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Lee & Man Paper Manufacturing

Lowering PT to HK\$6.0 – profit margins intact, which is guite an achievement for 2014

Lee & Man Paper (LMP) is the second-largest producer of containerboards in China. The company released FY14 results on Mar 9. LPM reported 0.8% y/y growth in revenue and a 2.3% y/y decrease in NP. These results were better than the performance of larger rival Nine Dragons Paper over this period, due to LMP's focus on higher-margin linerboards. We lower our Dec-15 PT to HK\$6.0; Overweight maintained.

- Industry dynamics improving. We expect a combination of the few plant openings and aggressive plant closure plans by the NDRC to result in a cut in supply in China for containerboards for the first time in at least ten years. Demand should improve as the drag from thinner paper weights has finally ended in 2014, and even a sluggish economy should generate sufficient growth to lift pricing power and margins for LMP, in our view.
- Lowering earnings estimates and target price. We lower our FY15E and FY16E sales by 3.9% and 2.2% mainly to factor in slightly lower sales volume in line with the slightly lower volumes in 2014 versus expectations. We are keeping our selling price unchanged from our previous estimates. We have factored in a slower recovery in GPM (now 19.1% for 2015, up 1.1% Y/Y) in order to be more conservative given that a demand recovery is still difficult to call. Our DCF-based Dec 15 PT is cut to HK\$6.0 (from HK\$6.3) as a result of these earnings changes.
- **Price, valuation and risks**. Our PT (Dec-15, DCF-derived) of HK\$6.0 implies a fwd P/BV of 1.5x and P/E of 11.2x (CY16E). The key downside risk to our PT is a sharp rise in the cost of OCC and coal. A key upside risk is an increase in demand that could result in a shortage of containerboard, pushing up margins.

Overweight

2314.HK, 2314 HK

Price: HK\$3.91

Price Target: HK\$6.00 Previous: HK\$6.30

Hong Kong SMID-Caps

Leon Chik, CFA AC

(852) 2800-8590

leon.hk.chik@jpmorgan.com

Bloomberg JPMA CHIK <GO>

Liwen Yin

(852) 2800-8528

liwen.yin@jpmorgan.com

J.P. Morgan Securities (Asia Pacific) Limited



Lee & Man Paper Manufacturing (Reuters: 2314.HK, Bloomberg: 2314 HK)

Lee & Mail Faper Mailula	cturing (ixeute	13. 23 1 4 .1111, 1	Jiooiiibeig. 2	31 4 111 <i>1</i>)	
HK\$ in mn, year-end Dec	FY12A	FY13A	FY14A	FY15E	FY16E
Revenue (HK\$ mn)	11,424	16,970	17,099	18,184	19,742
Net Profit (HK\$ mn)	1,321	1,948	1,905	2,248	2,521
EPS (HK\$)	0.28	0.41	0.41	0.48	0.54
DPS (HK\$)	0.10	0.15	0.14	0.14	0.16
Revenue growth (%)	(18.6%)	48.6%	0.8%	6.3%	8.6%
EPS growth (%)	(27.0%)	48.1%	(2.0%)	18.4%	12.1%
ROCE	6.3%	8.2%	7.3%	7.9%	8.4%
ROE	9.8%	12.6%	11.3%	12.3%	12.6%
P/E (x)	14.0	9.4	9.6	8.1	7.3
P/BV (x)	1.2	1.1	1.0	1.0	0.9
EV/EBITDA (x)	15.0	10.7	10.1	8.6	7.6
Dividend Yield	2.6%	3.7%	3.7%	3.7%	4 1%

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

Company Data	
Shares O/S (mn)	4,703
Market Cap (HK\$ mn)	18,389
Market Cap (\$ mn)	2,371
Price (HK\$)	3.91
Date Of Price	09 Mar 15
Free Float(%)	27.6%
3M - Avg daily vol (mn)	4.31
3M - Avg daily val (HK\$ mn)	17.87
3M - Avg daily val (\$ mn)	2.3
HSI	24,164.00
Exchange Rate	7.76
Price Target End Date	31-Dec-15

See page 18 for analyst certification and important disclosures, including non-US analyst disclosures.

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Key catalysts for the stock price:

- Start of peak season after May should see an opportunity to raise prices
- New figures for closures of small operators for 2013 could be announced by the government in 2H14
- More info on falling cost of coal and chemicals could become evident in mid-year results

Upside risks to our view:

- A stronger-than-expected improvement in pricing and margins as demand improves with the economy
- Smaller operators exit the industry for environmental reasons
- Acceleration of capacity growth to foster more growth

Downside risks to our view:

- New supply to come online to depress margins
- Surge in cost of old cardboard due to a booming US economy
- Credit tightening crimps demand from end customers and causes box makers to destock inventories

Vov financial metrics	EV42	EV4.4	FV4FF	EV46E
Key financial metrics	FY13	FY14	FY15E	FY16E
Revenues (LC)	16,970	17,099	18,300	19,742
Revenue growth (%)	48.6%	0.8%	7.0%	7.9%
EBITDA (LC)	3,009	3,260	3,733	4,077
EBITDA margin (%)	17.7%	19.1%	20.4%	20.7%
Tax rate (%)	11%	14%	14%	14%
Net profit (LC)	1,948	1,905	2,249	2,510
EPS (LC)	0.414	0.406	0.481	0.537
EPS growth (%)	48.1%	-2.0%	18.4%	11.6%
DPS (LC)	0.15	0.14	0.14	0.16
BVPS (LC)	3.48	3.74	4.08	4.46
Operating cash flow (LC mn)	1,272	1,910	2,958	2,986
Free cash flow (LC mn)	(876)	287	1,794	2,004
Interest cover (x)	22	16	17	21
Net margin (%)	11.5%	11.1%	12.3%	12.7%
Sales/assets (X)	0.58	0.52	0.51	0.53
Debt/equity (%)	67.0%	73.6%	65.9%	58.9%
Net debt/equity (%)	62.7%	62.0%	51.8%	41.8%
ROE (%)	13%	11%	12%	13%
Key model assumptions	FY13E	FY14E	FY15E	FY16E
Average Capacity ('000 tonne)	4910	5170	5430	5755
Utilization rate (%)	98%	98%	98%	98%
Sales Volume ('000 tonne)	4810	5060	5321.4	5639.9

Source: Company and J.P. Morgan estimates.

