BOND MARKET OUTLOOK

Carl Norrey J.P. Morgan Securities plc

April 2014

ECB BMCG meeting 8 April 2014

STRICTLY PRIVATE AND CONFIDENTIAL



This presentation was prepared exclusively for the benefit and internal use of the J.P. Morgan client to whom it is directly addressed and delivered (including such client's subsidiaries, the "Company") in order to assist the Company in evaluating, on a preliminary basis, the feasibility of a possible transaction or transactions and does not carry any right of publication or disclosure, in whole or in part, to any other party. This presentation is for discussion purposes only and is incomplete without reference to, and should be viewed solely in conjunction with, the oral briefing provided by J.P. Morgan. Neither this presentation nor any of its contents may be disclosed or used for any other purpose without the prior written consent of J.P. Morgan.

The information in this presentation is based upon any management forecasts supplied to us and reflects prevailing conditions and our views as of this date, all of which are accordingly subject to change. J.P. Morgan's opinions and estimates constitute J.P. Morgan's judgment and should be regarded as indicative, preliminary and for illustrative purposes only. In preparing this presentation, we have relied upon and assumed, without independent verification, the accuracy and completeness of all information available from public sources or which was provided to us by or on behalf of the Company or which was otherwise reviewed by us. In addition, our analyses are not and do not purport to be appraisals of the assets, stock, or business of the Company or any other entity. J.P. Morgan makes no representations as to the actual value which may be received in connection with a transaction nor the legal, tax or accounting effects of consummating a transaction. Unless expressly contemplated hereby, the information in this presentation does not take into account the effects of a possible transaction or transactions involving an actual or potential change of control, which may have significant valuation and other effects.

Notwithstanding anything herein to the contrary, the Company and each of its employees, representatives or other agents may disclose to any and all persons, without limitation of any kind, the U.S. federal and state income tax treatment and the U.S. federal and state income tax structure of the transactions contemplated hereby and all materials of any kind (including opinions or other tax analyses) that are provided to the Company relating to such tax treatment and tax structure insofar as such treatment and/or structure relates to a U.S. federal or state income tax strategy provided to the Company by J.P. Morgan. J.P. Morgan's policies on data privacy can be found at http://www.jpmorgan.com/pages/privacy.

J.P. Morgan's policies prohibit employees from offering, directly or indirectly, a favorable research rating or specific price target, or offering to change a rating or price target, to a subject company as consideration or inducement for the receipt of business or for compensation. J.P. Morgan also prohibits its research analysts from being compensated for involvement in investment banking transactions except to the extent that such participation is intended to benefit investors.

IRS Circular 230 Disclosure: JPMorgan Chase & Co. and its affiliates do not provide tax advice. Accordingly, any discussion of U.S. tax matters included herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone not affiliated with JPMorgan Chase & Co. of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries worldwide. Securities, syndicated loan arranging, financial advisory and other investment banking activities are performed by a combination of J.P. Morgan Securities LLC, J.P. Morgan Limited, J.P. Morgan Securities plc and the appropriately licensed subsidiaries of JPMorgan Chase & Co. in EMEA and Asia-Pacific, and lending, derivatives and other commercial banking activities are performed by JPMorgan Chase Bank, N.A. J.P. Morgan deal team members may be employees of any of the foregoing entities.

This presentation does not constitute a commitment by any J.P. Morgan entity to underwrite, subscribe for or place any securities or to extend or arrange credit or to provide any other services.

