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Global Markets Research

ANCHOR REPORT

China packaging paper: Cash boxes – FCF positive in 2014F

Valuations ignore steadily improving fundamentals

26 June 2014

Research analysts

China Basic Materials

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Paper stocks have not performed well since April 2010. Will 2014F and 2015F be different? Very possibly, in our view. We see potential for a multi-staged recovery process for paper stocks, first led by FCF generation turning mildly positive in 2014F and rising further in 2015F, then driven by forced capacity closures in 2014F that could exceed the official target due to new and tougher environmental standards and enforcement. Lastly, we may see a rebound in ASPs amid a substantial decline in net new capacity additions in 2015F.

During the early stage of this likely path of recovery, our preferred pick is Lee & Man Paper (LMP), for its solid execution track record, strong balance sheet and prudent capacity management. As we move further along the recovery process, Nine Dragons, whose earnings are more levered towards upside in ASP, may garner more investor attention.

Key analysis in this anchor report includes:

- Industry supply and demand analysis
- Analysis of China's containerboard industry's long-term demand vs. developed countries
- Analysis of paper recovered rate in China vs. developed countries

See Appendix A-1 for analyst certification, important disclosures and the status of non-US analysts.

NOMURA

China packaging paper

EQUITY: BASIC MATERIALS

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Cash boxes – FCF positive in 2014F

Valuations ignore steadily improving fundamentals

Action: Assuming coverage of China packaging paper; Buy LMP for steady execution; Buy Nine Dragons for leverage on ASP

Paper stocks have not performed well since April 2010. Will 2014F and 2015F be different? Very possibly, in our view. We see potential for a multi-staged recovery process for paper stocks, first led by FCF generation turning mildly positive in 2014F and rising further in 2015F, then driven by forced capacity closures in 2014F that could exceed the official target due to new and tougher environmental standards and enforcement. Lastly, we may see a rebound in ASPs amid a substantial decline in net new capacity additions in 2015F.

During the early stage of this likely path of recovery, our preferred pick is Lee & Man Paper (LMP), the second-largest containerboard paper maker in China, for its solid execution track record, strong balance sheet and prudent capacity management. As we move further along the recovery process, Nine Dragons (ND), the biggest containerboard paper maker in China, may garner more investor attention as its earnings are more levered towards upside in ASP.

Clearly, China's paper stocks have had false starts before. For example, their share prices slumped by 30% from the peak in March/April 2013 as investors' expectations for ASP recovery fell through amid higher-than-expected capacity growth. But we now see signs of digestion of capacity added in 2011-13 and exit of obsolete capacity. Potential resumption of China's containerboard export trading business should provide additional support to the sector.

Catalysts: Valuations could potentially offer even more upside after results announcements in Aug/Sep

In our view, current valuations on the two Chinese paper stocks are not capturing the operational and financial improvement of the underlying paper stocks or their current earnings growth. We expect FY14-16F pre-exceptional net profit for ND and LMP to show CAGRs of 22% and 13%, respectively. We believe there is mild downside to consensus estimates, more on ND than LMP. Our FY14F earnings are currently 6% below market consensus for ND and 4% below market consensus for LMP. Hence, we believe that, following their results announcements in August/September, valuations could potentially offer even more upside. Risks to our view include: 1) slower-than-expected demand growth; and 2) if the CNY turns weaker for some reason, although Nomura's economics team is looking for the CNY to appreciate by 1% in 2014F.

Fig. 1: Stocks for action

Company	Ticker	Nomura rating	Mkt cap (USDmn)	Share price (HKD)	Target price (HKD)	Upside/ (downside) (%)	FY15F (x) P/E (x)	FY15F (x) P/B (x)	FY15F (x) EV/EBITDA (x)
Nine Dragons	2689 HK	Buy	3,214	5.28	7.1	34.5	9.7	0.8	8.6
Lee & Man	2314 HK	Buy	2,596	4.31	5.9	36.9	9.0	1.1	9.3

Source: Bloomberg, Nomura estimates. Note: Pricing as of 23 June 2014.

Anchor themes

ASP growth momentum may resume from 2015F to 2016F, after a three-year downcycle, backed by more favourable supply/demand dynamics from 2015F amid a substantial slowdown in capacity growth.

Nomura vs consensus

Although we look for an earnings recovery in the next three years, we are more conservative on the extent of the recovery and expect it to come gradually.

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Stock rating, rationale and catalysts

Fig. 2: Ratings, TPs and rationale

	Stock code	Currency	Share Price	Rating	Price target	Implied upside (%)	Rationale
Nine Dragons	2689 HK	HKD	5.28	BUY	7.1	34.5	Being the largest containerboard manufacturer in China, according to the China Paper Association, and having a more diversified production network and higher operating leverage, we believe Nine Dragons will benefit more from industrial migration into inland China, industry consolidation and possible ASP recovery in China. With management targeting a 70-80% net gearing ratio as the threshold for an additional capex programme, we believe its capex cycle has peaked and its net gearing ratio will decline gradually over the next three years. Benefiting from the peaking of the capex cycle, we believe ND will be able to narrow its net profit per tonne gap compared to LMP. We are looking for its pre-exceptional net profit per tonne to show a CAGR of 16% over FY14-16F, versus 7% for LMP during the same period. Buy.
Lee & Man	2314 HK	HKD	4.31	BUY	5.9	36.9	As the second-largest containerboard manufacturer in China, according to the China Paper Association, Lee & Man Paper is known to be more prudent on expansion and hence has a stronger balance sheet, and a more stable and profitable earnings profile compared to its peers. Although there are some more capacities in the pipeline (PM19-23), with PM20 to come online in 2014 and PM19 to commence operations in 2015, we believe management will continue its style of being disciplined in capacity additions. We are targeting a pre-exceptional net profit CAGR of 13% over 2014-16F. Buy.

Source: Nomura estimates; share prices as of 23 June 2014

Fig. 3: Upcoming catalysts – positives and negatives

Postiives

- Substantial capacity growth slowing down in FY15-FY16F which leads to more favourable supply/demand picture
- Much stricter environmental protection rules will drive closure of more small companies, hence helps to reduce supply
- Potential resumption of export trading business for paper made from recovered paper which provides more incentives for manufacturers to export their prodcuts, hence another way to solve overcapacity issue
- Rampant growth of online shopping could be another growth driver in long-term, although this may take time to become material impact

Negatives

- Potential continuing slower economy growth in the next two years
- Much stricter environmental protection rules will also increase players' costs, yet we believe larger players to see more benefit than costs hike.
- The government's encouragement on anti-corruption and conservation-oriented strategy may have negative impact on the demand

Source: Nomura estimates

Key assumptions

Fig. 4: Key industry assumptions

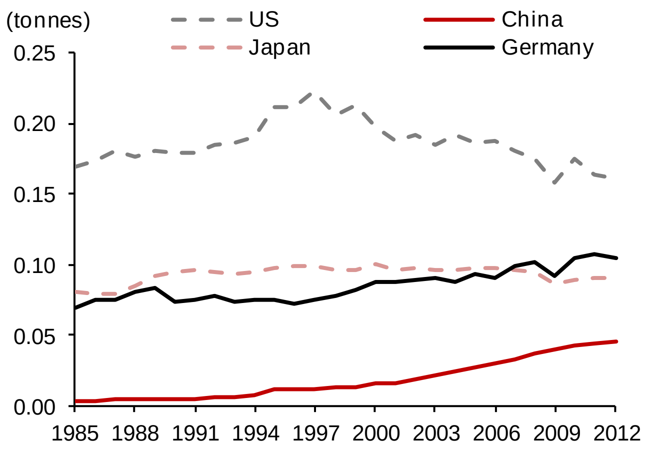
(mn tonnes)	2012	2013	2014F	2015F	2016F	CAGR (2001-2012)	CAGR (2013-2016F)
Production	41.0	40.6	41.6	43.1	45.4	13.1%	3.8%
Net import	0.8	0.6	0.4	0.2	0.1	-7.6%	n.a
Consumption	41.8	41.2	42.0	43.3	45.5	11.5%	3.3%
Capacity	45.2	48.3	52.0	53.8	55.3	11.7%*	4.6%
Utilization rate (%)	91%	84%	80%	80%	82%		

Note: *CAGR between 2005-2012

Source: China Paper Association, RISI-UMPaper, Nomura estimates

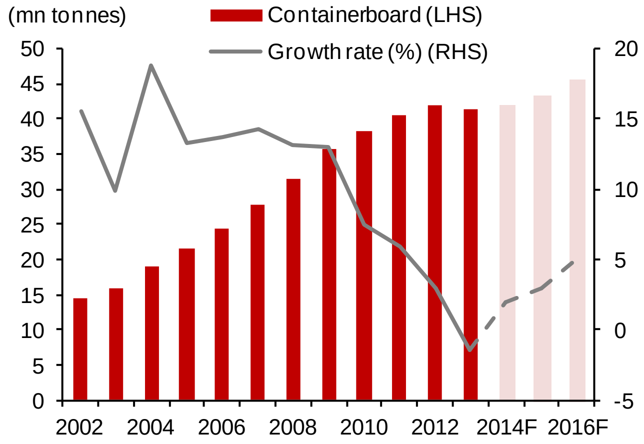
Key focus charts

Fig. 5: China's packaging paper consumption per capita is still low compared to other developed countries



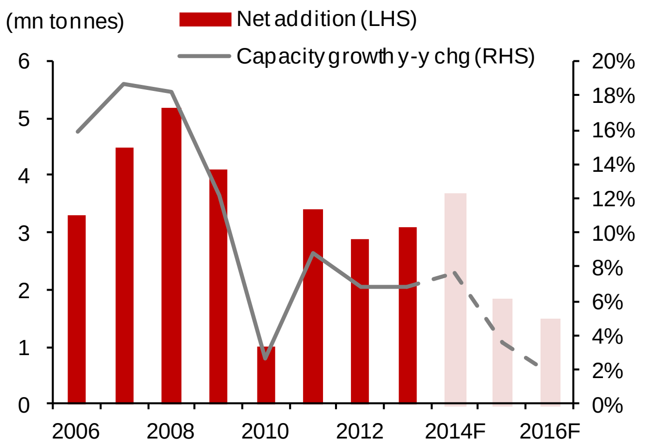
Source: FAO, Nomura Int'l (HK)