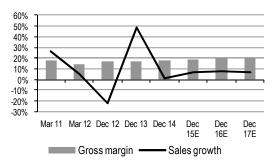
Sensitivity analysis	EBIT	TDA	EPS		
Sensitivity to	FY15E	FY16E	FY15E	FY16E	
1% chg in sales price	4%	4%	7%	7%	
1% chg in utilization	2%	2%	3%	3%	
1% chg in OCC cost	-2%	-2%	-3%	-3%	
1% chg in GPM	4%	4%	7%	7%	

Source: J.P. Morgan estimates.

Valuation and price target basis

Our Dec-15 price target is based upon a DCF methodology. The mature nature of the industry leads us to apply a terminal growth rate of 3.0% (the low end of the 3-6 percent growth rate we use for SMID Caps).

Sales growth and margin trends



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

JPMe vs. consensus, change in estimates						
EPS (LC)		FY15E	FY16E			
JPMe old	0.53	0.57				
JPMe new	0.481	0.537				
% chg	-9%	-6%				
Consensus	0.47	0.522				

Source: Bloomberg, J.P. Morgan estimates.

Peer valuation comparison

			MCAP	Vol	1W	3M	14E	15E	EV/	ROE	P/BV	
Company Name	Code	Price (PT)	US\$MM	US\$MM	Chg	Chg	P/E(x)	P/E(x)	EBITDA	(%)	(x)	YId (%)
Industrial companies												
XINYI GLASS HOLD (OW)*	868 HK	4.68 (6.1)	2,365	7.5	2.9	23.2	13.5	8.3	6.5	11.1	1.4	3.2
KINGBOARD CHEM (OW)*	148 HK	13 (21)	1,718	2.5	(0.9)	(3.1)	5.9	7.2	4.9	6.7	0.4	4.2
SHENZHOU (OW)*	2313 HK	31 (38)	5,589	5.9	0.0	22.5	18.3	14.8	12.3	17.9	2.8	3.1
LM PAPER (OW)*	2314 HK	3.91 (6)	2,353	1.8	(3.2)	(4.2)	9.6	8.1	9.0	12.6	1.1	3.7
TECHTRONIC INDS (OW)*	669 HK	27.25 (36)	6,431	13.1	2.1	5.6	21.0	17.1	12.5	16.7	2.9	1.2
ND PAPER (N)*	2689 HK	5 (8.2)	3,007	8.3	(0.4)	(21.8)	6.8	6.9	8.0	7.5	0.9	2.0
HAITIAN (OW)*	1882 HK	16.16 (22)	3,324	2.4	(1.9)	5.8	16.4	13.8	13.1	19.2	3.4	1.2
VTECH (ÙW)*	303 HK	109.9 (80)	3,539	4.0	(0.5)	6.6	16.7	16.5	13.8	35.4	5.5	5.7
WASION GROUP (OW)*	3393 HK	7.68 (10.5)	943	1.3	(1.3)	2.1	12.0	9.6	7.5	16.0	1.8	3.2
Average					1.0	5.7	12.2	11.0	9.4	16.1	2.1	3.4

Source: Company data, Bloomberg for NC companies, J.P. Morgan estimates. Share prices are as of close of Mar 09, 2015; *Stocks under J.P. Morgan coverage



Highlights from analysts briefing

Sales hurt by depreciation of Rmb

Management mentioned that the main reason for the drop in ASP is mainly due to the depreciation of the Renminbi, as 90% of sales are denominated in Rmb, while sales are measured in USD.

Overcapacity situation improved in 2014

LMP still considers the market in overcapacity, but the situation improved in 2014 due to the closures of over 1m tons of smaller mills during the year. Management mentioned that they have seen stable containerboard prices and did not have to cut prices during the first two months of the year. LMP also mentioned overall OCC cost remains quite stable in Rmb terms.

Tissues starting to make contribution in 2014

Capacity for 2014 was about 25k tons rising to 135k tons in 2015 (the majority of sales is OEM for other brands, but LMP is looking to build their own brands in future years). Profitable in 2014 but could be better in 2015. LMP wanted to be producing a more consumer oriented product that has the potential to grow faster than GDP rather than expand more in container boards where the demand is determined by the overall market and grows slower than GDP growth.

Capital expenditure slower in 2015

LMP is looking to invest HK1.8bn in 2015 which is 20 percent lower than the HK2.3bn spent in 2014. Over HK1.0bn of the investment in 2015 is related to the Vietnam plants and would not add to overcapacity in the Chinese market. Another HK400m is allocated for tissue paper production with the remainder mostly for maintenance-related expenses. LMP is looking to invest less for 2016 - HK1.2bn almost all in tissues and Vietnam. We think that the fact LMP is not spending much in China for 2015 and 2016 for new capacity is an indicator that the market is going to be constrained for new plants in China for a couple of years.

Other recent trends for the industry

- Containerboard price trend. The 1HFY15 results show that the recovery in containerboard prices in this peak period (Sept to Nov 2014) was not sufficient to offset the cuts in prices in the slack season (Feb to May 2014). In addition, much of the price hikes came too late in 1HFY15 to make much of an impact on profits. The key signal to watch for is a smaller decrease in prices this coming slack season (but we may not know until the month of May) which would show a continuing market recovery. We maintain our view that supply is being cut and any increase in demand would help lift margins in the peak season of 2015.
- OCC cost trends. The cost for OCC has been more or less stable from October to January and we see little change (or management has indicated) in OCC prices in the next few months as containerboard makers in China ramps up for post CNY demand. Port disruptions in West coast USA also propped up prices of OCC imported from the US to China. Our assumption for the full year OCC price for NDP is US\$175 per ton and we would not be concerned about this assumption unless OCC price falls below US\$150 in 1Q15. A clear positive signal would be raising OCC prices in March or April which would solidify our bullish view on the industry but we note that in 2013 and 2014 when demand was weak, the seasonal increase in OCC prices did not occur until after April. We look for signs that the recovery can start earlier this year.