J.P.Morgan

1Q14 saw downward revisions to growth and inflation forecasts but revisions were confined to 1H14 & EM, and the medium term story remains positive in Euro area and US

Revisions to growth and inflation have mostly been confined to the first half of the year and to EM

Change in J.P. Morgan growth and inflation forecasts since 29 November 2013 (%)

	R	eal GDF	Infla	ition		
	1Q14	2Q14	3Q14	4Q14	2Q14	4Q14
Euro area	-	-0.5	-	-	-	-0.1
US	-1.0	-	-	-	0.1	0.2
EM	-1.0	-0.4	-	0.1	-0.4	-0.2
Global PPP weighted	-0.6	-0.2	-0.1	-	-0.1	-0.1

The data flow has improved in the last few days of the quarter

J.P. Morgan EASI (economic activity surprise index) for Euro area and US (index)



Euro area and US PMI have been on an upward trend for a while whereas Chinese PMI has declined over the past few months

Evolution of composite PMI in Euro zone, US and China (index)



Source: Markit and HSBC

Contrary to expectations, long-end yields rallied in 1Q14

Contrary to expectations, long-end yields rallied globally in 1Q14

YTD changes in different segments on Germany and US curve; par rates used (bp)



In Germany the rally in long dated forwards has been driven by the US, but stronger expectations of low-forlong in 3Y 2Y forwards are a domestic phenomenon

YTD changes in different segments on Germany and US curve; par rates used (bp)

	2Y	3Y 2Y fwd	5Y 5Y fwd	20Y 10Y fwd
Germany	-8	-52	-47	-26
US	6	17	-69	-55
Difference	-13	-35	21	29

In the last few weeks EONIA fixings have stabilised despite a further decline in excess liquidity



Money markets are pricing divergence in EUR and USD policy rate paths



Peripheral spreads continued to tighten in 1Q14



- Constructive peripheral view is predicated on
 - Positive macro developments
 - Limited headline risk
 - Favourable technicals

Headline risk is manageable and the rating cycle has turned

- At the start of the year investors were concerned about the potential negative impact of AQR/stress tests, German constitutional court ruling on OMT and a legitimacy crisis following the European elections. Investors are less concerned now
- Positive surprises came from Moody's
- EM has seen many flare ups: Argentinean currency devaluation, Venezuelan civil unrest, Turkish political crisis, Ukraine-Russia crisis. However, the impact of these events on Euro markets has been short-lived

Rating actions have been positive over the past few months

Weighted average peripheral sovereign rating index¹ for Moody's and S&P



Source: Bloomberg, J.P. Morgan

¹ Rating index: AAA/Aaa=1, AA+, Aa1=2, negative outlook =1/3, neutral outlook=0, positive outlook=-1/3, negative watch=2/3. Peripheral countries' rating indices are weighted by the size of their outstanding bond market

Update on supply/demand trends–Impressive front-loading and maturity extension in Spain

Euro area countries have already covered nearly 1/3rd of their 2014 conventional bond funding needs, based on our forecasts

Gross conventional bond issuance in 2014

Spain's maturity extension has been very aggressive in 2014

Outright and 10Y duration equivalent Bono issuance in 1Q of 2012, 2013 and 2014; Spain maturity extension was impressive

Germany4316127%27%0%France5517532%30%2%Italy5215534%27%6%Spain4512835%31%4%Netherlands215043%37%5%Belgium143342%34%9%Austria42515%46%-32%Greece040%Finland41233%32%1%		1Q14 (€bn)	Proj. 2014 (€bn)	Front- loading	Av g. front- loading 2008-2013	Current - Av erage
Italy5215534%27%6%Spain4512835%31%4%Netherlands215043%37%5%Belgium143342%34%9%Austria42515%46%-32%Greece040%	Germany	43	161	27%	27%	0%
Spain4512835%31%4%Netherlands215043%37%5%Belgium143342%34%9%Austria42515%46%-32%Greece040%	France	55	175	32%	30%	2%
Netherlands215043%37%5%Belgium143342%34%9%Austria42515%46%-32%Greece040%	Italy	52	155	34%	27%	6%
Belgium143342%34%9%Austria42515%46%-32%Greece040%	Spain	45	128	35%	31%	4%
Austria 4 25 15% 46% -32% Greece 0 4 0% - -	Netherlands	21	50	43%	37%	5%
Greece 0 4 0%	Belgium	14	33	42%	34%	9%
	Austria	4	25	15%	46%	-32%
Finland 4 12 33% 32% 1%	Greece	0	4	0%	-	-
	Finland	4	12	33%	32%	1%
Portugal 6 14 45%	Portugal	6	14	45%	-	-
Ireland 5 10 48%	Ireland	5	10	48%	-	-
Total 249 767 32% 30% 2%	Total	249	767	32%	30%	2%
Core 141 456 31% 30% 1%	Core	141	456	31%	30%	1%
Peripheral 108 311 35% 30% 4%	Peripheral	108	311	35%	30%	4%

