bp2)	Vega (ct/bp)	Theta (ct/day)
USD 1m3y2y	2.92	2.89	2.89	-0.17	-0.02	1.03	0.36

Source: Nomura Research

On general trade risks, these turbo-carry trades have limited downside, and will tend to lose money if:

- Forwards move outside the range (specified in terms of breakevens in the previous discussion).
- Volatility decreases significantly.

These risks are not completely independent. Typically, large bearish moves have been associated with rising volatility (providing a further buffer against losses when rates rise). By contrast, large bullish moves have often coincided with falling volatility (decreasing the buffer against losses). This consequently has given the trades a more bearish bias. Nonetheless, we believe that the highlighted trades more than adequately offset these risks, where we believe the breakevens are relatively wide and vega is sufficiently high to help balance risk and return, especially in the light of the market action in the past two months. In any event, the maximum downside is losing the initial premium.

Trade Ideas: (scaled for a target carry of ~\$250k per trade)

EUR 1m1y2y 0.43%: Buy €680mn 13m2y receivers, sell €680mn 1m1y2y receivers, both struck at 1y2y spot rates ("spot", ref 43bp) for a package offer price of 15.5ct. The expected carry is 2.7ct.

EUR 3m1y2y 0.43%: Buy €390mn 15m2y receivers, sell €390mn 3m1y2y receivers, both struck at 1y2y spot rates ("spot", ref 43bp) for a package offer price of 13.5ct. The expected carry is 4.7ct.

USD 1m3y2y 2.89%: Buy \$145mn 37m2y receivers, sell \$145mn 1m3y2y receivers, both struck at 3y2y spot rates ("spot", ref 2.89%) for a package offer price of 108.5ct. The expected carry is 17.4ct.

Appendix A-1

Analyst Certification

We, Nick Firoozye and Qilong Zhang, hereby certify (1) that the views expressed in this Research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of our compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

Important Disclosures

Online availability of research and conflict-of-interest disclosures

Nomura research is available on www.nomuranow.com/research, Bloomberg, Capital IQ, Factset, MarkitHub, Reuters and ThomsonOne. Important disclosures may be read at <http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx> or requested from Nomura Securities International, Inc., on 1-877-865-5752. If you have any difficulties with the website, please email grpsupport@nomura.com for help.

The analysts responsible for preparing this report have received compensation based upon various factors including the firm's total revenues, a portion of which is generated by Investment Banking activities. Unless otherwise noted, the non-US analysts listed at the front of this report are not registered/qualified as research analysts under FINRA/NYSE rules, may not be associated persons of NSI, and may not be subject to FINRA Rule 2711 and NYSE Rule 472 restrictions on communications with covered companies, public appearances, and trading securities held by a research analyst account.

Nomura Global Financial Products Inc. ("NGFP") Nomura Derivative Products Inc. ("NDPI") and Nomura International plc. ("Nlplc") are registered with the Commodities Futures Trading Commission and the National Futures Association (NFA) as swap dealers. NGFP, NDPI, and Nlplc are generally engaged in the trading of swaps and other derivative products, any of which may be the subject of this report.

ADDITIONAL DISCLOSURES REQUIRED IN THE U.S.

Principal Trading: Nomura Securities International, Inc and its affiliates will usually trade as principal in the fixed income securities (or in related derivatives) that are the subject of this research report. Analyst Interactions with other Nomura Securities International, Inc. Personnel: The fixed income research analysts of Nomura Securities International, Inc and its affiliates regularly interact with sales and trading desk personnel in connection with obtaining liquidity and pricing information for their respective coverage universe.

Valuation methodology - Fixed Income

Nomura's Fixed Income Strategists express views on the price of securities and financial markets by providing trade recommendations. These can be relative value recommendations, directional trade recommendations, asset allocation recommendations, or a mixture of all three. The analysis which is embedded in a trade recommendation would include, but not be limited to:

- Fundamental analysis regarding whether a security's price deviates from its underlying macro- or micro-economic fundamentals.
- Quantitative analysis of price variations.
- Technical factors such as regulatory changes, changes to risk appetite in the market, unexpected rating actions, primary market activity and supply/ demand considerations.

The timeframe for a trade recommendation is variable. Tactical ideas have a short timeframe, typically less than three months. Strategic trade ideas have a longer timeframe of typically more than three months.