- Medium-term positive. While the 2014 results were roughly in line with
 expectations and did not show any shortages in the industry, our analysis of the
 containerboard industry in China indicates that we will see a small net reduction
 in supply in CY15 and any minor recovery in demand on the back of government
 stimulus measures (looser credit/appliance subsidies/infrastructure spending
 boost) would result in a significant increase in GPM for LMP (we assumed a
 recovery to 19.3% GPM in 2015)
- Industry dynamics improving. We expect a combination of the few plant openings and aggressive plant closure plans by the NDRC to result in a cut in supply in China for containerboards for the first time in at least ten years. Demand should improve as the drag from thinner paper weights has finally ended in 2014 and even a sluggish economy should generate mid single digit demand growth in 2015 compared to almost no growth since 2011.

FY14 results overview

LMP: FY14 results review

						FY14
FY results (HK\$m)	FY13	FY14A	Y/Y	FY14E	Var	Consensus
Turnover*	16,970	17,099	0.8%	17,334	-1.4%	17,873
Gross profit	2,886	3,072	6.4%	3,128	-1.8%	3,341
GPM*	17.0%	18.0%		18.0%		18.7%
EBIT	2,694	2,424	-10.0%	2,485	-2.5%	2,449
EBITM	15.9%	14.2%		14.3%		13.7%
Net profit	1,948	1,904	-2.3%	1,990	-4.3%	1,962
NP Margin	11.5%	11.1%		11.5%		11.0%
EPS	0.42	0.41	-2.0%	0.43	-5.4%	0.42

Source: Company, J.P. Morgan estimates

- LPM reported 0.8% y/y growth in revenue which is 1.4% lower than JPM estimates. Overall net profit reported a 2.3% y/y decrease, missing JPM estimates by 4.3%. Although the result was slightly lower than our estimates, there should be some relief following the release of these results (shares have been down 5% 2% lower than overall Hang Seng) since NDP released results for the six months ended Dec 14 which was down 29% LMP net profit for 2HFY14 (also 6 months ended Dec 14) was up 1.4%.
- LMP also outperformed larger NDP on another important measure. 2HFY14 GPM was up to 18% (from 16.4% 2HFY13) and this increase of 1.6% is much better than the Y/Y decrease in GPM of 2.3% over this same period (NDP's 1HFY15). We believe that LMP's focus on linerboards (over 90% of sales) was one of the reasons for the much better GPM as other containerboard and coated paperboard products struggled more in 2014.

Net profits revised down by 7.5% for FY15E and 5.2% for FY16E

-	New -			Change		
Year to Mar (HK\$m)	15-Dec	16-Dec	15-Dec	16-Dec	15-Dec	16-Dec
Turnover	18,184	19,742	19,041	20,190	-4.5%	-2.2%
Gross profit	3,476	3,831	3,680	3,942	-5.5%	-2.8%
EBIT	2,843	3,150	2,990	3,224	-4.9%	-2.3%
Net profit	2,248	2,521	2,432	2,649	-7.5%	-4.8%
EPS	0.48	0.54	0.53	0.57	-8.6%	-5.9%
Assumptions						
Containerboard ASP (HK\$/ton)	3,309	3,375	3,320	3,387	-0.3%	-0.3%
Gross margin	19.1%	19.4%	19.3%	19.5%	-0.2%	-0.1%

Source: J.P. Morgan estimates

We lowered our FY15E and FY16E sales by 3.9% and 2.2%, mainly to factor in slightly lower sales volume in line with slightly lower volumes in 2014 versus expectations. We are keeping our selling price unchanged from our previous estimates. We have factored in a slower recovery in GPM (now 19.1% for 2015 - up 1.1% Y/Y) in order to be more conservative given that a demand recovery is still difficult to call. Our new EPS for 2015E and 2016E are now 2% and 3% higher than consensus (Bloomberg), respectively, indicating our view of a recovery in the paper market in China is still more positive than our peers. Our DCF-based Dec 15 PT is cut to HK\$6.0 (previously HK\$6.3) as a result of these earnings changes.

What has changed in the industry since September?

As a recap, we had been negative on the industry in September 2014 because we thought the drop in OCC prices from July to Sept would make it difficult for containerboard makers to lift prices during peak season in 4QCY14. Please refer to the note, "Nine Dragons Paper Holdings Ltd: Dropping PT to HK\$7.0 – Waiting for a sustainable price hike" dated Sep 25, 2014 for detail.

We became more positive after seeing trends in containerboard prices in Dec 2014. During December, we understand that prices for containerboards in China were pretty flat from November (source: RISI article). This was apparently not welcomed by the market with the share price of both LMP and NDP down 10- 20% from the Dec peak levels (underperforming HSCEI by over 15-25% over this period). We actually find the fact that a flat December price compared to November is quite positive as normally December is less busy than November and the production in December would be using some of the cheapest OCC acquired in August/September.

Capacity in check

We show below our estimate of new capacity additions in 2014 and 2015 based on our review of RISI and other news articles. The net additions include the new plants, less the smaller plants closed by the government. Anecdotally, gross margins achieved by LMP and NDP would suggest no real reason for anyone to start a new plant since the middle of CY2011. So even greenfield plants with 3 years of construction period should be completed by the end of 2014. In fact, our review or new plants that are commencing construction operations in 2015 were initially contemplated after the end of 2011, mainly by very brave or long sighted companies with ample backing from local governments. Neither NDP or LMP have large plants commencing production in China in CY15 for containerboards.

