J.P.Morgan

Kotak Mahindra Bank

3Q FY13 results: positive surprise driven by loan growth

Kotak reported consolidate PAT of Rs5.77B (JPMe Rs5.44B), up 25% y/y. The surprise was driven by the parent bank (the subs actually missed, collectively) on the back of strong asset growth. The consolidated loan book grew 10% q/q – the y/y growth of 27% was well above management guidance of 20-23%. The corporate book growth of 15% q/q was the key driver of the growth. The return of growth momentum should be a trigger for the stock, and we maintain our OW rating.

- **Return of loan growth.** Standalone loan growth accelerated to 33% y/y, primarily driven by the corporate book. Kotak capitalized on the strong demand for working capital lending we see this as a good sign as the bank seems to be penetrating this segment now. Personal loans and autos also grew smartly the bank seems to be going slow on CVs where they have been flagging portfolio stress for some time.
- Margins bottoming out. Consolidated margins declined from 4.6% to 4.5% q/q and management expects this to stabilize at the current levels. We think this depends on the deposit pricing scenario and the CASA momentum. We see clear loan pricing pressure as low-risk segments are likely to offer better growth opportunities.
- **Asset quality solid.** Credit costs held up well at <50bp. Management sees no obvious signs of stress except in the CV/CE, where the momentum is getting worse. The recoverability of these loans still remains robust given the collateral, but we do expect some upward bias in credit costs, going forward.
- Cost-income < 50%. Opex growth remained muted and the standalone cost-income slipped below 50%. We expect the downward trend to continue as a) new branches are lower-cost so some operating leverage is creeping in, b) incremental loan growth is driven by corporates where origination costs tend to be low, and c) the weak economic environment helps contain rent and wage inflation.

Kotak Mahindra Bank (Reuters: KTKM.BO, Bloomberg: KMB IN)

Source: Company data, Bloomberg, J.P. Morgan estimates.

•		•	•		
Year-end Mar (Rs in mn)	FY10A	FY11A	FY12E	FY13E	FY14E
Operating Profit (Rs mn)	22,979	22,224	26,181	34,791	46,229
Net Profit (Rs mn)	12,310	14,924	18,118	21,945	28,069
Cash EPS (Rs)	17.68	20.25	24.46	29.63	37.90
Fully Diluted EPS (Rs)	16.97	19.02	23.35	28.41	36.41
DPS (Rs)	0.43	0.50	0.60	0.73	0.93
EPS growth (%)	90.6%	14.6%	20.8%	21.1%	27.9%
ROE	16.6%	15.5%	15.1%	15.8%	17.3%
P/E	36.2	31.6	26.2	21.6	16.9
BVPS (Rs)	116.16	150.82	173.39	201.30	237.64
P/BV	5.5	4.2	3.7	3.2	2.7
Div. Yield	0.1%	0.1%	0.1%	0.1%	0.1%

Company Data	
52-wk range (Rs)	677.00 - 472.65
Market cap (Rs mn)	477,208
Market cap (\$ mn)	8,877
Shares outstanding (mn)	745
Fiscal Year End	Mar
Price (Rs)	640.75
Date Of Price	22 Jan 13
Avg daily value (Rs mn)	1,051.2
Avg daily value (\$ mn)	19.6
Avg daily vol (mn)	1.8
NIFTY	6,049
Exchange Rate	53.76

Overweight KTKM.BO, KMB IN

KTKM.BO, KMB IN Price: Rs640.75

Price Target: Rs650.00

India Financials

Seshadri K Sen, CFA AC

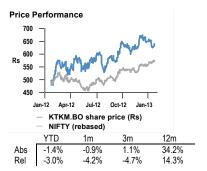
(91-22) 6157-3575 seshadri.k.sen@jpmorgan.com

J.P. Morgan India Private Limited

Josh Klaczek

(852) 2800-8534 josh.klaczek@jpmorgan.com

J.P. Morgan Securities (Asia Pacific) Limited



See page 7 for analyst certification and important disclosures, including non-US analyst disclosures.