Disclaimers

This document contains material that has been prepared by the Nomura entity identified at the top or bottom of page 1 herein, if any, and/or, with the sole or joint contributions of one or more Nomura entities whose employees and their respective affiliations are specified on page 1 herein or identified elsewhere in the document. The term "Nomura Group" used herein refers to Nomura Holdings, Inc. or any of its affiliates or subsidiaries and may refer to one or more Nomura Group companies including: Nomura Securities Co., Ltd. ('NSC') Tokyo, Japan; Nomura International plc ('Nlplc'), UK; Nomura Securities International, Inc. ('NSI'), New York, US; Nomura International (Hong Kong) Ltd. ('NIHK'), Hong Kong; Nomura Financial Investment (Korea) Co., Ltd. ('NFIK'), Korea (Information on Nomura analysts registered with the Korea Financial Investment Association ('KOFIA') can be found on the KOFIA Intranet at <http://dis.kofia.or.kr>); Nomura Singapore Ltd. ('NSL'), Singapore (Registration number 197201440E, regulated by the Monetary Authority of Singapore); Nomura Australia Ltd. ('NAL'), Australia (ABN 48 003 032 513), regulated by the Australian Securities and Investment Commission ('ASIC') and holder of an Australian financial services licence number 246412; P.T. Nomura Indonesia ('PTNI'), Indonesia; Nomura Securities Malaysia Sdn. Bhd. ('NSM'), Malaysia; NIHK, Taipei Branch ('NITB'), Taiwan; Nomura Financial Advisory and Securities (India) Private Limited ('NFASL'), Mumbai, India (Registered Address: Ceejay House, Level 11, Plot F, Shivsagar Estate, Dr. Annie Besant Road, Worli, Mumbai- 400 018, India; Tel: +91 22 4037 4037, Fax: +91 22 4037 4111; CIN No : U74140MH2007PTC169116, SEBI Registration No: BSE INB011299030, NSE INB231299034, INF231299034, INE 231299034, MCX: INE261299034) and Nlplc, Madrid Branch ('Nlplc, Madrid'). 'CNS Thailand' next to an analyst's name on the front page of a research report indicates that the analyst is employed by Capital Nomura Securities Public Company Limited ('CNS') to provide research assistance services to NSL under a Research Assistance Agreement. CNS is not a Nomura entity.

THIS MATERIAL IS: (I) FOR YOUR PRIVATE INFORMATION, AND WE ARE NOT SOLICITING ANY ACTION BASED UPON IT; (II) NOT TO BE CONSTRUED AS AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY ANY SECURITY IN ANY JURISDICTION WHERE SUCH OFFER OR SOLICITATION WOULD BE ILLEGAL; AND (III) BASED UPON INFORMATION FROM SOURCES THAT WE CONSIDER RELIABLE, BUT HAS NOT BEEN INDEPENDENTLY VERIFIED BY NOMURA GROUP.

Nomura Group does not warrant or represent that the document is accurate, complete, reliable, fit for any particular purpose or merchantable and does not accept liability for any act (or decision not to act) resulting from use of this document and related data. To the maximum extent permissible all warranties and other assurances by Nomura group are hereby excluded and Nomura Group shall have no liability for the use, misuse, or distribution of this information.

Opinions or estimates expressed are current opinions as of the original publication date appearing on this material and the information, including the opinions and estimates contained herein, are subject to change without notice. Nomura Group is under no duty to update this document.

Any comments or statements made herein are those of the author(s) and may differ from views held by other parties within Nomura Group. Clients should consider whether any advice or recommendation in this report is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. Nomura Group does not provide tax advice.

Nomura Group, and/or its officers, directors and employees, may, to the extent permitted by applicable law and/or regulation, deal as principal, agent, or otherwise, or have long or short positions in, or buy or sell, the securities, commodities or instruments, or options or other derivative instruments based thereon, of issuers or securities mentioned herein. Nomura Group companies may also act as market maker or liquidity provider (within the meaning of applicable regulations in the UK) in the financial instruments of the issuer. Where the activity of market maker is carried out in accordance with the definition given to it by specific laws and regulations of the US or other jurisdictions, this will be separately disclosed within the specific issuer disclosures.

This document may contain information obtained from third parties, including ratings from credit ratings agencies such as Standard & Poor's. Reproduction and distribution of third party content in any form is prohibited except with the prior written permission of the related third party. Third party content providers do not guarantee the accuracy, completeness, timeliness or availability of any information, including ratings, and are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, or for the results obtained from the use of such content. Third party content providers give no express or implied warranties, including, but not limited to, any warranties of merchantability or fitness for a particular purpose or use. Third party content providers shall not be liable for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including lost income or profits and opportunity costs) in connection with any use of their content, including ratings. Credit ratings are statements of opinions and are not statements of fact or recommendations to purchase hold or sell securities. They do not address the suitability of securities or the suitability of securities for investment purposes, and should not be relied on as investment advice.

Any MSCI sourced information in this document is the exclusive property of MSCI Inc. ('MSCI'). Without prior written permission of MSCI, this information and any other MSCI intellectual property may not be reproduced, re-disseminated or used to create any financial products, including any indices. This information is provided on an "as is" basis. The user assumes the entire risk of any use made of this information. MSCI, its affiliates and any third party involved in, or related to, computing or compiling the information hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of this information. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in, or related to, computing or compiling the information have any liability for any damages of any kind. MSCI and the MSCI indexes are services marks of MSCI and its affiliates.