	Total size (€bn)	Wtd. average maturity of 1Q14 supply (years)	10Y duration eq. size (€bn)
2012	37.9	5.5	23.3
2013	41.1	7.2	29.5
2014	44.6	8.3	35.3

Update on supply/demand trends-No concession into supply

Another indication of healthy technicals in 2014 is the lack of concession to absorb supply

Evolution of top 11 Euro area countries' ex Germany bond spread to Germany¹ around supply adjusted for crossmarket spreads²; 2009-2013 average and 2014 (YTD) (bp)



¹ If a new bond is issued, the bond with the closest shorter maturity is used

² (Bond yield – m/m German par yield) – Beta * weighted Euro area countries maturity matched spread to Germany in the sector of the curve (weighted by the size of their outstanding bond market). The beta between the country spread to Germany and the weighted spread to Germany is calculated as the ratio of (Bond yield–m/m German par yield) and weighted Euro area countries maturity matched spread to Germany at T-5 days

Update on supply/demand trends–Healthy syndicated stats

10Y Spanish syndicated deal had a record book size of €40bn

Statistics of syndicate deals in peripheral countries in January 2013

	Bel	gium	Irel	and		Port	ugal			Spain			Slov	/enia	
	1(ΟY	1(ЭY	4-	5Y	10)Y		10Y			\$ 5Y a	nd 10Y	
Syndicate date	10-Jan-13	14-Jan-14	13-Mar-13	07-Jan-14	23-Jan-13	09-Jan-14	07-May-13	11-Feb-14	22-Jan-13	15-May-13	22-Jan-14	02-M	ay-13	10-F	eb-14
New/Tap	New	New	New	New	Тар	Тар	New	Тар	New	New	New	New	New	New	New
Maturity	Jun-23	Jun-24	Mar-23	Mar-24	Oct-17	Jun-19	Feb-24	Feb-24	Jan-23	Oct-23	Apr-24	May-18	May-23	May-18	May-23
Book size	7	11	13	14	12	11	10	10	23	21	40	\$1	6+	\$1	6+
Deal size	4	5	5	4	3	3	3	3	7	7	10	\$1	\$2.5	\$1.5	\$2
Pricing	MS+62bp	MS+49bp	MS+240bp	MS+140bp	MS+395bp	MS+330bp	MS+400	MS+320	MS+365bp	MS+278bp	MS+178bp	MS+414bp	MS+419bp	MS+269bp	MS+268bp
% International	91%	93%	82%	83%	93%	88%	86%	83%	59%	48%	61%	100%	100%	100%	100%
Book size/Deal size	1.8	2.2	2.6	3.7	4.8	3.4	3.3	3.2	3.3	3.0	4.0	-	-	-	-

Source: National Treasuries

Update on supply/demand trends–Pick-up in mutual fund flows into bond funds and return of Japanese investors to periphery



Update on supply/demand trends – Benchmarked investors have been OW peripherals for 17 months now



Source: J.P. Morgan European Client Survey

Trend of re-inclusion of Italy and Spain in the benchmarks

Update on supply/demand trends–Part of bank selling of government securities in December 2013 was reversed in January 2014

Part of bank selling of government securities in December reversed in January, with France and Spain being the most aggressive

Change in government securities portfolio held by monetary and financial institutions¹, by jurisdiction (€on)