J.P. Morgan does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Company Description

Kotak Mahindra Bank (Kotak) is focused on retail lending while building a strong wholesale lending franchise – it also operates in investment banking and broking, asset management and insurance. It has a loan book size of ~US\$16B. Kotak is well capitalized and is expanding on an excercise to deepen distribution over the next few years

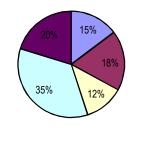
P&L sensitivity metrics	EBITDA impact (%)	EPS impact (%)
NIMs		
Impact of each 25bp	5.0%	6.0%
Cost to Income		
Impact of each 100bp	3.0%	3.6%
Provisions/Assets		
Impact of each 25bp	0.0%	6.0%

Source: J.P. Morgan estimates

Price target and valuation analysis

Our Mar-14 PT for Kotak of Rs650 is based on a 2-stage Gordon growth model implying 2.7x FY14E book. Our valuations factor in a Cost of Equity of 14.6%, normalized ROE of ~22%, and terminal growth of 5%.

Retail loan breakdown



Source: Company

Source: Bloomberg, J.P. Morgan.

■Home

EPS: J.P. Morgan vs consensus

E1 0. 0.1 . W	organ va conscrisus	
Rs	Consensus	
FY13E	29.6	28.0
FY14E	37.9	34.2

□ CV □ Corporate ■ Others

Risk free rate	8.0%
Equity Risk Premium	6.0%
Cost of Equity	14.6%
Terminal growth	5.0%
Stage 2 growth	26.0%
Mar-14 PT	650
Insurance Valuation	26
Normalised ROE	
NII/Assets	4.5%
Revenues/assets	7.3%
Costs/Assets	3.7%
Provisions/assets	0.4%
ROA	2.2%
ROE Source: J.P. Morgan estimates	22.0%

Kotak's lending business continues to surprise on growth and asset quality and we expect the positive trend to continue. Key risks to our OW recommendation and price target are a slowdown in retail credit due to weak sentiment and asset quality shocks from specific events.

Table 1: 3Q13 results: consolidated

Rs MM, YE Mar.	3Q FY12	2Q FY13	3Q FY13	YoY	QoQ
Net interest income	9,997	11,607	12,316	23.2%	6.1%
Non interest income	9,005	14,260	13,457	49.4%	-5.6%
Non interest expenses	11,804	18,000	16,836	42.6%	-6.5%
Pre Prov profits	7,198	7,867	8,937	24.2%	13.6%
Provisions	452	614	589	30.3%	-4.0%
PBT	6,746	7,253	8,348	23.7%	15.1%
Tax	2,083	2,192	2,489	19.5%	13.6%
PAT	4,662	5,061	5,858	25.7%	15.8%
Affiliates/Minorities	36	40	88	NM	NM
Attributable PAT	4,626	5,022	5,771	24.7%	14.9%
Cost/Income	62.1%	69.6%	65.3%	3.20%	-4.26%
Prov/PBT	6.3%	7.8%	6.6%	0.31%	-1.21%
Tax rate	30.9%	30.2%	29.8%	-1.07%	-0.40%
NIM	4.7%	4.7%	4.6%		
Operating data					
Gross NPAs	6,780	8,300	8,241	21.5%	-0.7%
Net NPAs	2,465	3,833	3,648	48.0%	-4.8%
Coverage	63.6%	53.8%	55.7%	-7.91%	1.91%
NIMs	4.7%	4.7%	4.6%	-0.10%	-0.10%
CASA	27.7%	27.1%	25.9%	-1.73%	-1.17%
Loan book growth					
CV loans	75,400	81.830	80.710	7.0%	-1.4%
Car loans	97,710	117,480	122,170	25.0%	4.0%
Personal loans	16,890	21,410	24,200	43.3%	13.0%
Home loans	79,350	92,860	98,690	24.4%	6.3%
Corp/SME	166,970	202,490	233,150	39.6%	15.1%
Others	92,150	96,480	111,290	20.8%	15.4%
Total Loan book	528,470	612,550	670,210	26.8%	9.4%

Source: Company reports and J.P. Morgan calculations.