Fig. 6: Containerboard demand bottom in 2013F



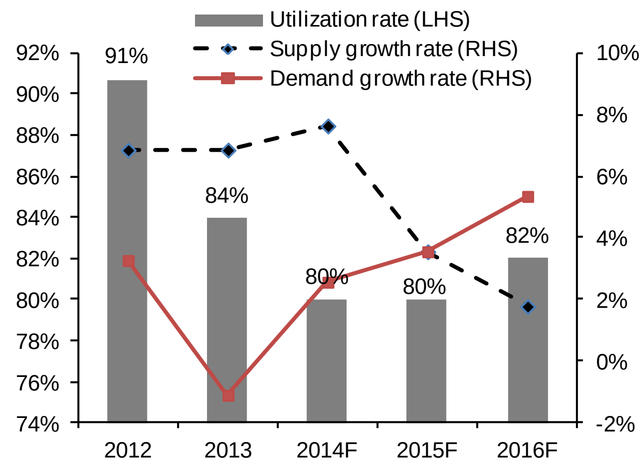
Source: China Paper Association, Nomura estimates

Fig. 7: Supply growth likely to slow significantly



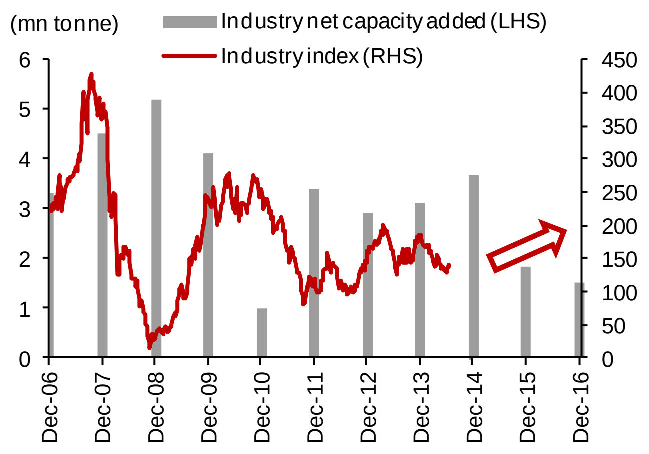
Source: China Paper Association, Nomura estimates

Fig. 8: Supply/demand to become more balanced



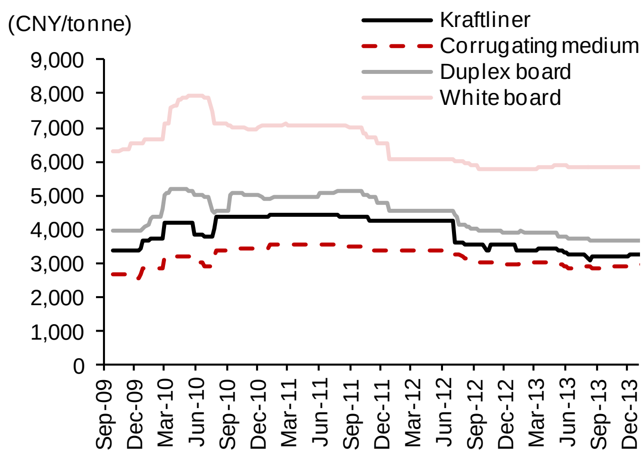
Source: China Paper Association, Nomura estimates

Fig. 9: Share prices of containerboard companies tend to negatively correlate with industry net capacity added



Source: China Paper Association, Nomura estimates

Fig. 10: Ex-factory prices of different products will be stable to slightly higher in FY2015F

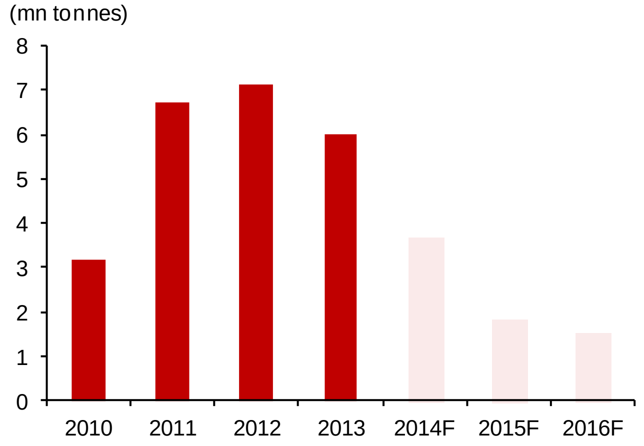


Source: WIND

Executive summary

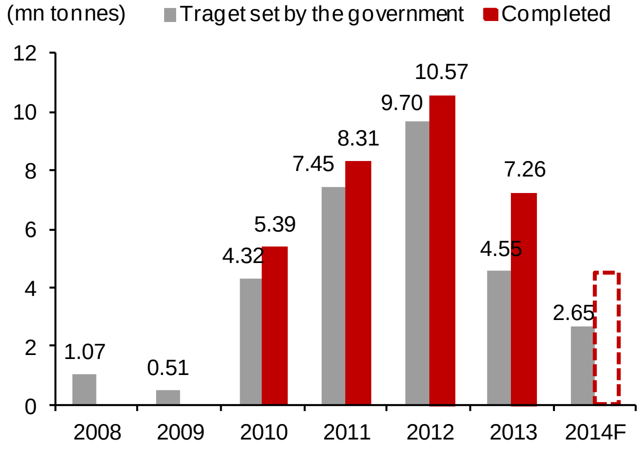
Share prices of containerboard firms are down 30% from Mar/April 2013 peaks amid higher-than-expected supplies, the residual impact from newly added capacity in 2011-13 and the delayed withdrawal of inefficient capacity that resulted in lower-than-expected ASP growth in 2013. However, we believe the overcapacity issue will be resolved in 2015F, on: 1) the faded impact from newly added capacity in 2011-13 as it is gradually digested by the market; 2) the start of benefits from the withdrawal of obsolete capacity; and 3) a substantial decline in new capacity in 2015F.

Fig. 11: Industry gross newly added capacity



Source: UMpaper, China Paper Association, WIND, Nomura estimates

Fig. 12: Total capacity closed (all categories of paper and paperboard)



Source: WIND, Nomura estimates

Overall capacity to be closed in 2014F due to not being in compliance with the new regulations is likely to be higher than China's official target, given the much stricter environmental protection rules implemented by the provincial governments recently and likely another round of anti-corruption initiatives which may force enterprises to comply with the new discharge standards. We think the closure of capacities is only half completed; we estimate some 10mn tonnes of capacity of containerboard (or 21% of total capacity for containerboard in 2013) needs to be closed, despite an estimated 10mn tonnes having already been retired over the past few years.

Although new discharge standards became effective in July 2011, some provinces were not in compliance. With more emphasis recently put on the government's anti-corruption campaign, we believe enterprises that don't comply with the discharge standards are now being forced to either replace old machines with new high-standard ones or to retire the obsolete machines. Since a new machine is very expensive, at CNY1.0-1.2bn, most small paper makers are more likely to eventually opt for machine disposal.

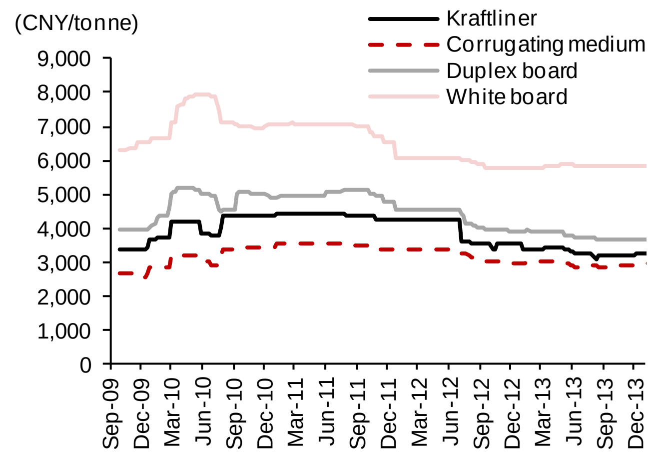
Some provinces have recently increased their discharge standards to even higher than the national level. For example, Fujian province said it would increase its discharge standard on 1 Jan 2014 with a COD limit at 80mg/L, versus the national standard of 90mg/l. From September 2013, Guangdong province also increased its discharge standard on COD and ammonia nitrogen limits to be in line with the "national special arrangement" standards, ie, a COD limit at 60mg/l. Shandong province also has COD limits set at 60mg/L. Based on our checks, the industry is now studying the possibility of implementing the "national special arrangement" standards across the country.

Should all provinces increase their discharge standards to the "national special arrangement" standards, we believe more small companies will be forced to close amid high replacement costs and a weak earnings outlook.

We expect ASP to increase in 2015F following substantial decline in net added capacities

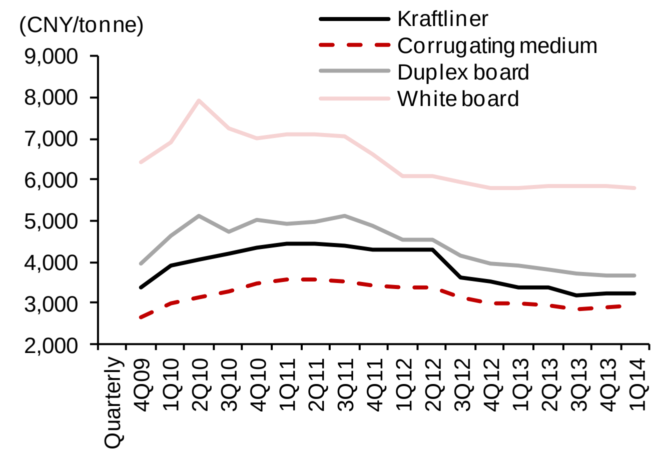
With our expectation of a substantial decrease in net added capacity in 2015F and a mild pick-up in demand, we expect containerboard pricing will be stable to modestly higher in the next two years. We look for changes in average containerboard prices of -2%, +1% and +3% over 2014/15/16F, respectively.