	Jan-14	Dec-13	Avg. Jan flow (1999- 2012)	Avg. Dec flow (1999- 2012)
Austria	-1	1	1	-1
Belgium	1	0	-1	-3
Finland	4	2	0	0
France	19	-21	9	-13
Germany	0	-1	5	-5
Greece	0	0	0	-1
Ireland	3	-3	1	-2
Italy	-7	-16	4	-7
Luxembourg	4	-1	0	0
Netherlands	2	-1	0	-1
Portugal	2	-4	0	0
Spain	20	-22	1	2
Euro area	48	-66	22	-25

Source: ECB, J.P. Morgan

¹ October and November 2010 removed in Germany and March 2011 in France due to structural breaks in the time series

In February, Italian banks increased their government securities holdings by around €7bn and the Spanish banks reduced their holdings marginally (-€2bn)

Update on supply/demand trends–Rotation in peripheral demand in 2H13

Non-domestic investors have increased their pace of buying Italian and Spanish securities over the past 6 months...

Evolution of non-domestic and domestic MFIs holdings of Italian and Spanish (average) government securities¹; general government for Italy and central government for Spain (% of total)



...thereby compensating for the decline in MFI holdings over the same time

Net purchases of Italian and Spanish government securities by investor type; general government for Italy

	2013	2012	2011
Italy			
Credit institutions	47	90	13
Other domestics	2	24	128
Non-domestics ¹	41	-67	-183
SMP	-10	4	98
Total	80	51	56
Spain			
Credit institutions	-7	20	50
Other domestics	15	18	36
Non-domestics ¹	63	22	-75
SMP	-1	2	42
Total	70	61	54

Source:National central banks, national debt agencies, ECB, J.P. Morgan ¹ Non-domestic holdings exclude ECB SMP holdings. For Italy, it also excludes Italian securities held abroad but attributable to Italian savers. (see Shedding some light on non-domestic investors in Italian and Spanish government bonds, Gianluca Salford et al., 31 Aug 2012 for details) Source: National central banks, national debt agencies, ECB, J.P. Morgan ¹ Non-domestic holdings exclude ECB SMP holdings. It also excludes Italy's securities held abroad "but attributable to Italian savers" (see Global Fixed Income Markets Weekly, 6 Dec 2012 for details)

Credit/EM spreads are back to end of 2013 levels after a temporary spike in 1Q14



Q 1 4

~

Z

S

DEVELOPMENT

MAIN

J.P.Morgan

FX: EUR outperformed in 1Q14

In 1Q4, EUR and JPY outperformed

FX indices showing performance vs. USD; 31 Dec 2013 = 100



The trend started to reverse at the end of the quarter on the back of a more hawkish Fed and soft verbal intervention from ECB members

We forecast Bund yields above 2% by the year end and peripheral spreads to tighten further

J.P. Morgan 10Y benchmarks forecasts; %										
	02-Apr	2Q14	3Q14	4Q14	1Q15					
US	2.80	3.00	3.25	3.40	3.50					
Germany	1.62	1.80	1.95	2.10	2.20					
UK	2.78	3.15	3.35	3.50	3.65					
Japan	0.62	0.60	0.70	0.80	0.85					

We project higher rates globally in 2014

We project a rise in 10Y Bund yields above 2% by the end of the year

ociman benefimarks amess other wise stated, 70									
	02 Apr	2014	2014	4044	1015	2Q14 vs.	4Q14 vs.		
	02-Apr	2Q14 3Q14 4Q14 1Q15				fwd (bp)	fwd (bp)		
ECB refi	0.25	0.25	0.25	0.25	0.25	n/a	n/a		
2Y	0.19	0.15	0.15	0.20	0.25	-5	-10		
5Y	0.68	0.75	0.85	0.95	1.05	-3	-1		
10Y	1.62	1.80	1.95	2.10	2.20	10	25		
30Y	2.50	2.70	2.80	2.90	3.00	18	33		
2s/10s (bp)	143	165	180	190	195	15	35		
10s/30s (bp)	88	90	85	80	80	8	8		

German benchmarks unless otherwise stated; %

We expect peripheral spreads to continue tightening in 2Q and core spreads to move broadly sideways