Table 2: 3Q FY13 results: subsidiaries

Rs MM, YE Mar.	3Q FY12	2Q FY13	3Q FY13	YoY	QoQ
Kotak Mahindra Bank					
PAT	2,760	2,800	3,620	31.2%	29.3%
Kotak Mahindra Prime (KMP)					
Profit before royalty & taxes	1,520	1,700	1,580	3.9%	-7.1%
PAT	1,040	1,140	1,050	1.0%	-7.9%
KMCC					
PAT	40	40	20	-50.0%	-50.0%
Kotak Securities					
Total income	1,340	1,550	1,460	9.0%	-5.8%
PAT	240	400	380	58.3%	-5.0%
Kotak Asset Management					
Total income	30	-50	110	266.7%	-320.0%
PAT	30	-50	110	266.7%	-320.0%
Kotak Insurance					
Gross premium income	6,390	6,200	5,950	-6.9%	-4.0%
Profit	470	470	530	12.8%	12.8%
International subsidiaries					
PAT	-40	80	50	-225.0%	NM

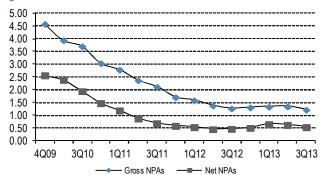
Source: Company reports and J.P. Morgan calculations.

Table 3: 3Q FY13 results: standalone

Rs MM, YE Mar.	3Q FY12	2Q FY13	3Q FY13	YoY	QoQ
NII	6,514	7,581	8,228	26.3%	8.5%
Other income	2,820	2,508	3,049	8.1%	21.6%
Total Revenues	9,333	10,089	11,277	20.8%	11.8%
Employee expense	2,260	2,428	2,636	16.6%	8.6%
Other expense	2,638	2,840	2,915	10.5%	2.7%
Operating expense	4,898	5,267	5,551	13.3%	5.4%
PPOP	4,435	4,822	5,726	29.1%	18.7%
Provisions	307	706	424	38.0%	-40.0%
PBT	4,128	4,116	5,302	28.4%	28.8%
Tax	1,368	1,312	1,686	23.2%	28.5%
PAT	2,760	2,804	3,616	31.0%	29.0%
Standalone Loan book	397,720	454,430	502,450	26.3%	10.6%
Standalone margins	4.63%	4.63%	4.56%	-0.07%	-0.07%
Credit cost	0.32%	0.64%	0.35%	0.04%	-0.29%
NIM	4.70%	4.70%	4.60%	-2.1%	-2.1%

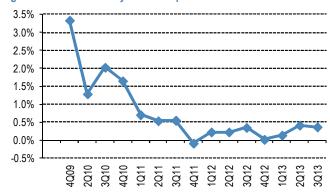
Source: Company reports and J.P. Morgan calculations.

Figure 1:NPLs remain under control



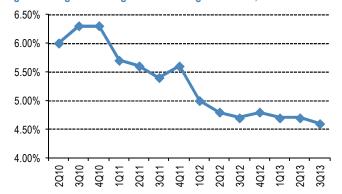
Source: Company reports and J.P. Morgan estimates.

Figure 2: Credit costs stay below 50bp



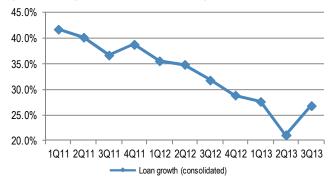
Source: Company reports and J.P. Morgan estimates.

Figure 3:Margins trending down – nearing the bottom, we think



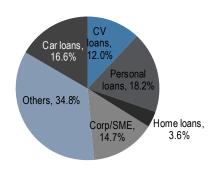
Source: Company reports and J.P. Morgan estimates.

Figure 4: Loan growth accelerates, breaking recent trend



Source: Company reports and J.P. Morgan estimates.

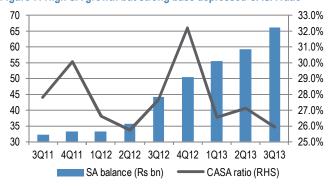
Figure 5: Loan book still retail-oriented



Source: Company reports and J.P. Morgan estimates.

Source: Company reports and J.P. Morgan estimates.

Figure 7: High SA growth but strong base depressed CASA ratio



Source: Company reports and J.P. Morgan estimates.

loans, 5.3%

Figure 6: Corporate book drives incremental 3Q loan book

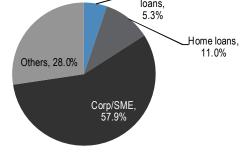


Figure 8: Falling cost-income offsetting NIM pressures



Source: Company reports and J.P. Morgan estimates.