6000 5000 4000 3000 2000 1000 -1000 -2000 2012 2014E 2015E 2013 ■ Gross add ■ Net add

Figure 1: Capacity Additions ('000 MT)

Source: RISI; J.P. Morgan estimates

Big plans for plant closures in 2015

We show below the plans of the government over the period from 2010 to 2015 and the actual closures as reported by the government from 2010 to 2013. As you can see the actual closures fairly match the proposed plans. Therefore, we are pleased to see a large jump in plant closures in 2015 (based on NDRC documents in Sept 2014). The large plant closures combined with low level of new plant openings lead us to conclude that 2015 would be the first year ever when capacity for containerboards could actually fall in China. Longer term, pollution concerns as well as energy efficiency goals should limit approvals for new projects and prevent significant overbuilding that we saw in previous peaks in 2006 and 2010.

mn ton 12.00 700 600 10.00 500 8.00 400 6.00 300 4.00 200 2.00 100 0 0.00 2010 2011 2012 2013 2014 2015E (The NDRC) Completed (National) Target (National) Number of company

Figure 2: Total capacity shutdown by government

Source: WIND; Ministry of Industry and Information Technology of the PRC

Demand not as bad as it looks for 2012 and 2013

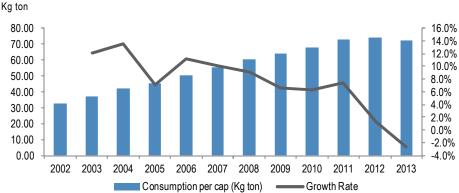
One of the key negative developments in the past few years has been the slowing pace of growth in demand. The chart below shows a sharp drop in growth in 2012 and 2013 to an average of 0% compared to 5-10% in the previous 5 years. This is surprising, in our view, given that retail sales continue to grow mid double digits in China and there is increasing demand for e-commerce packaging (now over 10% of total containerboard demand).

mn ton 25 20 15 10 5 0 2003 2005 2006 2007 2008 2009 2010 2011 2012 2013 2002 2004

Figure 3: Containerboard consumption

Source: Wind

Figure 4: Consumption per capita



Source: Wind

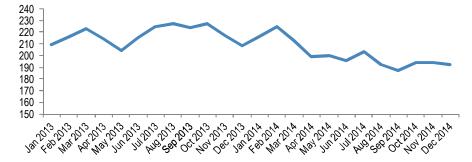
We believe that the sharp drop in demand was mainly due to new technology that allowed the production of boxes using lighter paper weights. The weight of containerboards for average packaging usage fell from more than 100g/sm to around 80g/sm. We can see this as some of the capacity plants of LMP was lowered by 20-25% over this period. We understand that weights continued to drop in 2014 but cannot fall any more from 2014 levels without compromising box strength to undesirable levels. Had it not been for the change in paper weights, demand in 2012 and 2013 would have been much higher and closer to the growth trend of past years. We see better growth going forward of mid single digits in a sluggish economy to high single digits in a recovery situation.

Stable OCC prices and likely rising prices a positive trend

The following chart shows that the price of OCC (US imports to China) has been flat for 3-4 months. This is actually quite positive for 2 reasons:

- No major inventory related losses/write-down for the period ended Dec 2014 expected
- Strong OCC price given lower oil prices and transport costs support the view that demand is quite strong

Figure 5: OCC in China (USD Imports)



Source: RISI

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Longer term, RISI consultants see OCC to be on a rising trend in 2015 because the recovery rates globally are already quite high at 80% and isn't likely to move higher quickly. A big drag on OCC pricing in the past 2 years is that the recovery rates (amount of boxes recycled into new materials) rose sharply in China from below 50% 3 years ago to around 70% today. It is our firm view that rising OCC prices lead to rising containerboard prices (under normal or shortage situation) and this is positive for sentiment over NDP and its share price.

Valuation and share price analysis

DCF valuation

Our Dec-15 price target is based on a DCF valuation that assumes a market risk premium of 6.0% and a risk-free rate of 4.2% (yield on 10-year government notes in China). We have assumed a beta of 1.3 (sector long-term beta). Accordingly, WACC is assumed at a 9.5%. We have estimated free cash flow for LMP until 2020 and assume a terminal growth rate of 3.0%. The terminal growth is based on the annual growth rate expected in 2020 (the final year of the estimate period) subject to a minimum of 3% and a maximum of 6% depending on the nature of the industry and the level of maturity in China

We also analyzed the DCF price sensitivity to WACC, and the terminal multiple.

Table 1: LMP - Base-case DCF analysis

Year to Dec (March until 2011)	2013E	2014	2015E	2016E	2017E	2018E	2019E	Terminal
Cash flow estimates								
Sales	16,970	17,099	18,184	19,742	21,032	22,593	24,183	25,801
EBIT	2,341	2,424	2,843	3,150	3,427	3,731	4,116	4,628
NOPAT	2,059	2,132	2,526	2,715	2,954	3,217	3,549	3,990
Capex, net	(2,271)	(2,300)	(1,809)	(1,219)	(1,113)	(1,065)	(1,043)	(1,324)
Depreciation	668	846	899	959	968	972	976	978
Change in working capital	(1,411)	(401)	(192)	(551)	(443)	(543)	(548)	(684)
Free Cash Flows	(955)	276	1,424	1,906	2,367	2,585	2,938	2,965
DCF Parameters			Assumpti	ons				
Liabilities as a % of EV	30%		Terminal g	rowth		3.0%		
WACC	9.6%		Risk-free r			4.2%		
			Market risk	(6.0%		
Enterprise NPV (10E-16E)	37,784		Beta			1.30		
+ Net cash (debt), current	(10,269)		Cost of de	bt		4.2%		
- Minorities (Market value)	Ó							
+/- Other items	0		Implied ex	it P/E multipl	e (x)	8		
= Equity value	27,515		•	·	• •			
/ Number of shares	4,658							
= Equity value per share (HK\$)	6.0							

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

Table 2: LMP- Sensitivity analysis based on WACC and perpetual terminal growth rate

				Terminal growth rate						
		1.5%	2%	2.5%	3.0%	3.5%	4.0%	4.5%		
	8.1%	6.5	7	7.7	8.5	9.4	10.6	12.1		
	8.6%	5.9	6.3	6.9	7.5	8.3	9.2	10.4		
ပ	9.1%	5.3	5.7	6.2	6.7	7.3	8.1	9		
WACC	9.6%	4.9	5.2	5.6	6	6.6	7.2	7.9		
≥	10.1%	4.4	4.7	5.1	5.5	5.9	6.4	7		
	10.6%	4.1	4.3	4.6	4.9	5.3	5.7	6.2		
	11.1%	3.7	4	4.2	4.5	4.8	5.2	5.6		

Source: J.P. Morgan estimates.