Fig. 13: Weekly ex-factory prices for different products



Source: WIND

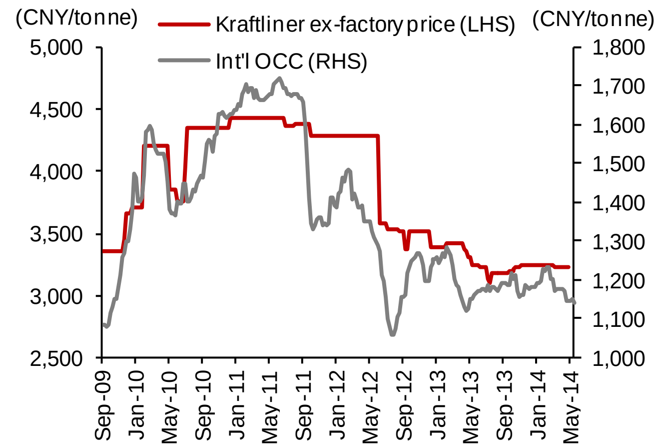
Fig. 14: Quarterly ex-factory price of different products



Source: WIND, 2Q14 data was updated to 23 June 2014

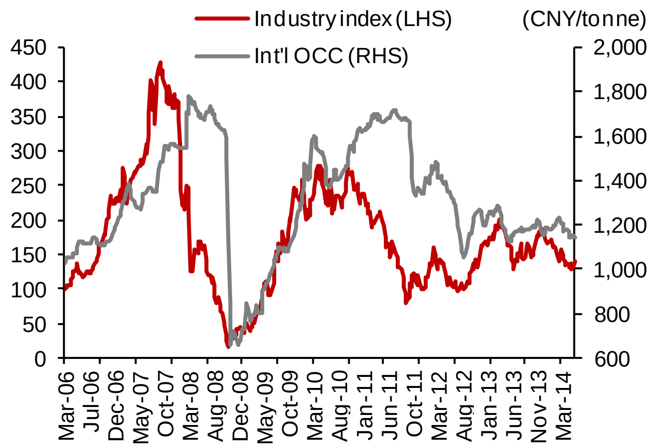
In terms of profitability, we believe supply/demand and prices will be key drivers for earnings. We note that the price of containerboard manufacturers' major cost (old corrugated container, or "OCC") tends to move in tandem with containerboard prices. This could partly be explained by the fact that paper manufacturers can effectively pass on costs to their customers. Since OCC tends to move in tandem with containerboard prices, this also explains why the sector's share prices are positively correlated with moves in international OCC prices, despite OCC being the major cost item.

Fig. 15: Kraftliner ex-factory prices vs International OCC prices



Source: WIND

Fig. 16: Sector share prices vs International OCC prices

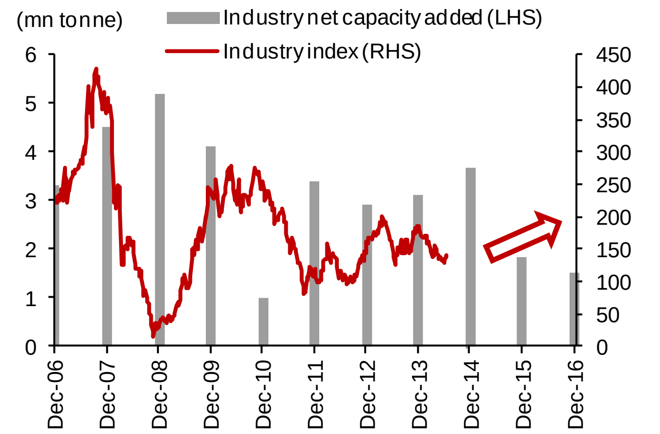


Source: Bloomberg, WIND, Nomura Int'l (HK)

Although historically, containerboard prices are often driven by strong demand, this time around, we believe supply instead of demand will be the key factor affecting prices, as demand may still move at a slower pace amid China's slower economic growth and likely next round of anti-corruption initiatives, as estimated by our China strategist Wendy Liu in her recent report "China portfolio tracker – Be defensive and selective" dated 2 June 2014, which may dampen demand. With a substantial decline in supply over the next two years, we believe paper manufacturers may be able to increase prices given a more favourable supply/demand picture.

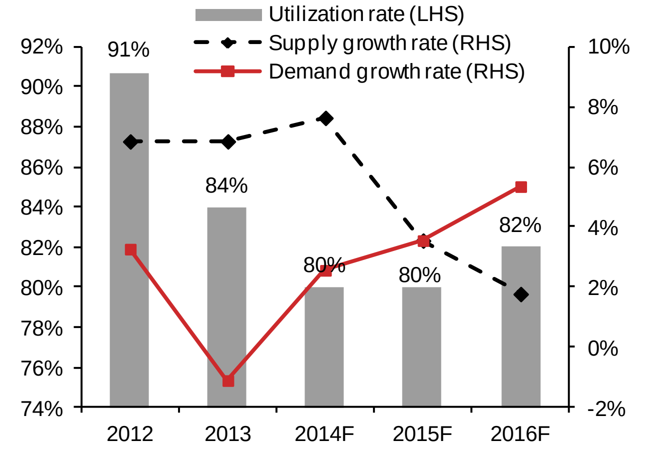
We note that the sector's share price average is negatively correlated with net-added capacity. Based on our analysis, the average share price of containerboard firms tends to bottom when industry net capacity added peaks, while share prices tend to peak when the industry's net added capacity troughs and starts to increase. We currently expect the industry's net added capacity to peak in 2013/14F and come down significantly into 2016F. Hence, should our low capacity growth forecasts prove to be correct, we believe the average share price of containerboard firms should regain its increasing trend from late CY14F until CY16F.

Fig. 17: Industry share price vs industry net capacity added



Source: Bloomberg, China Paper Association, Nomura estimates

Fig. 18: Industry supply/demand forecasts

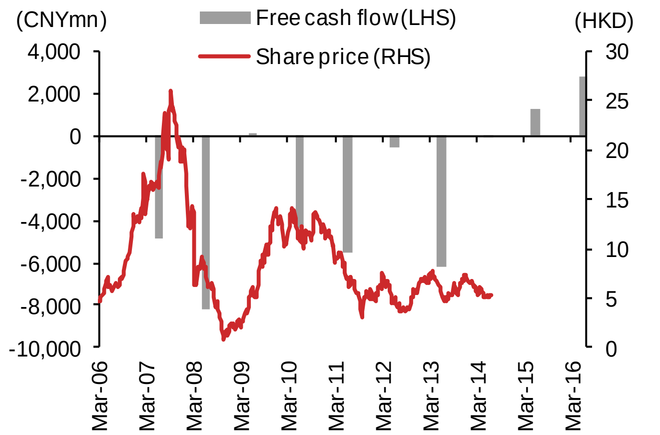


Source: China Paper Association, Nomura estimates

Multi-stage recovery - Prefer Lee & Man in the early stage and then Nine Dragons in the later stage for leverage to ASP hike

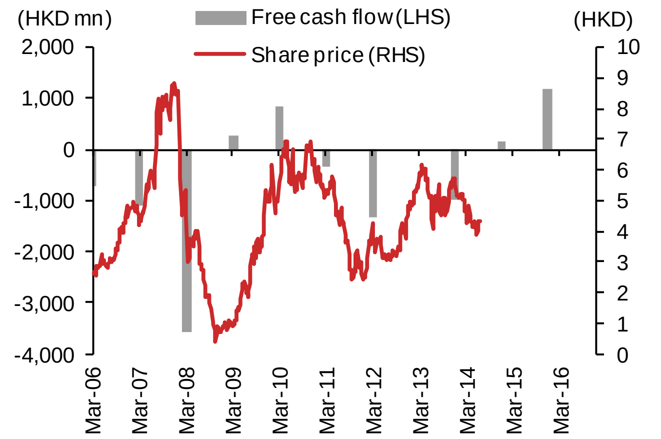
We look for paper stocks to undergo a multi-stage recovery process, first led by free cash flow generation turning mildly positive in 2014F and further rising in 2015F, then driven by more than officially targeted forced capacity closure in 2014F due to new and tougher environment standards and enforcement, lastly driven by possible rebound in ASP amid substantial decline in net new capacity additions in 2015F.

Fig. 19: Nine Dragons: Share price vs free cash flow



Source: Company data, Nomura estimates

Fig. 20: Lee & Man: Share price vs free cash flow

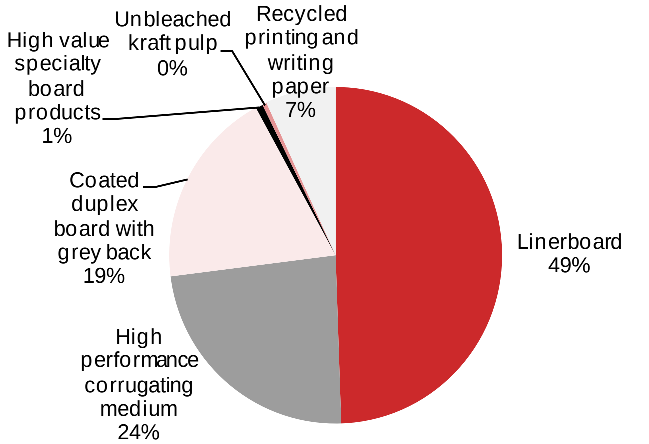


Source: Company data, Nomura estimates

During the early stage of this likely path of recovery, our preferred pick is Lee & Man Paper (LMP), the second largest containerboard paper maker in China, for its solid execution track record, strong balance sheet and prudent capacity management. As we move further along the recovery process, Nine Dragons, the biggest containerboard paper maker in China, may garner more investor attention as its earnings are more levered towards upside in ASP.

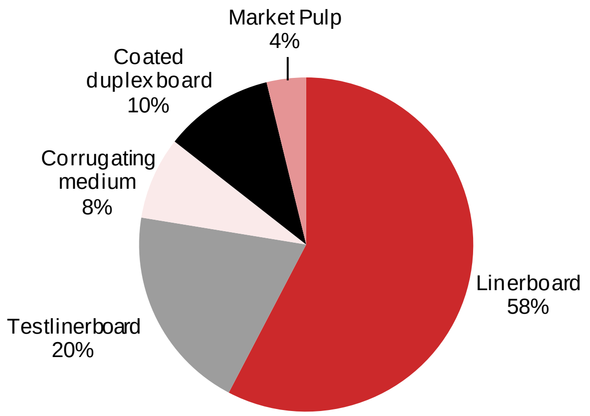
We currently look for ND's pre-exceptional net profit per tonne to show a CAGR of 16% over FY14-16F, vs 7% for LMP.