J.P. Morgan forecast of 10Y intra-EMU curve-adjusted spread to Germany*; bp

	02-Apr	2Q14	3Q14	4Q14	1Q15	4Q14 vs. fwd.
Austria	29	30	25	25	25	-5
Belgium	60	65	60	60	60	1
Finland	27	30	30	30	30	7
France	49	55	55	55	55	7
Ireland	139	150	140	130	125	-9
Italy	167	165	160	140	130	-54
Netherlands	30	30	30	30	30	5
Portugal	236	220	205	190	175	-88
Spain	163	160	150	140	130	-47
Wtd. peri. spread**	168	165	158	142	132	-51

* Adjusted for maturity mismatch by taking the difference in maturity-matched swap spreads.

** Weighted peripheral spreads computed against Germany for Ireland, Portugal, Italy and Spain (weighted by the size of their outstanding bond market).

Points for discussion/risks

- US growth-pick-up in 2H14?
- ECB reaction function to continued decline in inflation?
- China slowdown?

Disclosures

Analyst Certification: The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report. For all Korea-based research analysts listed on the front cover, they also certify, as per KOFIA requirements, that their analysis was made in good faith and that the views reflect their own opinion, without undue influence or intervention.

Company-Specific Disclosures: Important disclosures, including price charts, are available for compendium reports and all J.P. Morgan–covered companies by visiting https://jpmm.com/research/disclosures, calling 1-800-477-0406, or e-mailing research.disclosure.inquiries@jpmorgan.com with your request. J.P. Morgan's Strategy, Technical, and Quantitative Research teams may screen companies not covered by J.P. Morgan. For important disclosures for these companies, please call 1-800-477-0406 or e-mail research.disclosure.inquiries@jpmorgan.com.

Analysts' Compensation: The research analysts responsible for the preparation of this report receive compensation based upon various factors, including the quality and accuracy of research, client feedback, competitive factors, and overall firm revenues.

Other Disclosures

J.P. Morgan ("JPM") is the global brand name for J.P. Morgan Securities LLC ("JPMS") and its affiliates worldwide. J.P. Morgan Cazenove is a marketing name for the U.K. investment banking businesses and EMEA cash equities and equity research businesses of JPMorgan Chase & Co. and its subsidiaries.

Options related research: If the information contained herein regards options related research, such information is available only to persons who have received the proper option risk disclosure documents. For a copy of the Option Clearing Corporation's Characteristics and Risks of Standardized Options, please contact your J.P. Morgan Representative or visit the OCC's website at http://www.optionsclearing.com/publications/risks/riskstoc.pdf