Replacement value

We highlight below the updated replacement value per share for LMP of HK\$3.9. The capacity was raised up from the designed capacity (where utilization only reaches 80% as a theoretical maximum) to a capacity which is based on practical production (where utilization reaches 100% if business is good). Therefore, we have amended our replacement value based on the new capacity figure provided by management. This is the total amount of investment that a new entrant would need to invest in order to replicate the production capabilities of LMP. We have adjusted this figure for the impact of a depreciating Euro (makes equipment made in Europe cheaper) as well as a factor for the age of LMP's machines. This is a theoretical replacement value because we think new entrants are unlikely given they would need similar licenses, locations and supply chains as the incumbents and these may not be available. Furthermore, large amounts of capital required and the cyclical nature of this business increasingly discourage new entrants.

Typically, the replacement value is a defensive "floor value" for a containerboard producer. In the past, the share price of LMP has exceeded the replacement value by over 3x times during periods of extreme shortages and very high gross margins such as in the second half of 2007. We expect a reduction in the discount should operating conditions improve to a point that debt servicing becomes less of an issue and the focus is back on growth and profitability.

In the longer term, we believe LMP could trade at a premium to the replacement value. It would be, in our view, very difficult for a new entrant to mimic LMP's operations without incurring costs that are 30-50% higher than the replacement value.

Table 3: Replacement value

Containerboard		As at Dec 2014	HK\$m
Capacity as at Dec 2014 (000 ton)	5,230	Non-cash ST assets	9,184
Capacity under construction (000 ton)	1,050	Non-debt current liabs	(3,619)
Total Dec17 capacity (000 ton)	6,280	Net working capital	5,565
		Deposit and prepayments	1,055
Equipment cost (HK\$000 per ton)	3.3	Cash	2,033
Land cost (HK\$000 per ton)	0.4	ST Debt	(6,698)
Power plant and supporting (HK\$000 per ton)	0.4	LT Debt	(7,253)
Interest cost 2 years (HK\$000 per ton)	0.42	Net Debt + Working Capital (Rmb m)	(5,298)
Total cost (HK\$000 per ton)	4.52		
		Replacement cost (including WC and net debt)	18,381
Replacement cost for containerboard (HK\$m)	28,386	number of shares	4,658
Adjustment for age of machines	(3,974)	Replacement cost per share	3.9
<u>Pulp</u>	, ,	· · · · · · · · · · · · · · · · · · ·	
Replacement cost for pulp	1,000		
Replacement cost (pulp and containerboard) (HK\$m)	25,412		
Outstanding Capex	(1,733)		
Replacement cost (net of cost to complete) (HK\$m)	23,679		

Source: J.P. Morgan estimates

Financial analysis

Table 4: LMP - P&L statement

HK\$MM, YE	Mar 12	Dec 12	Dec 13	Dec 14	Dec 15E	Dec 16E
Total Revenues	14,716	11,424	16,970	17,099	18,184	19,742
YoY change (%)	4.9%	NA	NA	0.8%	6.3%	8.6%
Cost of Goods Sold	(12,652)	9,473	(14,084)	(14,028)	(14,708)	(15,911)
YoY change (%)	10.5%	NA	NA	-0.4%	4.9%	8.2%
Gross Profit	2,063	1,951	2,886	3,072	3,476	3,831
YoY change (%)	-20.1%	NA	NA	6.4%	13.1%	10.2%
Gross Margin	14.0%	17.1%	17.0%	18.0%	19.1%	19.4%
SGA	(842)	(660)	(934)	(1,039)	(1,083)	(1,175)
YoY change (%)	15.5%	NA	NA	11.2%	4.2%	8.6%
Other Income/(Expenses)	415	278	389	391	450	495
Operating profit	1,637	1,290	2,341	2,424	2,843	3,150
EBITDA	2,473	1,762	3,009	3,270	3,742	4,109
EBITDA margin	16.8%	17.8%	17.7%	19.1%	20.6%	20.8%
Depreciation & Amortization	(837)	(471)	(668)	(846)	(899)	(959)
YoY change (%)	11.9%	-44.7%	44.3%	26.6%	6.3%	6.7%
EBIT	1,637	1,290	2,341	2,424	2,843	3,150
EBIT margin	11.1%	11.3%	13.8%	14.2%	15.6%	16.0%
Net Interest Expense	(100)	(70)	(149)	(215)	(235)	(226)
Exceptional item	0	0	0	0	0	0
Associates	0	0	0	0	0	0
Gains/losses	0	0	0	0	0	0
Net Income Before Taxes	1,537	1,498	2,193	2,209	2,608	2,924
YoY change (%)	-22.5%	N	NA	0.8%	18.0%	12.1%
Tax	(185)	(177)	(244)	(305)	(359)	(403)
Effective Tax rate	12.1%	13.4%	11.1%	13.8%	13.8%	13.8%
Minority Interests	0	0	0	0	0	0
Net Income	1,351	1,321	1,948	1,905	2,248	2,521
YoY change (%)	-26.9%	NA	NA	-2.2%	18.0%	12.1%
Net margin	9.2%	11.6%	11.5%	11.1%	12.4%	12.8%