Fig. 21: Nine Dragons: Breakdown of revenue in FY13



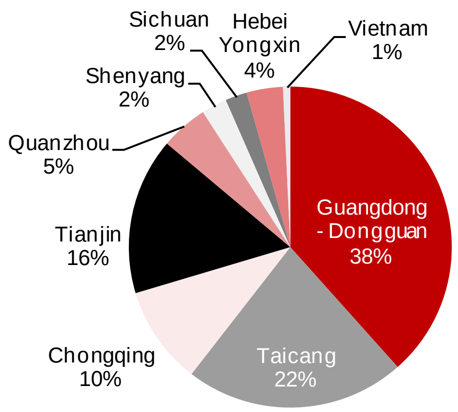
Source: Company data

Fig. 22: Lee & Man: Breakdown of revenue in FY13



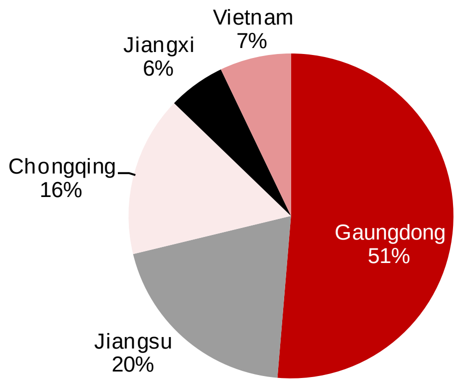
Source: Company data

Fig. 23: Nine Dragons: Capacity geographical distribution



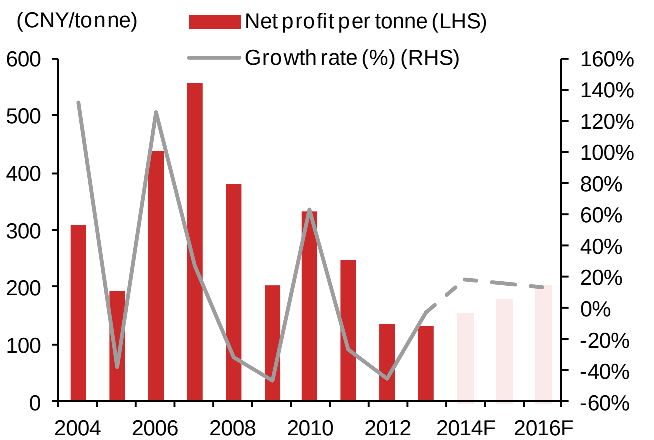
Source: Company data, Nomura estimates

Fig. 24: Lee & Man: Capacity geographical distribution



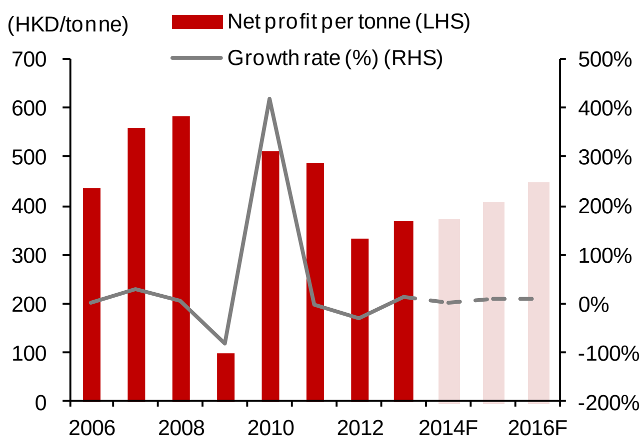
Source: Company data, Nomura estimates

Fig. 25: Nine Dragons: Pre-exceptional net profit per tonne



Source: Company data, Nomura estimates

Fig. 26: Lee & Man: Pre-exceptional net profit per tonne



Source: Company data, Nomura estimates

Valuation

With containerboard firms' share prices currently trading close to one standard deviation below mid-cycle valuations, we believe share prices have already factored in the average ~30% earnings decline in FY15F. Note that share prices traded at one standard deviation below mid-cycle valuations when sector net profit declined by 27-28% in FY12 and at trough valuations when earnings declined by 30% to 80% in FY08/09.

As we currently look for pre-exceptional net profit CAGRs of 22% ND and 13% for LMP over 2014-16F, we believe their share prices should not trade at one standard deviation below mid-cycle valuation. We value LMP based on mid-cycle valuation, while we value ND based on a half-standard deviation below mid-cycle valuation. We give a valuation premium to LMP compared to ND to reflect its stronger balance, more stable earnings profile.

Valuation methodology: Nine Dragons (2689 HK; Buy, 35% potential upside)
We value Nine Dragons at HKD7.10/share based on a half standard deviation below mid-cycle valuation of 12.7x P/E on FY15F pre-exceptional EPS of CNY0.44 and an exchange rate of CNY:HKD0.79. We believe the stock should not trade at one-standard deviation below mid-cycle as we look for an earnings CAGR of 22% over FY14-16F. Historically the stock has traded one-standard deviation below mid-cycle only when its pre-exceptional earnings saw a fall of 36% in FY12. Our TP equals 1.0x FY15F P/BV.

Investment risks for ND:

1) more-than-expected capacity coming online in the next two years, compared to our current estimate of a substantial decline in newly added capacity in FY15-16F;

2) much weaker-than-expected demand amid a slower economy in China;

3) CNY depreciation, which may also hurt earnings; our economics team is currently expecting the CNY to depreciate slightly by 0.3% in 2015F;

4) continuing increases in leverage by management.

Valuation methodology: Lee & Man Paper (2314 HK; Buy, 37% potential upside)

We value Lee & Man Paper at HKD5.90/share based on mid-cycle valuation of 12.3x P/E on FY15F EPS of HKD0.48. We believe the stock should not trade at one-standard deviation below mid-cycle as we look for its earnings to see a CAGR of 13% over FY14-16F. Historically the stock has traded one standard deviation below mid-cycle only when its pre-exceptional earnings fell 29% in FY12. Our target price implies 1.4x 2015F P/BV.

Investment risks for LMP:

1) more-than-expected capacity coming online in the next two years, compared to our current estimate of a substantial decline in newly added capacities in FY15-16F;

2) much weaker-than-expected demand amid a slower economy in China;

3) CNY depreciation, which may also hurt earnings; our economics team is currently expecting the CNY to depreciate slightly by 0.3% in 2015F;

4) Increasing financial leverage for aggressive expansion.

Fig. 27: Implied target prices based on different valuation multiples

	Stock code	Share price	2015F EPS (HKD)	2015F Current P/E (x)	Mid-cycle minus 1st dev P/E multiple (x)	Mid-cycle minus 1st dev Implied fair value (HKD)	Mid-cycle minus 1st dev Up/downside (%)
Nine Dragons	2689 HK	5.28	0.56	9.4	9.4	5.2	(0.9)
Lee & Man	2314 HK	4.31	0.48	9.0	7.2	3.5	(19.4)

	Stock code	Mid-cycle P/E multiple (x)	Mid-cycle Implied fair value (HKD)	Mid-cycle Up/downside (%)	Mid-cycle plus 1st dev P/E multiple (x)	Mid-cycle plus 1st dev Implied fair value (HKD)	Mid-cycle plus 1st dev Up/downside (%)
Nine Dragons	2689 HK	16.5	9.2	75.1	23.7	13.3	151.2
Lee & Man	2314 HK	12.3	5.9	36.7	17.3	8.3	92.8

Source: Company data, Nomura estimates, Share price as of 23 June 2014

Fig. 28: Valuation comparison

	Stock code	Curr.	Share Price	Mkt cap	Nomura Rating	PE FY13A	PE FY14F	PE FY15F	EPS CAGR (13~15)	P/B FY13A	P/B FY14F	P/B FY15F	Div Yield FY13A	Div Yield FY14F	Div Yield FY15F
HK/China			(Loc)	(USD mm)		(x)	(x)	(x)	(%)	(x)	(x)	(x)	(%)	(%)	(%)
Nine Dragons Paper	2689 HK	HKD	5.28	3,214	Buy	12.7	10.8	9.7	13.7	0.9	0.8	0.8	2.3	2.8	3.1
Lee & Man Paper	2314 HK	HKD	4.31	2,596	Buy	10.4	10.1	9.0	12.3	1.2	1.1	1.0	3.4	3.5	3.9
Shandong Chenming	1812 HK	HKD	3.28	1,128	NR	7.6	7.5	6.6	6.9	0.4	na	na	11.4	5.7	7.6
Anhui Shanying	600567 CH	CNY	1.92	1,167	NR	23.4	na	na	na	0.9	na	na	na	na	na
Zhejiang Jingxing	002067 CH	CNY	3.39	594	NR	217.0	61.5	112.7	73.2	0.8	na	na	na	na	na
China Sunshine	2002 HK	HKD	0.70	72	NR	19.3	na	na	na	0.3	na	na	na	na	na
Average						**48.4**	**22.5**	**34.5**	**26.5**	**0.7**	**1.0**	**0.9**	**5.7**	**4.0**	**4.9**
Japan															
Oji Holdings	3861 JP	JPY	421	4,374	Neutral	12.3	14.3	13.4	(4.2)	0.7	0.7	0.7	2.4	2.4	2.4
Nippon Paper Group	3893 JP	JPY	1960	2,193	Buy	10.0	6.9	9.5	2.7	0.5	0.5	0.5	2.0	2.6	2.6
Hokuetsu Kishu Paper	3865 JP	JPY	460	942	Neutral	14.7	13.1	14.5	0.9	0.5	0.5	0.5	2.6	2.6	2.6
Rengo	3941 JP	JPY	469	1,250	Reduce	31.4	16.8	15.1	44.2	0.6	0.6	0.6	2.6	2.6	2.6
Average						**17.1**	**12.8**	**13.1**	**10.9**	**0.6**	**0.6**	**0.6**	**2.4**	**2.5**	**2.5**
Europe / US															
Intl Paper Co	IP US	USD	48.60	21,053	NR	11.7	13.6	11.1	18.1	2.6	2.6	2.3	2.8	2.9	3.3
Packaging Corp	PKG US	USD	71.19	6,999	NR	19.3	15.5	13.3	8.9	4.7	4.5	3.7	2.2	2.3	2.3
Meadwestvaco Corp	MWV US	USD	43.60	7,319	NR	36.6	24.2	20.2	(32.6)	1.6	2.0	1.9	4.6	3.3	2.3
Mondi Ltd	MNDI LN	GBp	1,100.00	9,098	NR	15.7	13.3	12.5	17.6	2.4	2.3	2.0	3.0	2.9	3.3
UPM-Kymmene OYJ	UPM1V FH	EUR	13.10	9,477	NR	19.5	13.3	12.8	27.3	0.9	0.9	0.9	4.6	4.7	4.8
Smurfit Kappa Group	SKG ID	EUR	16.65	5,240	NR	21.7	10.4	9.1	49.3	1.8	1.5	1.3	2.5	2.6	3.2
DS Smith Plc	SMDS LN	GBp	313.10	5,007	NR	30.7	14.6	12.6	71.8	2.0	2.6	2.4	3.1	3.0	3.5
Average						**22.2**	**15.0**	**13.1**	**22.9**	**2.3**	**2.3**	**2.1**	**3.3**	**3.1**	**3.2**