Russell/Nomura Japan Equity Indexes are protected by certain intellectual property rights of Nomura Securities Co., Ltd. and Russell Investments. Nomura Securities Co., Ltd. and Russell Investments do not guarantee the accuracy, completeness, reliability, or usefulness thereof and do not account for business activities and services that any index user and its affiliates undertake with the use of the Indexes. Investors should consider this document as only a single factor in making their investment decision and, as such, the report should not be viewed as identifying or suggesting all risks, direct or indirect, that may be associated with any investment decision. Nomura Group produces a number of different types of research product including, among others, fundamental analysis, quantitative analysis and short term trading ideas; recommendations contained in one type of research product may differ from recommendations contained in other types of research product, whether as a result of differing time horizons, methodologies or otherwise. Nomura Group publishes research product in a number of different ways including the posting of product on Nomura Group portals and/or distribution directly to clients. Different groups of clients may receive different products and services from the research department depending on their individual requirements. Clients outside of the US may access the Nomura Research Trading Ideas platform (Retina) at <http://go.nomuranow.com/equities/tradingideas/retina/>.

Figures presented herein may refer to past performance or simulations based on past performance which are not reliable indicators of future performance. Where the information contains an indication of future performance, such forecasts may not be a reliable indicator of future performance. Moreover, simulations are based on models and simplifying assumptions which may oversimplify and not reflect the future distribution of returns.

Certain securities are subject to fluctuations in exchange rates that could have an adverse effect on the value or price of, or income derived from, the investment.

The securities described herein may not have been registered under the US Securities Act of 1933 (the '1933 Act'), and, in such case, may not be offered or sold in the US or to US persons unless they have been registered under the 1933 Act, or except in compliance with an exemption from the registration requirements of the 1933 Act. Unless governing law permits otherwise, any transaction should be executed via a Nomura entity in your home jurisdiction.

This document has been approved for distribution in the UK and European Economic Area as investment research by Nlplc. Nlplc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Nlplc is a member of the London Stock Exchange. This document does not constitute a personal recommendation within the meaning of applicable regulations in the UK, or take into account the particular investment objectives, financial situations, or needs of individual investors. This document is intended only for investors who are 'eligible counterparties' or 'professional clients' for the purposes of applicable regulations in the UK, and may not, therefore, be redistributed to persons who are 'retail clients' for such purposes. This document has been approved by Nlplc, which is regulated by the Hong Kong Securities and Futures Commission, for distribution in Hong Kong by Nlplc. This document has been approved for distribution in Australia by NAL, which is authorized and regulated in Australia by the ASIC. This document has also been approved for distribution in Malaysia by NSM. In Singapore, this document has been distributed by NSL. NSL accepts legal responsibility for the content of this document, where it concerns securities, futures and foreign exchange, issued by their foreign affiliates in respect of recipients who are not accredited, expert or institutional investors as defined by the Securities and Futures Act (Chapter 289). Recipients of this document in Singapore should contact NSL in respect of matters arising from, or in connection with, this document. Unless prohibited by the provisions of Regulation S of the 1933 Act, this material is distributed in the US, by NSI, a US-registered broker-dealer, which accepts responsibility for its contents in accordance with the provisions of Rule 15a-6, under the US Securities Exchange Act of 1934. The entity that prepared this document permits its separately operated affiliates within the Nomura Group to make copies of such documents available to their clients.

This document has not been approved for distribution to persons other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' (as defined by the Capital Markets Authority) in the Kingdom of Saudi Arabia ('Saudi Arabia') or 'professional clients' (as defined by the Dubai Financial Services Authority) in the United Arab Emirates ('UAE') or a 'Market Counterparty' or 'Business Customers' (as defined by the Qatar Financial Centre Regulatory Authority) in the State of Qatar ('Qatar') by Nomura Saudi Arabia, Nlplc or any other member of Nomura Group, as the case may be. Neither this document nor any copy thereof may be taken or transmitted or distributed, directly or indirectly, by any person other than those authorised to do so into Saudi Arabia or in the UAE or in Qatar or to any person other than 'Authorised Persons', 'Exempt Persons' or 'Institutions' located in Saudi Arabia or 'professional clients' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar. By accepting to receive this document, you represent that you are not located in Saudi Arabia or that you are an 'Authorised Person', an 'Exempt Person' or an 'Institution' in Saudi Arabia or that you are a 'professional client' in the UAE or a 'Market Counterparty' or 'Business Customers' in Qatar and agree to comply with these restrictions. Any failure to comply with these restrictions may constitute a violation of the laws of the UAE or Saudi Arabia or Qatar.

NO PART OF THIS MATERIAL MAY BE (I) COPIED, PHOTOCOPIED, OR DUPLICATED IN ANY FORM, BY ANY MEANS; OR (II) REDISTRIBUTED WITHOUT THE PRIOR WRITTEN CONSENT OF A MEMBER OF NOMURA GROUP. If this document has been distributed by electronic transmission, such as e-mail, then such transmission cannot be guaranteed to be secure or error-free as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender therefore does not accept liability for any errors

or omissions in the contents of this document, which may arise as a result of electronic transmission. If verification is required, please request a hard-copy version.

Nomura Group manages conflicts with respect to the production of research through its compliance policies and procedures (including, but not limited to, Conflicts of Interest, Chinese Wall and Confidentiality policies) as well as through the maintenance of Chinese walls and employee training.

Additional information is available upon request and disclosure information is available at the Nomura Disclosure web page:

<http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx>

Copyright © 2014 Nomura International plc. All rights reserved.