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

Table 5: LMP - Balance sheet

HK\$MM, YE	Mar 12	Dec 12	Dec 13	Dec 14	Dec 15E	Dec 16E
Cash and Cash Equivalents	732	657	711	2,033	2,292	3,080
Inventories	3,124	2,880	3,123	3,258	3,395	3,686
Accounts receivable	5,242	4,535	5,582	5,891	6,140	6,666
Other Current Assets	31	36	45	35	137	243
Total Current Assets	9,130	8,108	9,460	11,217	11,963	13,675
Intangible Assets	0	0	0	0	0	0
Property and Equipment, Net	16,923	18,790	20,830	22,465	23,374	23,634
Other Assets	688	711	905	1,055	1,076	1,098
Non-Current assets	17,611	19,501	21,734	23,520	24,451	24,732
Total Assets	26,741	27,609	31,195	34,737	36,414	38,407
Accounts Payable	3,127	3,309	3,165	3,262	3,469	3,767
Other Accrued Expenses	17	8	18	267	357	472
Taxes Payable	66	80	65	90	145	188
ST and current LT debts	2,896	3,864	5,661	6,698	6,542	6,386
Total Current Liabilities	6,106	7,261	8,909	10,317	10,513	10,813
Long-term Debt	6,664	5,209	5,298	6,163	6,019	5,875
Other Noncurrent Liability	473	541	641	780	829	900
Noncurrent liabilities	7,137	5,750	5,939	6,942	6,848	6,775
Total Liabilities	13,243	13,011	14,848	17,260	17,361	17,588
Share capital	117	117	117	117	117	117
Reserves and Surplus	13,381	14,481	16,229	17,360	18,936	20,702
Total Shareholders' Equity	13,498	14,598	16,346	17,477	19,053	20,819
Minority Interest	0	0	0	0	0	0
Total Shareholders' Equity	13,498	14,598	16,346	17,477	19,053	20,819
Total Liabilities and Equity	26,741	27,609	31,195	34,737	36,414	38,407

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

Table 6: LMP - Cash flow statement

HK\$MM, YE	Mar 12	Dec 12	Dec 13	Dec 14	Dec 15E	Dec 16E
EBIT	1,637	1,568	2,341	2,424	2,843	3,150
Depreciation and Amortization	837	463	668	846	899	959
Working Capital Changes	(699)	663	(1,411)	(401)	(192)	(551)
Net Interest	(100)	(70)	(149)	(215)	(235)	(226)
Tax Paid	(136)	(185)	(177)	(244)	(305)	(359)
Cash Flow From Operations	1,538	2,438	1,272	2,410	3,011	2,972
Capital expenditures	(3,256)	(1,600)	(2,271)	(2,300)	(1,809)	(1,219)
Investments and others	49	(23)	(57)	(151)	(21)	(22)
Cash Flow from Investing	(3,207)	(1,623)	(2,328)	(2,451)	(1,830)	(1,241)
Free Cash Flow	(1,669)	815	(1,056)	(41)	1,181	1,732
Dividends	(501)	(472)	(582)	(677)	(671)	(714)
Common issue	Ô	0	0	0	0	0
Debt	1,674	(419)	1,676	2,040	(251)	(229)
Other Financing	0	0	0	0	Ó	0
Cash Flow from financing	1,173	(891)	1,094	1,363	(922)	(943)
Change in cash	(496)	(75)	38	1,322	259	789
Cash beginning	1,228	732	657	711	2,033	2,292
Foreign exchange changes	0	0	15	0	0	0
Cash at end	732	657	711	2,033	2,292	3,080

Source: Company data, J.P. Morgan estimates

Table 7: LMP - Interim estimates

HK\$MM, YE March	1H13	2H13	1H14	2H14	1H15E	2H15E
Total Revenues	8,102	8,868	8,308	8,791	8,981	9,203
Gross Profit	1,431	1,455	1,461	1,611	1,668	1,808
EBIT	1,186	1,156	1,152	1,272	1,280	1,563
Net Income Before Taxes	1,119	1,073	1,038	1,171	1,166	1,442
Net Income	971	977	913	992	1,005	1,243
Diluted EPS (CNY)	0.206	0.208	0.194	0.212	0.214	0.266
Revenue split	47.7%	52.3%	49.0%	51.8%	52.5%	53.8%
GPM	17.7%	16.4%	17.6%	18.3%	18.6%	19.6%
EBIT margin	14.6%	13.0%	13.9%	14.5%	14.2%	17.0%
NPM	12.0%	11.0%	11.0%	11.3%	11.2%	13.5%
YoY						
Revenue	12.8%	17.8%	2.5%	-0.9%	8.1%	4.7%
GP	45.4%	34.8%	2.1%	10.7%	14.2%	12.2%
EBIT	45.7%	40.5%	-2.9%	10.1%	11.1%	22.9%
NP	44.5%	43.9%	-6.0%	1.5%	10.2%	25.3%

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



Investment Thesis, Valuation and Risks

Lee & Man Paper Manufacturing (Overweight; Price Target: HK\$6.00)

Investment Thesis

The company is the second largest containerboard maker in China and among the top five globally. Demand is driven by domestic usage, which is over 80% of end consumer demand. Improvement in retail sales of consumable products (groceries, drink, personal care) drive demand. Rising pollution standards, and the forced closure of small suppliers are improving the supply and demand equation. We expect a benign to positive pricing environment for the next one to two years.