Source: Bloomberg, market consensus, Nomura estimates, share prices as of 23 June 2014. FY14-FY16 data were used for Japanese companies given YE-Mar

Note: Bloomberg estimates for NR companies, Nomura estimates for rated companies

Fig. 29: Valuation comparison table (continued)

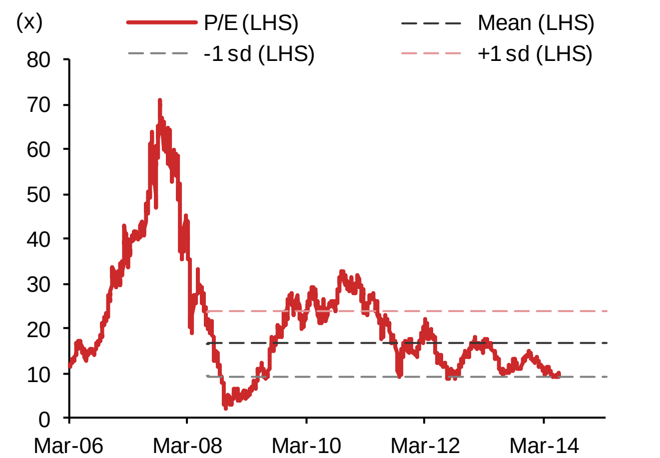
	Stock		Share	Mkt	Nomura	EV/EBITDA			ROE			Net Debt / Equity		
	code	Curr.	Price	cap	Rating	FY13A	FY14F	FY15F	FY13A	FY14F	FY15F	FY13A	FY14F	FY15F
HK/China			(Loc)	(USD mm)		(x)	(x)	(x)	(%)	(%)	(%)	(%)	(%)	(%)
Nine Dragons Paper	2689 HK	HKD	5.28	3,214	Buy	10.2	9.4	8.6	7.0	7.7	8.1	124.2	119.3	109.3
Lee & Man Paper	2314 HK	HKD	4.31	2,596	Buy	11.5	10.6	9.3	13.1	11.7	12.1	62.7	59.4	52.2
Shandong Chenming	1812 HK	HKD	3.28	1,128	NR	9.0	na	na	5.1	4.8	5.4	125.3	na	na
Anhui Shanying	600567 CH	CNY	1.92	1,167	NR	13.1	na	na	5.5	na	na	127.7	na	na
Zhejiang Jingxing	002067 CH	CNY	3.39	594	NR	14.9	na	na	0.4	na	na	43.5	na	na
China Sunshine	2002 HK	HKD	0.70	72	NR	8.1	na	na	1.5	na	na	200.1	na	na
Average						**11.1**	**10.0**	**8.9**	**5.4**	**8.1**	**8.5**	**113.9**	**89.3**	**80.8**
Japan														
Oji Holdings	3861 JP	JPY	421	4,374	Neutral	9.1	8.8	8.7	6.3	5.0	5.1	128.8	121.0	119.0
Nippon Paper Group	3893 JP	JPY	1,960	2,193	Buy	9.6	8.2	8.0	5.6	7.6	5.2	159.8	142.4	131.4
Hokuetsu Kishu Paper	3865 JP	JPY	460	942	Neutral	9.0	6.9	6.3	3.9	4.1	3.6	71.5	59.8	49.4
Rengo	3941 JP	JPY	469	1,250	Reduce	8.1	8.2	7.9	2.0	3.5	3.8	118.4	121.9	116.0
Average						**8.9**	**8.0**	**7.7**	**4.4**	**5.0**	**4.4**	**119.6**	**111.3**	**104.0**
Europe / US														
Intl Paper Co	IP US	USD	48.60	21,053	NR	7.9	6.8	6.2	19.4	18.5	22.2	91.0	99.1	83.2
Packaging Corp	PKG US	USD	71.19	6,999	NR	12.4	8.3	7.5	38.2	31.5	37.9	181.4	140.1	93.8
Meadwestvaco Corp	MWV US	USD	43.60	7,319	NR	10.4	9.3	8.5	23.0	8.2	9.9	20.4	45.1	38.1
Mondi Ltd	MNDI LN	GBp	1,100.00	9,098	NR	7.5	7.6	7.2	15.0	17.9	17.3	57.0	50.1	38.1
UPM-Kymmene OYJ	UPM1V FH	EUR	13.10	9,477	NR	7.0	5.8	5.6	4.5	7.1	7.0	9.1	37.0	32.3
Smurfit Kappa Group	SKG ID	EUR	16.65	5,240	NR	6.6	5.6	5.4	8.2	15.0	17.6	104.9	88.4	70.0
DS Smith Plc	SMDS LN	GBp	313.10	5,007	NR	9.4	8.5	7.7	7.2	16.7	19.1	76.4	65.6	50.9
Average						**8.7**	**7.4**	**6.9**	**16.5**	**16.4**	**18.7**	**77.2**	**75.1**	**58.1**

Source: Bloomberg, market consensus, Nomura estimates, share prices as of 23 Jun 2014. FY14-FY16 data were used given YE-Mar

Note: Bloomberg estimates for NR companies, Nomura estimates for rated companies

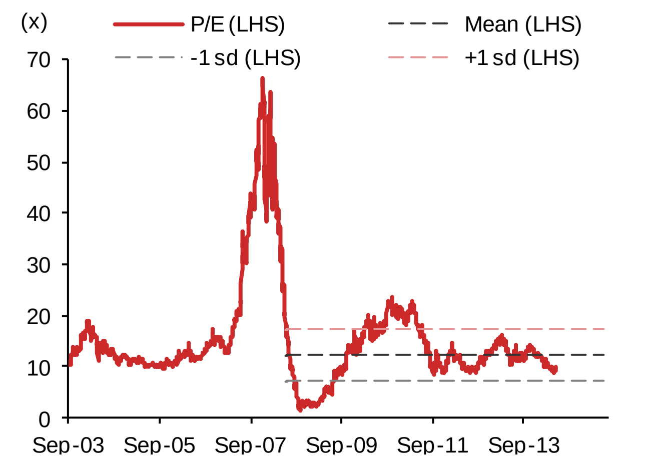
Valuation charts

Fig. 30: ND – Forward P/E



Source: Datastream, company data, Nomura estimates for FY14F

Fig. 31: LMP – Forward P/E

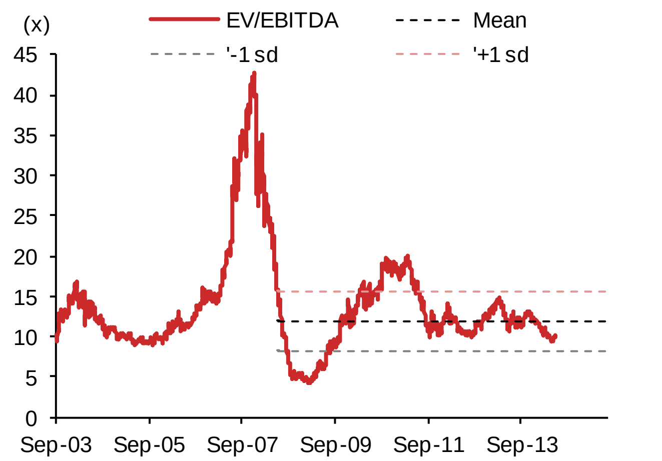


Source: Datastream, company data, Nomura estimates for FY14F

Fig. 32: ND – Forward EV/EBITDA

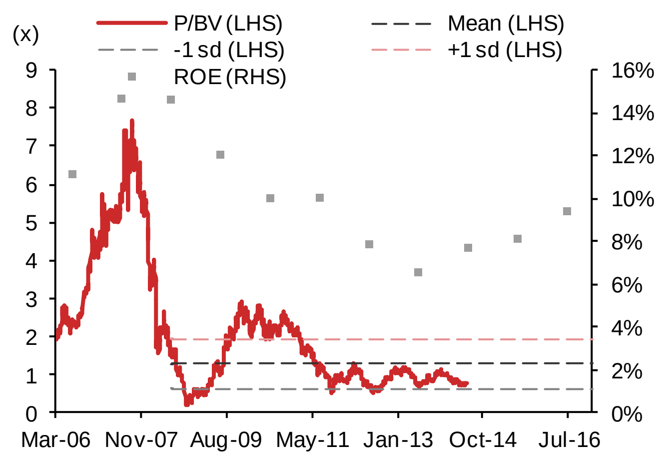
Source: Datastream, company data, Nomura estimates for FY14F

Fig. 33: LMP – Forward EV/EBITDA



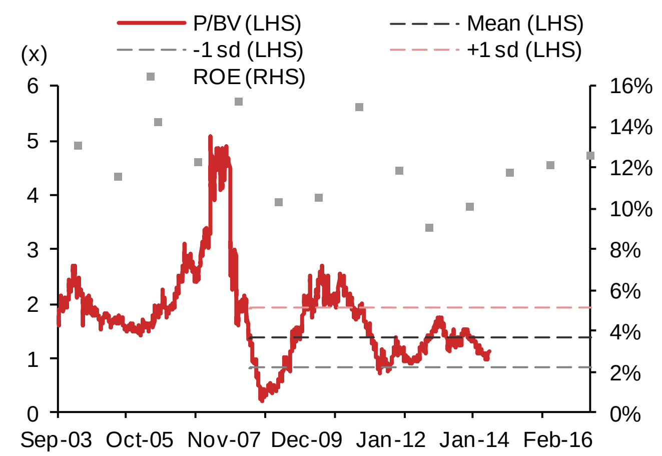
Source: Datastream, company data, Nomura estimates for FY14F