Legal Entities Disclosures

U.S.: JPMS is a member of NYSE, FINRA, SIPC and the NFA, JPMorgan Chase Bank, N.A. is a member of FDIC, U.K.: JPMorgan Chase N.A., London Branch, is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and to limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from J.P. Morgan on request, J.P. Morgan Securities plc (JPMS plc) is a member of the London Stock Exchange and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Registered in England & Wales No. 2711006, Registered Office 25 Bank Street, London, E14 5JP. South Africa: J.P. Morgan Equities South Africa Proprietary Limited is a member of the Johannesburg Securities Exchange and is regulated by the Financial Services Board. Hong Kong: J.P. Morgan Securities (Asia Pacific) Limited (CE number AAJ321) is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission in Hong Kong, Korea: J.P. Morgan Securities (Far East) Ltd. Seoul Branch, is regulated by the Korea Financial Supervisory Service, Australia: J.P. Morgan Australia Limited (JPMAL) (ABN 52 002 888 011/AFS Licence No: 238188) is regulated by ASIC and J.P. Morgan Securities Australia Limited (JPMSAL) (ABN 61 003 245 234/AFS Licence No: 238066) is regulated by ASIC and is a Market, Clearing and Settlement Participant of ASX Limited and CHI-X. Taiwan: J.P.Morgan Securities (Taiwan) Limited is a participant of the Taiwan Stock Exchange (company-type) and regulated by the Taiwan Securities and Futures Bureau. India: J.P. Morgan India Private Limited, having its registered office at J.P. Morgan Tower, Off, C.S.T. Road, Kalina, Santacruz East, Mumbai - 400098, is a member of the National Stock Exchange of India Limited (SEBI Registration Number - INB 230675231/INF 230675231/INE 230675231) and Bombay Stock Exchange Limited (SEBI Registration Number - INB 010675237/INF 010675237) and is regulated by Securities and Exchange Board of India. Thailand: JPMorgan Securities (Thailand) Limited is a member of the Stock Exchange of Thailand and is regulated by the Ministry of Finance and the Securities and Exchange Commission. Indonesia: PT J.P. Morgan Securities Indonesia is a member of the Indonesia Stock Exchange and is regulated by the BAPEPAM LK. Philippines: J.P. Morgan Securities Philippines Inc. is a Trading Participant of the Philippine Stock Exchange and a member of the Securities Clearing Corporation of the Philippines and the Securities Investor Protection Fund. It is regulated by the Securities and Exchange Commission. Brazil: Banco J.P. Morgan S.A. is regulated by the Comissao de Valores Mobiliarios (CVM) and by the Central Bank of Brazil. Mexico: J.P. Morgan Casa de Bolsa, S.A. de C.V., J.P. Morgan Grupo Financiero is a member of the Mexican Stock Exchange and authorized to act as a broker dealer by the National Banking and Securities Exchange Commission. Singapore: This material is issued and distributed in Singapore by J.P. Morgan Securities Singapore Private Limited (JPMSS) [MIC (P) 049/04/2013 and Co. Reg. No.: 199405335R] which is a member of the Singapore Exchange Securities Trading Limited and is regulated by the Monetary Authority of Singapore (MAS) and/or JPMorgan Chase Bank, N.A., Singapore branch (JPMCB Singapore) which is regulated by the MAS. Japan: JPMorgan Securities Japan Co., Ltd. is regulated by the Financial Services Agency in Japan. Malaysia: This material is issued and distributed in Malaysia by JPMorgan Securities (Malaysia) Sdn Bhd (18146-X) which is a Participating Organization of Bursa Malaysia Berhad and a holder of Capital Markets Services License issued by the Securities Commission in Malavsia, Pakistan; J. P. Morgan Pakistan Broking (Pvt.) Ltd is a member of the Karachi Stock Exchange and regulated by the Securities and Exchange Commission of Pakistan. Saudi Arabia: J.P. Morgan Saudi Arabia Ltd. is authorized by the Capital Market Authority of the Kingdom of Saudi Arabia (CMA) to carry out dealing as an agent, arranging, advising and custody, with respect to securities business under licence number 35-07079 and its registered address is at 8th Floor, Al-Faisaliyah Tower, King Fahad Road, P.O. Box 51907, Riyadh 11553, Kingdom of Saudi Arabia. Dubai: JPMorgan Chase Bank, N.A., Dubai Branch is regulated by the Dubai Financial Services Authority (DFSA) and its registered address is Dubai International Financial Centre -Building 3, Level 7, PO Box 506551, Dubai, UAE.