Kotak Mahindra Bank: Summary of Financials

Income Statement						Growth Rates					
Rs in millions, year end Mar	FY10	FY11	FY12E	FY13E	FY14E		FY10	FY11	FY12E	FY13E	FY14E
NIM (as % of avg. assets)	6.3%	5.4%	4.8%	4.7%	4.6%	Loans	30.9%	37.4%	28.7%	31.2%	31.2%
Earning assets/assets	95.4%	96.4%	96.5%	96.2%		Deposits	25.3%	9.7%	14.1%	20.7%	25.5%
Margins (% of earning assets)	6.0%	5.2%	4.6%	4.5%		Assets	33.2%	32.8%	26.6%	32.5%	31.6%
margino (% or ourning accose)	0.070	0.270	1.070	1.070	1.070	Equity	19.7%	37.4%	15.6%	16.1%	18.1%
Net Interest Income	25,897	29,972	34.413	43,538	56,921		37.6%	34.1%	25.8%	32.6%	31.8%
Total Non-Interest Income	16,765	16,815	18.982	20,922	,	Net Interest Income	18.5%	15.7%	14.8%	26.5%	30.7%
Fee Income	10,703	10,013	10,902	20,922	,	Non-Interest Income	37.4%	0.3%	12.9%	10.2%	14.7%
ree income	-	-	-	-	-	of which Fee Grth	37.4/0	0.5 /6	12.9/0	10.2 /0	14.7 /0
Other Orestine Income				_			FO 70/	20 50/	24 70/	CO 00/	20.50/
Other Operating Income	40.000	40 707				Revenues	52.7%	22.5%	31.7%	62.0%	38.5%
Total operating revenues	42,663	46,787	53,395	64,460	80,925		-2.7%	24.8%	10.8%	9.0%	16.9%
0 "	40.000	04.500	07.044	00.000	04.000	Pre-Provision Profits	66.3%	-3.3%	17.8%	32.9%	32.9%
Operating costs	-19,683	-24,563	-27,214	-29,669	-34,696	Loan Loss Provisions	71.8%	-71.4%	-37.6%	256.0%	74.9%
						Pre-Tax					-
Pre-Prov. Profits	22,979	22,224	26,181	34,791		Attributable Income	91.9%	21.2%	21.4%	21.1%	27.9%
Provisions	-5,641	-1,613	-1,008	-3,587	-6,274		90.6%	14.6%	20.8%	21.1%	27.9%
Other Inc/Exp. (treasury Income)	493	912	822	900	1,100	DPS	13.3%	17.6%	20.0%	21.1%	27.9%
Exceptionals	0	0	0	0	0						
						Balance Sheet Gearing	FY10	FY11	FY12E	FY13E	FY14E
Pre-tax	17,831	21,522	25,995	32,104	41,055	Loan/deposit	128.8%	144.5%	141.2%	114.3%	108.3%
Tax	5,521	6,598	7,876	10,159	12,987	Investment/assets	5.0%	5.5%	5.6%	4.9%	4.3%
Minorities	-	-	-	-	-	Loan/Assets	62.2%	64.4%	65.4%	64.8%	64.6%
Other Distbn.	-	-	-	-	-	Customer deposits/liab.	58.6%	54.2%	55.4%	66.1%	68.3%
Attributable Income	12,310	14,924	18,118	21,945	28,069	LT debt/liabilities	27.3%	32.1%	33.5%	25.8%	24.4%
Per Share Data Rs	FY10	FY11	FY12E	FY13E	FY14E	Asset Quality/Capital	FY10	FY11	FY12E	FY13E	FY14E
EPS	17.68	20.25	24.46	29.63	37.90	Loan loss reserves/loans	0.0%	0.0%	0.0%	0.0%	0.0%
DPS	0.43		0.60	0.73		NPLs/loans	3.0%	1.7%	1.2%	1.1%	1.4%
Payout	2.4%	2.5%	2.5%	3.4%	3.5%	Specific loan loss reserves/NPLs	0.0%	0.0%	0.0%	0.0%	0.0%
Book value	116.16	150.82	173.39	201.30		Growth in NPLs	10.4%	-23.9%	-4.3%	17.0%	62.9%
Fully Diluted Shares	696.28	736.87	740.69	740.69		Tier 1 Ratio	15.4%	18.0%	15.7%	14.0%	12.0%
. any Enated enaite	000.20					Total CAR	18.4%	19.9%	17.5%	15.4%	13.0%
Key Balance sheet Rs in millions	FY10	FY11	FY12E	FY13E	EV1/E	Du-Pont Analysis	FY10	FY11	FY12E	FY13E	FY14E
Net Loans	307,637		544,004	713,663		NIM (as % of avg. assets)	6.3%	5.4%	4.8%	4.7%	4.6%
LLR	007,007	,	0	7 13,003		Earning assets/assets	95.4%	96.4%	96.5%	96.2%	96.3%
Gross Loans		422,706	-	713,663		Margins (as % of Avg. Assets)	6.0%	5.2%	4.6%	4.5%	4.5%
NPLs	9.167	6.977	6.677	7.810		Non-Int. Rev./ Revenues	39.3%	35.9%	35.5%	32.5%	29.7%
	24,926	- , -	46,368	54,178	,		39.3%	2.9%	2.6%	2.2%	1.9%
Investments	14,835	15,426	25,997	34,176		Non IR/Avg. Assets Revenue/Assets	9.9%	8.1%	7.2%	6.7%	6.3%
Other earning assets	,	,		,	,						
Avg. IEA	412,020	554,816	111,511	929,824		Cost/Income	46.1%	52.5%	51.0%	46.0%	42.9%
Goodwill	404.007	-	-	4 404 047		Cost/Assets	4.5%	4.3%	3.7%	3.1%	2.7%
Assets	494,387	656,622	831,239	1,101,047	1,449,401	Pre-Provision ROA	5.3%	3.9%	3.5%	3.6%	3.6%
						LLP/Loans	-2.1%	-0.4%	-0.2%	-0.6%	-0.8%
Deposits	,	292,610	,	624,193	,	Loan/Assets	62.7%	63.5%	65.0%	65.1%	64.7%
Long-term bond funding	135,099	210,652	278,148	283,981	,	Other Prov, Income/ Assets	0.1%	0.2%	0.1%	0.1%	0.1%
Other Borrowings	-	-	-	-		Operating ROA	5.3%	3.9%	3.5%	3.6%	3.6%
Avg. IBL		438,613		785,844		Pre-Tax ROA	4.1%	3.7%	3.5%	3.3%	3.2%
Avg. Assets	,	575,504	,	966,143	1,275,224		-	-	-	-	-
Common Equity	80,879	111,134	128,431	149,101	176,016	Minorities & Outside Distbn.	0.0%	0.0%	0.0%	0.0%	0.0%
RWA	432,677	580,266	729,834	967,771	1,275,239	ROA	2.8%	2.6%	2.4%	2.3%	2.2%
Avg. RWA	373,506	506,471	655,050	848,803	1,121,505	RORWA	3.3%	2.9%	2.8%	2.6%	2.5%
						Equity/Assets	17.2%	16.7%	16.1%	14.4%	12.7%
						ROE	16.6%	15.5%	15.1%	15.8%	17.3%