Fig. 34: ND – Forward PBV vs ROE



Source: Datastream, Nomura estimates, FY14-FY16F are estimates

Fig. 35: LMP – Forward PBV vs ROE

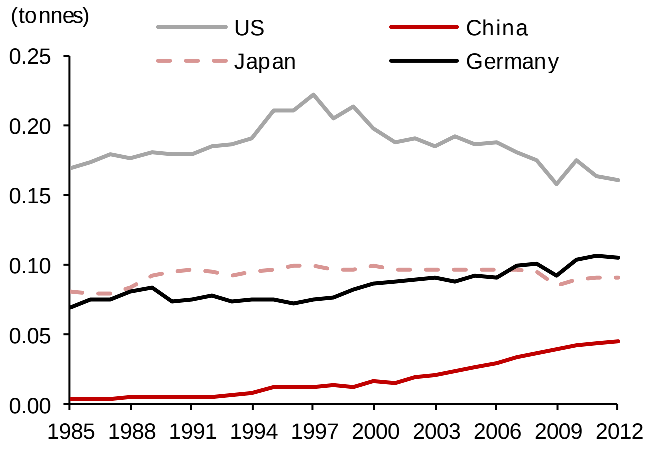


Source: Datastream, Nomura estimates, FY14-FY16F are estimates

Demand: remains intact long term

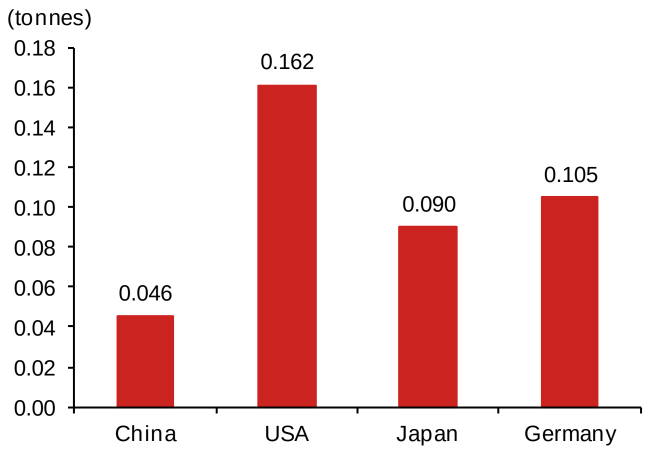
We expect containerboard demand to remain strong and intact in the long term. Packaging paper and board consumption per capita in China is still at very low levels compared to other developed economies. In 2012, US packaging paper consumption per capita was 3.5x that of China's consumption, Germany's was 2.3x and Japan's was 2.0x, according to the FAO.

Fig. 36: Packaging paper consumption per capita



Source: FAO, Nomura Int'l (HK)

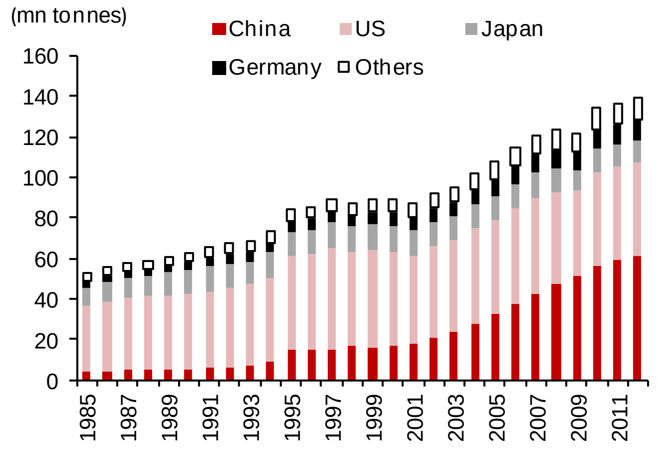
Fig. 37: Packaging paper consumption per capita in 2012



Source: FAO, Nomura Int'l (HK)

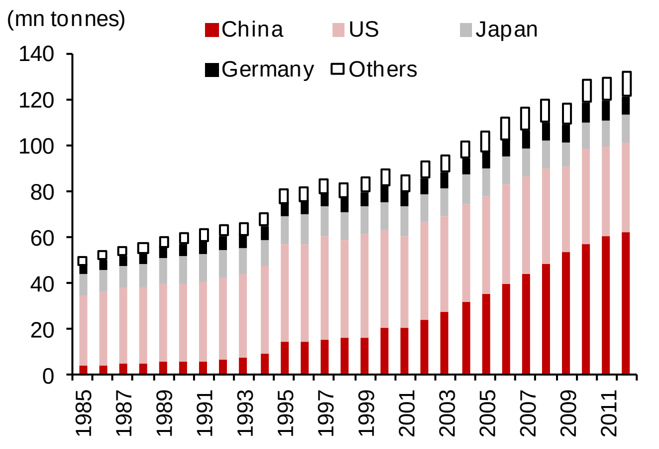
Should China's packaging paper industry replicate growth trends in these developed economies, we think there will be significant growth potential in the long term.

Fig. 38: Packaging paper and board: Production volume breakdown by major countries



Source: FAO, Nomura Int'l (HK)

Fig. 39: Packaging paper and board: Consumption volume breakdown by major countries



Source: FAO, Nomura Int'l (HK)

Among the three major countries (the US, Japan and Germany), we believe the Japan market is a good proxy for China's containerboard industry, given the likely similar customer spending habits. We note that US and German per-capita consumption rates are generally higher compared to rates in Asian countries.

We note that Japan's packaging paper consumption per capita continued to rise before reaching its highest point at 0.1 tonne per capita in 2000 and started to fall from then.

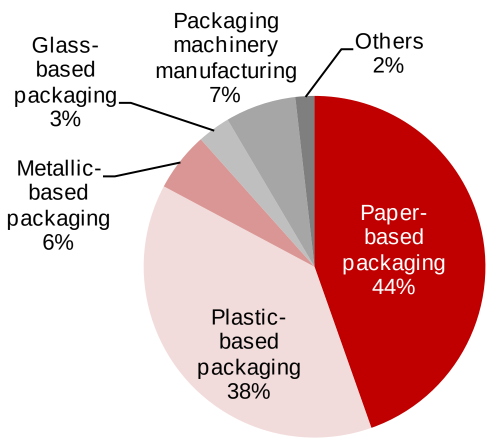
In order to reflect the historically disproportionate distribution of income in China, we also attach a 40% discount to China's population to get our China containerboard consumption per capita forecasts. In 2013, according to the CEIC, China's rural population accounted for 46% of its total population, hence we use a 40% discount. As such, we estimate demand for China's packaging paper industry may eventually increase at least 30% from current levels to reach a peak of 0.06 tonne per capita, from the current 0.046 tonne per capita.

Apart from organic growth along with GDP growth, we believe the government's recent "green" policy moves and growing environmental awareness in the community should also support the industry's future growth potential, as packaging paper can be recycled and is biodegradable, which is much more environmentally friendly compared to wood and plastic materials in packaging.

China's government has been promoting green packaging in recent years, which is in line with its general policy of striking a balance between environmental protection and economic development under the 12th Five-Year Plan, under which green packaging is highly encouraged. As well, growing environmental awareness in the community should drive demand for "green" packaging, as consumers are increasingly seeking "greener" alternatives to traditional packaging materials. We expect green packaging will be the main theme in the paper-based packaging industry in the years ahead. Paper-based packaging has 44% market share in China's packaging industry in 2012, versus 38% for plastics-based packaging.

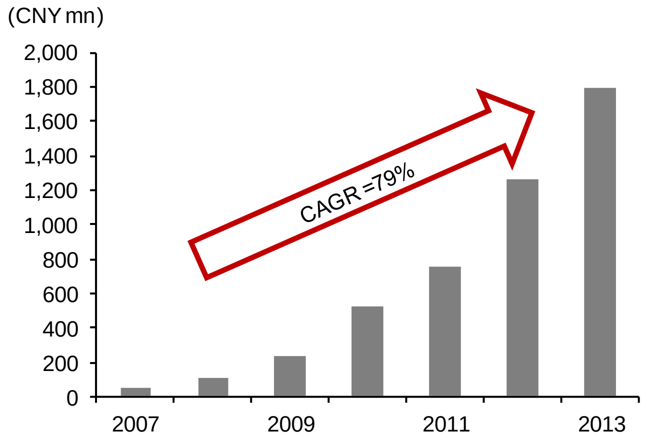
Further, the recent strong demand for e-commence should provide another source of demand for packaging paper, albeit its contribution to the industry's overall volume should be limited at the moment.

Fig. 40: Breakdown of packaging industry in China in 2012



Source: The ASKCI Report, China Packaging Holdings

Fig. 41: China online retail sales



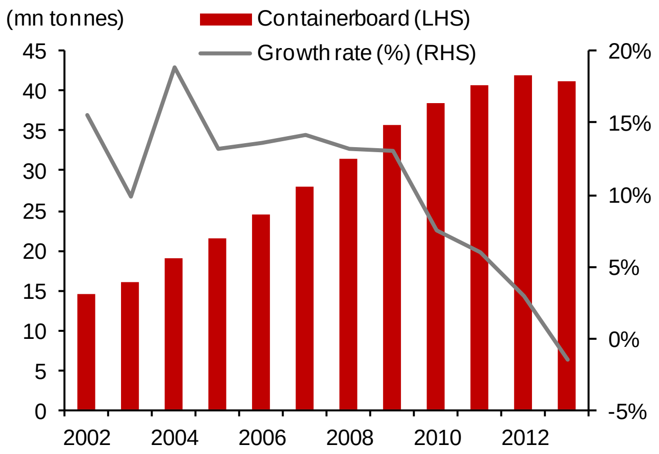
Source: Nomura Research

Growth likely to slow

Containerboard (eg, linerboard, corrugating medium) contributed 67% of total packaging paper, or 40% of total paper and paperboard consumption, in 2013, according to the China Paper Association. If we include coated duplex board within containerboard, containerboard may account for close to 90% of total packaging paper.