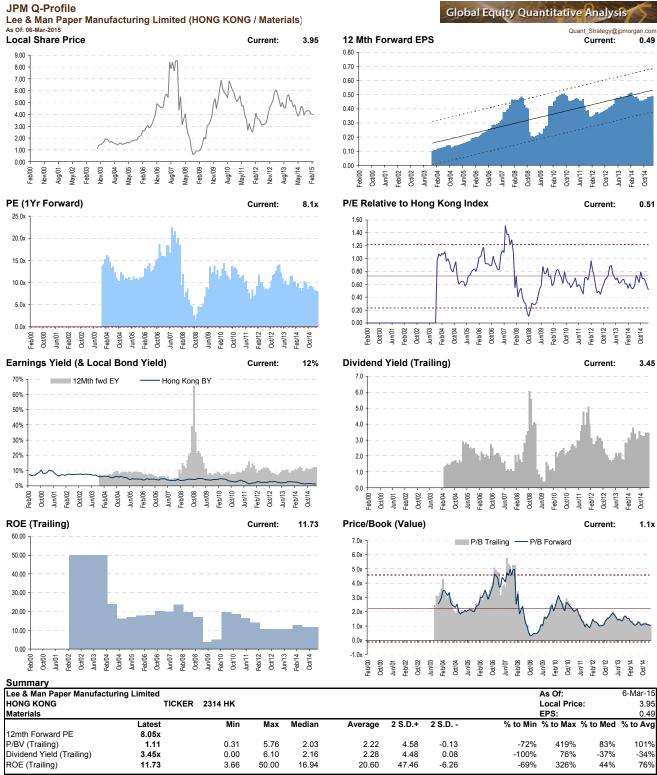
Valuation

Our Dec-15 price target is based on a DCF valuation that assumes a market risk premium of 6.0% and a risk-free rate of 4.2% (yield on 10-year government notes in China). We have assumed a beta of 1.3 (sector long-term beta). Accordingly, WACC is assumed at 9.5%.

Risks to Rating and Price Target

New supply to come online to depress margins. A surge in the cost of old cardboard due to a booming US economy. Credit tightening crimps demand from end customers and causes box makers to destock inventories.







Lee & Man Paper Manufacturing: Summary of Financials

Income Statement						Cash flow statement			-	-	
HK\$ in millions, year end Dec	FY13	FY14	FY15E	FY16E	FY17E	HK\$ in millions, year end Dec	FY13	FY14	FY15E	FY16E	FY17
Revenues	16,970	17,099	18,184	19,742	21,032	EBIT	2,341	2,424	2,843	3,150	3,42
% change Y/Y	48.6%	0.8%	6.3%	8.6%	6.5%	Depr. & amortization	668	846	899	959	96
Gross Profit	2,886	3,072	3,476	3,831	4,135	Change in working capital	(1,411)	(401)	(192)	(551)	(443
% change Y/Y	48.0%	6.4%	13.1%	10.2%	7.9%	Taxes	(177)	(244)	(305)	(359)	(403
EBITDA	3,009	3,270	3,742	4,109	4,394	Cash flow from operations	1,272	2,410	3,011	2,972	3,33
% change Y/Y	48.2%	8.7%	14.4%	9.8%	6.9%						
EBIT	2,341	2,424	2,843	3,150	3,427	Capex	(2,271)	(2,300)	(1,809)	(1,219)	(1,113
% change Y/Y	49.3%	3.5%	17.3%	10.8%	8.8%	Net Interest	(139)	(205)	(224)	(196)	(184
EBIT Margin	13.8%	14.2%	15.6%	16.0%	16.3%	Other	Ó	Ó	Ó	Ó	,
Net Interest	(139)	(205)	(224)	(196)	(184)	Free cash flow	(876)	287	1,395	1,923	2,37
Earnings before tax	2,193	2,209	2,608	2,924	3,209		, ,				
% change Y/Y	46.4%	0.8%	18.0%	12.1%	9.8%						
Tax	(244)	(305)	(359)	(403)	(442)	Equity raised/(repaid)	0	2,040	(251)	(229)	(241
as % of EBT	11.1%	13.8%	13.8%	13.8%	13.8%	Debt raised/(repaid)	1,676	-	. ,	` -	,
Net income (reported)	1,948	1,905	2,248	2,521	2,767	Other	0	0	0	0	
% change Y/Y	47.5%	(2.2%)	18.0%	12.1%	9.8%	Dividends paid	(582)	(677)	(671)	(714)	(791
Shares outstanding	4,703	4,690	4,677	4,677		Beginning cash	657	`711	2,033	2,292	3,08
EPS (reported)	0.41	0.41	0.48	0.54		Ending cash	711	2,033	2,292	3,080	4,24
% change Y/Y	48.1%	(2.0%)	18.4%	12.1%	9.8%		0.15	0.14	0.14	0.16	0.1
Balance sheet						Ratio Analysis					
HK\$ in millions, year end Dec	FY13	FY14	FY15E	FY16E	FY17E	HK\$ in millions, year end Dec	FY13	FY14	FY15E	FY16E	FY17
Cash and cash equivalents	711	2,033	2,292	3,080		Gross margin	17.0%	18.0%	19.1%	19.4%	19.7%
Accounts receivable	5,582	5,891	6,140	6,666	7,101	EBITDA margin	17.7%	19.1%	20.6%	20.8%	20.9%
Inventories	3,123	3,258	3,395	3,686	3,927	Operating margin	13.8%	14.2%	15.6%	16.0%	16.3%
Others	45	35	137	243	357	Net margin	11.5%	11.1%	12.4%	12.8%	13.29
Current assets	9,460	11,217	11,963	13,675	15,628	-					
						Sales per share growth	49.2%	1.0%	6.6%	8.6%	6.5%
LT investments	905	1,055	1,076	1,098	1,120	Sales growth	48.6%	0.8%	6.3%	8.6%	6.5%
Net fixed assets	20,830	22,465	23,374	23,634	23,780	Net profit growth	47.5%	(2.2%)	18.0%	12.1%	9.89
Total Assets	31,195	34,737	36,414	38,407	40,528	EPS growth	48.1%	(2.0%)	18.4%	12.1%	9.89
Liabilities						Interest coverage (x)	21.7	15.9	16.7	20.9	23.
Short-term loans	5,661	6,698	6,542	6,386	6,229	3 ()					
Payables	3,165	3,262	3,469	3,767	4,013	Net debt to equity	62.7%	62.0%	53.9%	44.1%	33.9%
Others	83	357	502	660	837	Working Capital to Sales	3.2%	5.3%	8.0%	14.5%	21.69
Total current liabilities	8,909	10,317	10,513	10,813		Sales/assets	0.6	0.5	0.5	0.5	0.
Long-term debt	5,298	6,163	6,019	5,875		Assets/equity	1.9	1.9	1.9	1.9	1.
Other liabilities	641	780	829	900	,	ROE	12.6%	11.3%	12.3%	12.6%	12.79
Total Liabilities	14,848	17,260	17,361	17,588	17,770	ROCE	8.2%	7.3%	7.9%	8.4%	8.79
Shareholders' equity	16,346	17,477	19,053	20,819	22,758						
BVPS	3.48	3.74	4.08	4.46	4.88						