Source: Company reports and J.P. Morgan estimates.

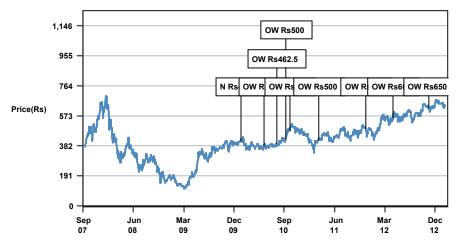
Analyst Certification: The research analyst(s) denoted by an "AC" on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an "AC" on the cover or within the document individually certifies, with respect to 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.

Important Disclosures

- Client: J.P. Morgan currently has, or had within the past 12 months, the following company(ies) as clients: Kotak Mahindra Bank.
- Client/Non-Investment Banking, Securities-Related: J.P. Morgan currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-investment-banking, securities-related: Kotak Mahindra Bank.
- Client/Non-Securities-Related: J.P. Morgan currently has, or had within the past 12 months, the following company(ies) as clients, and the services provided were non-securities-related: Kotak Mahindra Bank.
- Non-Investment Banking Compensation: J.P. Morgan has received compensation in the past 12 months for products or services other than investment banking from Kotak Mahindra Bank.

Company-Specific Disclosures: Important disclosures, including price charts, are available for compendium reports and all J.P. Morgan—covered companies by visiting https://mm.jpmorgan.com/disclosures/company, 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.