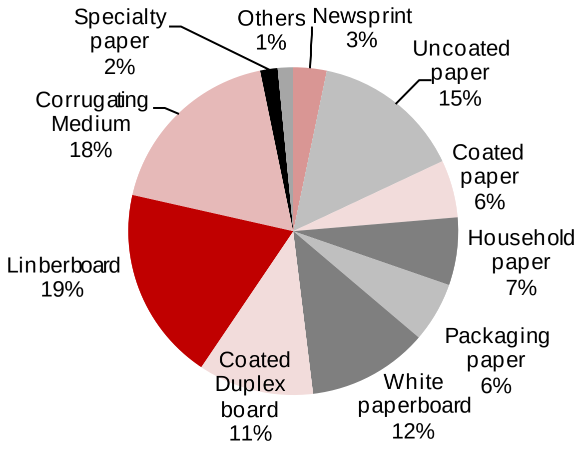
Linerboard and corrugating medium are the two major types of containerboard. Coated duplex board (which is classified under white paperboard) is sometimes included under containerboard if they are used to manufacture corrugated containers.

Fig. 42: Containerboard consumption volume growth trend



Source: China Paper Association

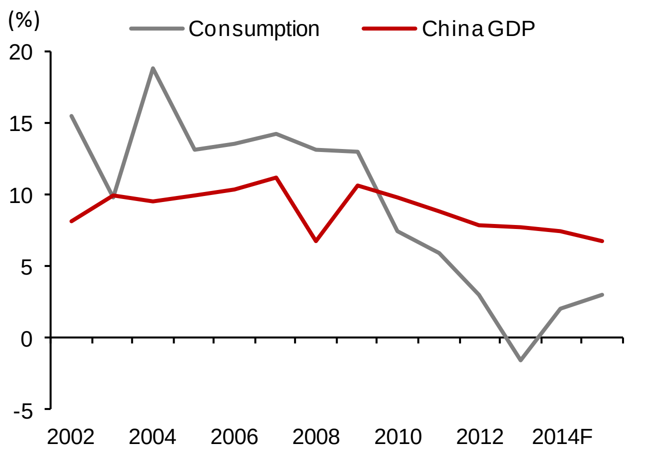
Fig. 43: Breakdown by type of paper and paperboard for consumption volume in 2013



Source: China Paper Association

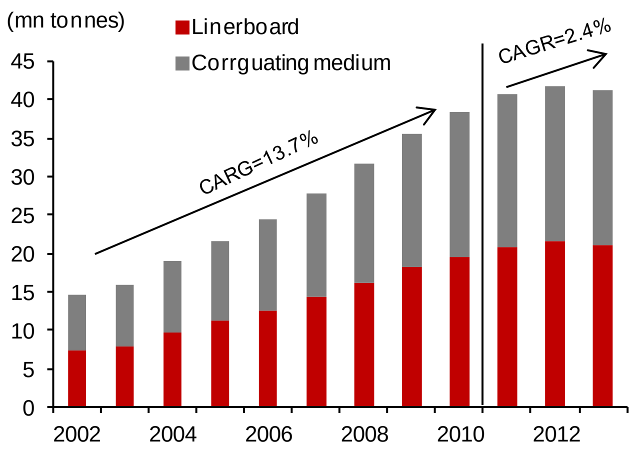
In China, growth of containerboard consumption outpaced China's GDP growth rate to 2009. After 2009, growth slowed significantly from a double-digit CAGR of 13.7% over 2002-09 to a single-digit 4.2% over 2009-13 and just 2.4% over 2010-13.

Fig. 44: Containerboard's consumption volume growth vs China GDP



Source: China Paper Association, CEIC, Nomura estimates

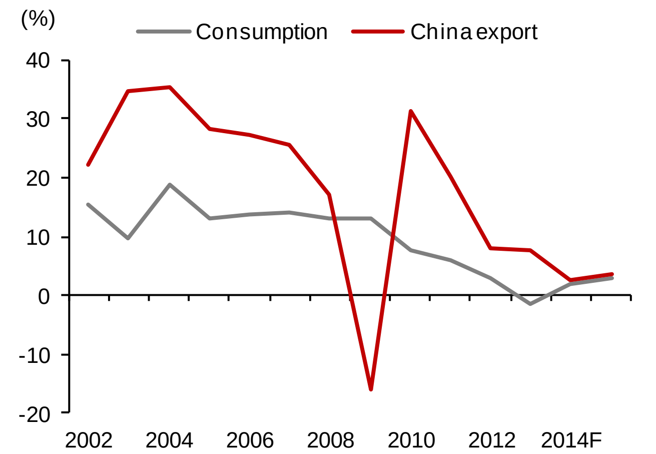
Fig. 45: Containerboard's consumption volume growth rate trend



Source: China Paper Association

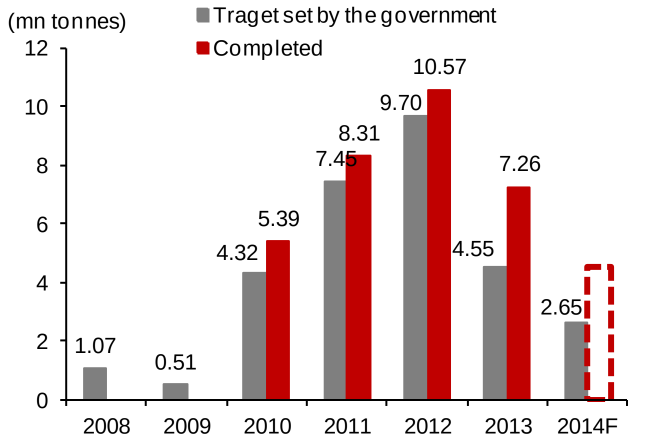
We attribute the slow growth rate in recent years to: 1) slowing of China's exports growth rate amid weakening demand from developed economies including the US and Europe; 2) more stringent requirements imposed by the government under the 12th Five-Year Plan for corporate environmental protection, energy conservation and emission reduction, which has resulted in smaller companies closing down over 2010-12 under the instructions of the government, slowing growth in capacity and production volumes; 3) slower growth of China's GDP; 4) lighter and fewer layers of packaging, as promoted by the government in recent years; 5) the government's recent anti-corruption moves and encouragement of reduced spending on social activities have reduced demand from end-users. Food and beverage end-users account for over 50% of demand in the paper packaging industry.

Fig. 46: Containerboard consumption vs China export growth rate



Source: China Paper Association, CEIC, Nomura estimates

Fig. 47: Total capacities shutdown (all categories of paper and paperboard)



Source: WIND, Nomura estimates

Going forward, we believe containerboard consumption may continue to grow but at a more moderate pace, and lower than China's GDP growth rate, as we look for China's GDP to slow to 6.8% (vs over 8% in the past decade) into 2015F according to our China economic team's recent report "The bigger economies are more in tune", 10 June 2014.

Further, our China strategist, Wendy Liu, thinks a new and tougher round of anti-corruption measures has already kicked in and will remain effective for another year. She anticipates further shrinkage in government and enterprise consumption (about 40% of total social retail sales in China) and pressures on the y-y growth rate in total social retail sales during 2014. "China portfolio tracker – Be defensive and selective", 2 June 2014.

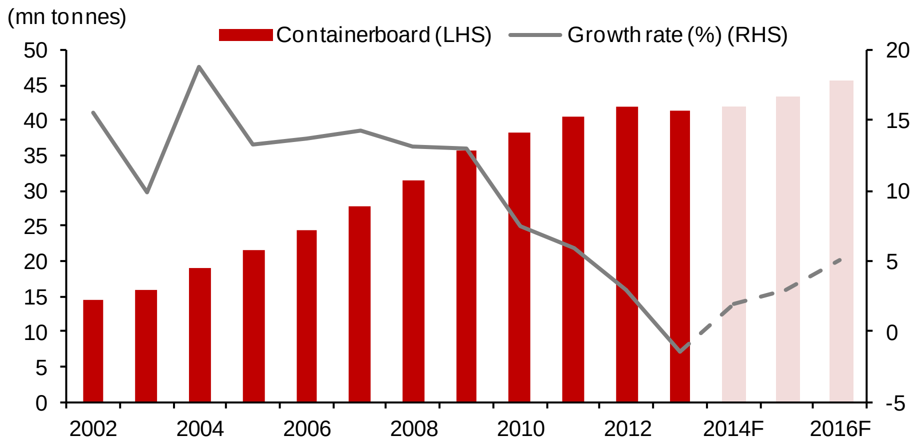
On the positive side, we believe some factors that caused the slowing of consumption could be normalised going forward, including lighter packaging and reduction of obsolete capacity. Hence, with easier comparisons, we expect the sector to resume growth momentum in 2014F, which is also party driven by more capacity coming into the market in 2014F.

Most downstream packaging manufacturers (ie, printing companies like China Packaging [1439 HK; NR], which mainly focus on China's domestic market) are quite positive on their end-user demand in the long term and expect to continue to expand their capacity. However, China Packaging's management expects the selling price of containerboard may continue to decline in the near future, and hence it has opted to keep a low raw material (containerboard) inventory of 20 days. Should demand come in better than management expects, this will easily boost the selling prices if there is a rush to buy containerboard.

In terms of export weakness, containerboard manufacturers have moved their focus to domestic consumption rather than exports (we forecast the contribution from exports will drop to 11% of total sales for Nine Dragons in FY12, vs 40% in FY06). Thus, although we look for substantial slowing in China's export value in 2014-15F (growth rate to slow to 4.8% in 2014F and 3.5% in 2015F, from 7.8% in 2013), we believe the impact to containerboard manufacturers may be limited.

Overall, we forecast containerboard consumption CAGRs of 3.3% over 2013-16F and 2.5% over 2011-15F, versus the government's growth target of below 3% (revised downwards from 4.6%) for total paper and paper board production over 2011-15F.