Disclosures

Country and Region Specific Disclosures

U.K. and European Economic Area (EEA): Unless specified to the contrary, issued and approved for distribution in the U.K. and the EEA by JPMS plc. Investment research issued by JPMS plc has been prepared in accordance with JPMS plc's policies for managing conflicts of interest arising as a result of publication and distribution of investment research. Many European regulators require a firm to establish, implement and maintain such a policy. This report has been issued in the U.K. only to persons of a kind described in Article 19 (5), 38, 47 and 49 of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this document relates is only available to relevant persons and will be engaged in only with relevant persons. In other EEA countries, the report has been issued to persons regarded as professional investors (or equivalent) in their home jurisdiction. Australia: This material is issued and distributed by JPMSAL in Australia to "wholesale clients" only. This material does not take into account the specific investment objectives, financial situation or particular needs of the recipient. The recipient of this material must not distribute it to any third party or outside Australia without the prior written consent of JPMSAL. For the purposes of this paragraph the term "wholesale client" has the meaning given in section 761G of the Corporations Act 2001. Germany: This material is distributed in Germany by J.P. Morgan Securities plc. Frankfurt Branch and J.P.Morgan Chase Bank, N.A., Frankfurt Branch which are regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht. Hong Kong: The 1% ownership disclosure as of the previous month end satisfies the requirements under Paragraph 16.5(a) of the Hong Kong Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. (For research published within the first ten days of the month, the disclosure may be based on the month end data from two months prior.) J.P. Morgan Broking (Hong Kong) Limited is the liquidity provider/market maker for derivative warrants, callable bull bear contracts and stock options listed on the Stock Exchange of Hong Kong Limited. An updated list can be found on HKEx website: http://www.hkex.com.hk. Japan: There is a risk that a loss may occur due to a change in the price of the shares in the case of share trading, and that a loss may occur due to the exchange rate in the case of foreign share trading. In the case of share trading, JPMorgan Securities Japan Co., Ltd., will be receiving a brokerage fee and consumption tax (shouhizei) calculated by multiplying the executed price by the commission rate which was individually agreed between JPMorgan Securities Japan Co., Ltd., and the customer in advance, Financial Instruments Firms; JPMorgan Securities Japan Co., Ltd., Kanto Local Finance Bureau (kinsho) No. 82 Participating Association / Japan Securities Dealers Association. The Financial Futures Association of Japan. Type II Financial Instruments Firms Association and Japan Investment Advisers Association. Korea: This report may have been edited or contributed to from time to time by affiliates of J.P. Morgan Securities (Far East) Ltd, Seoul Branch. Singapore: JPMSS and/or its affiliates may have a holding in any of the securities discussed in this report; for securities where the holding is 1% or greater, the specific holding is disclosed in the Important Disclosures section above. India: For private circulation only, not for sale. Pakistan: For private circulation only, not for sale. New Zealand: This material is issued and distributed by JPMSAL in New Zealand only to persons whose principal business is the investment of money or who, in the course of and for the purposes of their business, habitually invest money. JPMSAL does not issue or distribute this material to members of "the public" as determined in accordance with section 3 of the Securities Act 1978. The recipient of this material must not distribute it to any third party or outside New Zealand without the prior written consent of JPMSAL. 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, or 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. The information contained herein is under no circumstances to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. 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 must be conducted through a dealer registered in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed judgment upon these materials, the information contained herein or the merits of the securities described herein, and any representation to the contrary is an offence. Dubai: This report has been issued to persons regarded as professional clients as defined under the DFSA rules. Brazil: Ombudsman J.P. Morgan: 0800-7700847 / ouvidoria.jp.morgan@jpmorgan.com.

General: Additional information is available upon request. Information has been obtained from sources believed to be reliable but JPMorgan Chase & Co. or its affiliates and/or subsidiaries (collectively J.P. Morgan) do not warrant its completeness or accuracy except with respect to any disclosures relative to JPMS and/or its affiliates and the analyst's involvement with the issuer that is the subject of the research. All pricing is as of the close of market for the securities discussed, unless otherwise stated. Opinions and estimates constitute our judgment as of the date of this material and are subject to change without notice. Past performance is not indicative of future results. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients. The recipient of this report must make its own independent decisions regarding any securities or financial instruments mentioned herein. JPMS distributes in the U.S. research published by non-U.S. affiliates and accepts responsibility for its contents. Periodic updates may be provided on companies/industries based on company specific developments or announcements, market conditions or any other publicly available information. Clients should contact analysts and execute transactions through a J.P. Morgan subsidiary or affiliate in their home jurisdiction unless governing law permits otherwise.

"Other Disclosures" last revised December 7, 2013.

Copyright 2014 JPMorgan Chase & Co. All rights reserved. This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of J.P. Morgan.