Kotak Mahindra Bank (KTKM.BO, KMB IN) Price Chart



Date	Rating	Share Price (Rs)	Price Target (Rs)
06-Jan-10	N	415.52	412.50
12-May-10	OW	380.45	425.00
22-Jul-10	OW	392.48	462.50
09-Sep-10	OW	424.40	500.00
02-Oct-10	OW	476.30	575.00
06-Mar-11	OW	416.25	500.00
17-Nov-11	OW	491.25	525.00
13-Apr-12	OW	558.35	600.00
26-Oct-12	OW	620.70	650.00

Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage Jan 06. 2010.

The chart(s) show J.P. Morgan's continuing coverage of the stocks; the current analysts may or may not have covered it over the entire period.

J.P. Morgan ratings or designations: OW = Overweight, N= Neutral, UW = Underweight, NR = Not Rated

Explanation of Equity Research Ratings, Designations and Analyst(s) Coverage Universe:

J.P. Morgan uses the following rating system: Overweight [Over the next six to twelve months, we expect this stock will outperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Neutral [Over the next six to twelve months, we expect this stock will perform in line with the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Underweight [Over the next six to twelve months, we expect this stock will underperform the average total return of the stocks in the analyst's (or the analyst's team's) coverage universe.] Not Rated (NR): J.P. Morgan has removed the rating and, if applicable, the price target, for this stock because of either a lack of a sufficient fundamental basis or for legal, regulatory or policy reasons. The previous rating and, if applicable, the price target, no longer should be relied upon. An NR designation is not a recommendation or a rating. In our Asia (ex-Australia) and U.K. small- and mid-cap equity research, each stock's expected total return is compared to the expected total return of a benchmark country market index, not to those analysts' coverage universe. If it does not appear

in the Important Disclosures section of this report, the certifying analyst's coverage universe can be found on J.P. Morgan's research website, www.jpmorganmarkets.com.

Coverage Universe: Sen, Seshadri K: Axis Bank Ltd (AXBK.BO), Bank of Baroda (BOB.BO), Bank of India (BOI.BO), HDFC (Housing Development Finance Corporation) (HDFC.BO), HDFC Bank (HDBK.BO), ICICI Bank (ICBK.BO), IDFC (IDFC.BO), IndusInd Bank (INBK.BO), Kotak Mahindra Bank (KTKM.BO), Punjab National Bank (PNBK.BO), Reliance Capital (RLCP.BO), State Bank of India (SBI.BO), Yes Bank (YESB.BO)

J.P. Morgan Equity Research Ratings Distribution, as of January 1, 2013

	Overweight	Neutral	Underweight
	(buy)	(hold)	(sell)
J.P. Morgan Global Equity Research Coverage	44%	44%	12%
IB clients*	53%	46%	34%
JPMS Equity Research Coverage	42%	49%	9%
IB clients*	71%	62%	51%

^{*}Percentage of investment banking clients in each rating category.

For purposes only of FINRA/NYSE ratings distribution rules, our Overweight rating falls into a buy rating category; our Neutral rating falls into a hold rating category; and our Underweight rating falls into a sell rating category. Please note that stocks with an NR designation are not included in the table above.

Equity Valuation and Risks: For valuation methodology and risks associated with covered companies or price targets for covered companies, please see the most recent company-specific research report at http://www.jpmorganmarkets.com, contact the primary analyst or your J.P. Morgan representative, or email research.disclosure.inquiries@jpmorgan.com.

Equity Analysts' Compensation: The equity 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.

Registration of non-US Analysts: Unless otherwise noted, the non-US analysts listed on the front of this report are employees of non-US affiliates of JPMS, are not registered/qualified as research analysts under NASD/NYSE rules, may not be associated persons of JPMS, 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.

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.

All research reports made available to clients are simultaneously available on our client website, J.P. Morgan Markets. Not all research content is redistributed, e-mailed or made available to third-party aggregators. For all research reports available on a particular stock, please contact your sales representative.

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 and is authorized and regulated in the UK by the Financial Services Authority. U.K.: J.P. Morgan Securities plc (JPMS plc) is a member of the London Stock Exchange and is authorized and regulated by the Financial Services 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) [MICA (P) 088/04/2012 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. 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 Malaysia. 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.

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. JPMSAL does not issue or distribute this material to "retail clients". 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 terms "wholesale client" and "retail client" have the meanings given to them 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.

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 January 1, 2013.

Copyright 2013 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.

Seshadri K Sen, CFA (91-22) 6157-3575 seshadri.k.sen@jpmorgan.com J.P.Morgan