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



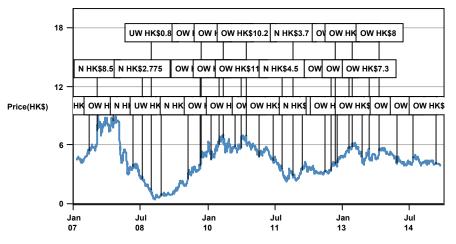
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Data

Lee & Man Paper Manufacturing (2314.HK, 2314 HK) Price Chart



Source: Bloomberg and J.P. Morgan; price data adjusted for stock splits and dividends. Initiated coverage May 14, 2007.

14-May-07 N 5.41 5.88 17-Jul-07 N 7.52 8.50 22-Nov-07 OW 8.48 10.50 06-May-08 N 3.80 3.80 17-Jul-08 N 2.60 2.78 25-Sep-08 UW 1.42 0.80 16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 <th>Date</th> <th>Rating</th> <th>Share Price (HK\$)</th> <th>Price Target (HK\$)</th>	Date	Rating	Share Price (HK\$)	Price Target (HK\$)
22-Nov-07 OW 8.48 10.50 06-May-08 N 3.80 3.80 17-Jul-08 N 2.60 2.78 25-Sep-08 UW 1.42 0.80 16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 </td <td>14-May-07</td> <td>N</td> <td>5.41</td> <td>5.88</td>	14-May-07	N	5.41	5.88
06-May-08 N 3.80 3.80 17-Jul-08 N 2.60 2.78 25-Sep-08 UW 1.42 0.80 16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW <td< td=""><td>17-Jul-07</td><td>N</td><td>7.52</td><td>8.50</td></td<>	17-Jul-07	N	7.52	8.50
17-Jul-08 N 2.60 2.78 25-Sep-08 UW 1.42 0.80 16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 4.09 5.00 20-Nov-12 OW 4.09 5.50 27-Feb-13 OW 5.62 7.20 </td <td>22-Nov-07</td> <td>OW</td> <td>8.48</td> <td>10.50</td>	22-Nov-07	OW	8.48	10.50
25-Sep-08 UW 1.42 0.80 16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 4.09 5.00 20-Nov-12 OW 4.09 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 <	06-May-08	N	3.80	3.80
16-Dec-08 UW 0.86 0.68 21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30	17-Jul-08	N	2.60	2.78
21-Jul-09 N 2.60 2.03 28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30	25-Sep-08	UW	1.42	0.80
28-Oct-09 OW 3.92 5.95 10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00	16-Dec-08	UW	0.86	0.68
10-Nov-09 OW 4.72 6.75 31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	21-Jul-09	N	2.60	2.03
31-Jan-10 OW 4.56 7.20 31-Mar-10 OW 6.10 10.00 05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 08-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	28-Oct-09	OW	3.92	5.95
31-Mar-10 OW 6.10 10.00 05-May-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	10-Nov-09	OW	4.72	6.75
05-May-10 OW 6.79 11.80 09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 28-Oct-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	31-Jan-10	OW	4.56	7.20
09-Aug-10 OW 5.88 10.50 28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	31-Mar-10	OW	6.10	10.00
28-Sep-10 OW 5.74 11.00 08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.63 7.30 08-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	05-May-10	OW	6.79	11.80
08-Nov-10 OW 7.01 10.20 24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	09-Aug-10	OW	5.88	10.50
24-Feb-11 OW 4.87 8.50 15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	28-Sep-10	OW	5.74	11.00
15-Jun-11 OW 4.40 7.40 31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	08-Nov-10	OW	7.01	10.20
31-Aug-11 N 3.58 4.50 24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	24-Feb-11	OW	4.87	8.50
24-Nov-11 N 2.90 3.70 08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	15-Jun-11	OW	4.40	7.40
08-Feb-12 N 3.51 3.50 09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	31-Aug-11	N	3.58	4.50
09-Aug-12 N 3.29 4.00 03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	24-Nov-11	N	2.90	3.70
03-Oct-12 OW 3.41 4.60 06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	08-Feb-12	N	3.51	3.50
06-Nov-12 OW 4.09 5.00 20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	09-Aug-12	N	3.29	4.00
20-Nov-12 OW 4.20 5.50 27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	03-Oct-12	OW	3.41	4.60
27-Feb-13 OW 5.62 7.20 18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	06-Nov-12	OW	4.09	5.00
18-Mar-13 OW 5.84 7.50 06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	20-Nov-12	OW	4.20	5.50
06-Jun-13 OW 4.87 6.40 05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	27-Feb-13	OW	5.62	7.20
05-Aug-13 OW 5.63 7.30 28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	18-Mar-13	OW	5.84	7.50
28-Oct-13 OW 5.42 8.00 18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	06-Jun-13	OW	4.87	6.40
18-Mar-14 OW 4.25 5.70 31-Jul-14 OW 4.72 6.00	05-Aug-13	OW	5.63	7.30
31-Jul-14 OW 4.72 6.00	28-Oct-13	OW	5.42	8.00
	18-Mar-14	OW	4.25	5.70
02-Feb-15 OW 4.08 6.30	31-Jul-14	OW	4.72	6.00
	02-Feb-15	OW	4.08	6.30

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

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	(buy)	(hold)	(sell)
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IB clients*	56%	49%	33%
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IB clients*	75%	67%	52%

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