Fig. 48: Containerboard consumption forecasts



Source: China Paper Association, Nomura estimate

Fig. 49: Macro economic forecasts

	2013	2014F	2015F
% yoy chg			
China GDP	7.7	7.5	6.8
China export value	7.9	2.6	3.5
China retail sales (nominal)	13.3	12.4	12.9
US GDP	1.9	2.0	3.1
Europe GDP	(0.4)	0.9	1.0

Source: Nomura Global Economics

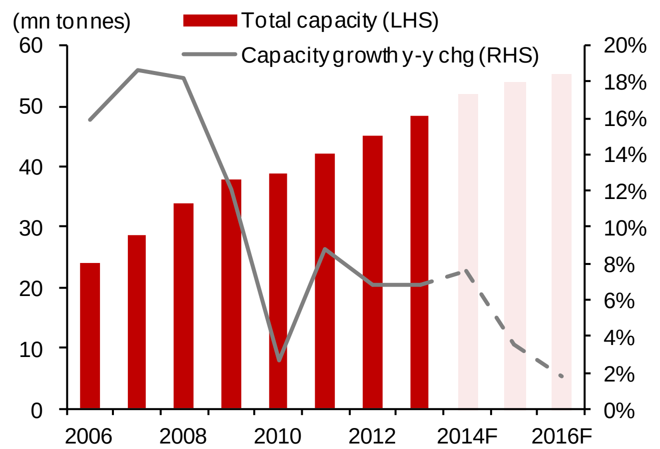
Supply: capacity growth to fall sharply

Benefiting from strong demand for containerboard amid fast growth in China's economy (GDP growth at over 8% in the past decade), as well as solid demand from foreign companies in the past decade (as many foreign companies set up manufacturing factories in China in order to take advantage of cheaper labour costs), China's containerboard demand saw a resilient CAGR of 13.7% over 2002-12. Strong growth in demand and good profitability saw many paper companies expand their capacity aggressively in recent years (we estimate a capacity CAGR of 11.7% over 2005-12).

However, with the recent slower growth of China's economy (GDP growth slowed to 7.7% in 2013 and 7.9% in 2012, from over 8% before 2012), weaker export business (export value growth slowed to +7.9% in 2013 and +7.9% in 2012 from +20.3% in 2011 and +31.3% in 2010) amid weak demand from the US and Europe, the industry has experienced structural overcapacity.

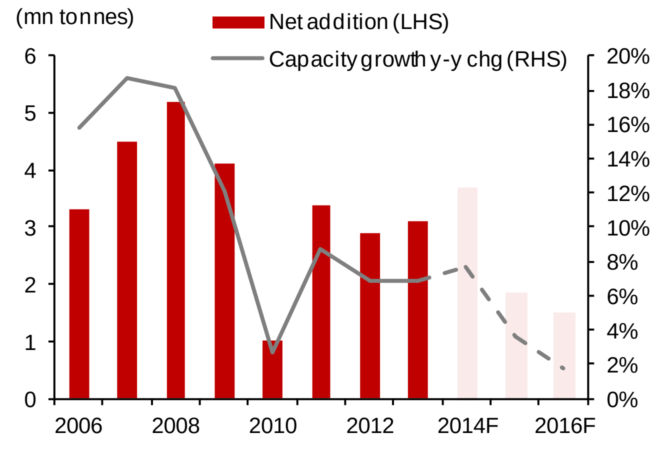
We believe capacity growth in the coming two years may slow significantly with the help of the government, which continues to close obsolete and inefficient capacity, and enterprises' slower pace of capacity additions amid the weaker profit outlook. We expect industry capacity to slow significantly to a CAGR of 4.6% over 2013-16F, from a CAGR of 11.7% over 2005-12.

Fig. 50: Industry's capacity growth trends



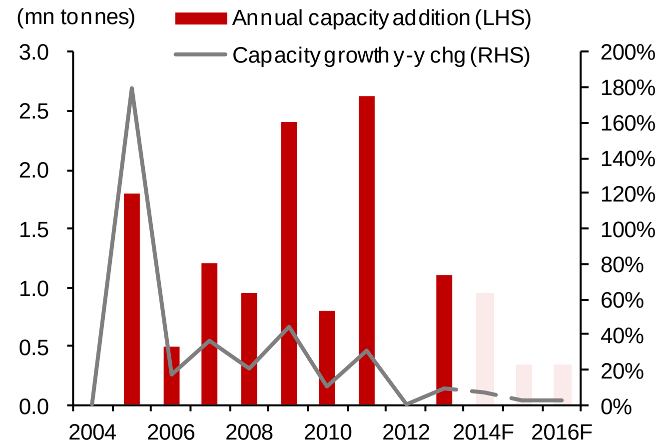
Source: Nomura estimates

Fig. 51: Industry's capacity addition trends



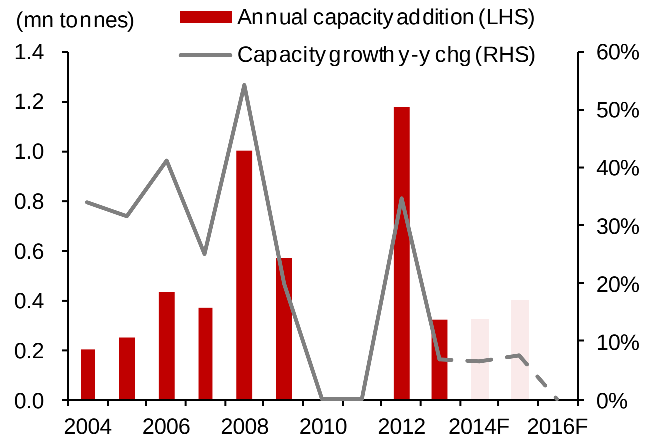
Source: Nomura estimates

Fig. 52: Nine Dragons: Annual capacity additions



Source: Company data, Nomura estimates

Fig. 53: Lee & Man: Annual capacity additions



Source: Company data, Nomura estimates

According to UMpaper, upcoming new capacity will peak in 2014F and fall significantly in 2015-16F, with an estimated 3.69mn tonnes of capacity coming online in 2014F, 1.85mn tonnes in 2015F and 1.50mn tonnes in 2016F. This compares to an average 6.0-7.0mn tonnes coming online per year in the past three years, according to our estimates.

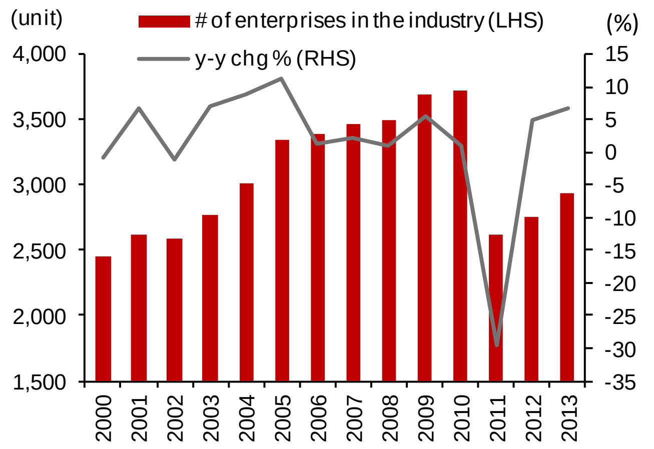
Fig. 54: Upcoming new major capacity

	Capacity (mn tonnes)	Location	Type of products	Completion
CY2014				
Nine Dragons	0.30	Sichuan	Corrugating medium	Jan-14
Fujian Liansheng	0.60	Fujian	Grayback coated duplex board	Apr-14
Nine Dragons	0.35	Shenyang	Linerboard	Jun-14
Anhui Shanying Paper	0.46	Anhui	Linerboard	2014
Anhui Shanying Paper	0.38	Anhui	Corrugating medium	2014
Lee and Man Paper	0.30	Chongqing	Linerboard	Jun-14
Zhejiang Jingxing Paper	0.30	Zhejiang	Corrugating medium	2014
Henan Shengyuan Paper	0.30	Henan	Linerboard	2014
Jiangxi Sihai	0.20	Jiangxi	Corrugating medium	2Q2014
Guochang Tianyu*	0.50	Hebei Caofeidian	Linerboard/Corrugating medium/ Environmental-friendly T-board	Aug-14
Total	**3.69**			
CY2015				
Hebei Changtai	1.20	Hebei Caofeidian	Linerboard/Corrugating medium	2015
Henan Chongfeng	0.15	Henan	Corrugating medium	Jul-15
Guochang Tianyu*	0.50	Hebei Caofeidian	Linerboard/Corrugating medium/ Environmental-friendly T-board	2015
Total	**1.85**			
CY2016 onwards				
Nine Dragons	0.35	Shenyang	Linerboard	Dec-16
Zhejiang Chuancheng	0.50	Zhejiang	Linerboard/Corrugating medium	
Jiangsu Lvcheng	0.25	Jiangsu	Corrugating medium	
Hebei Yongxin	0.40	Hebei Tangshan	Corrugating medium	
Baishan Qixiang	0.20	Jilin	Corrugating medium	
Zhejiang Jinlong	0.30	Zhejiang	Linerboard	
Shangdong Taiyang Honghei	0.50	Shandong	Linerboard	
Guochang Tianyu*	2.00	Hebei Caofeidian	Linerboard/Corrugating medium/ Environmental-friendly T-board	
Sun Paper	0.50	Shandong	Linerboard	
Sun Paper	0.50	Shandong	Corrugating Medium	
Total	**5.50**			

Source: RISI-UMpaper, Nomura Int'l (HK), *Assume its 3mn tonnes capacity to be built evenly through Aug2014-July2019

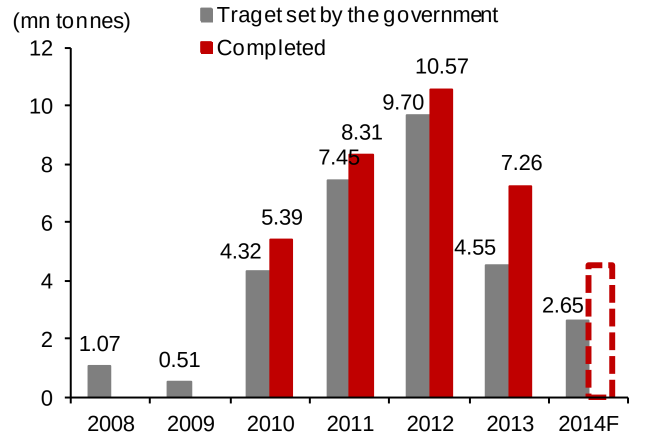
The industry is relatively fragmented (the total number of enterprises amounted to 2,568 as at end-2013 and the top 10 players in paper and paper packaging have ~31% market share based on total paper and paperboard production, according to the China Paper Association). Thus we concede it might be difficult to control capacity growth, since this will ultimately rely mainly on self-discipline in companies' investment decisions.

Fig. 55: China: Total number of paper and paper packaging enterprises



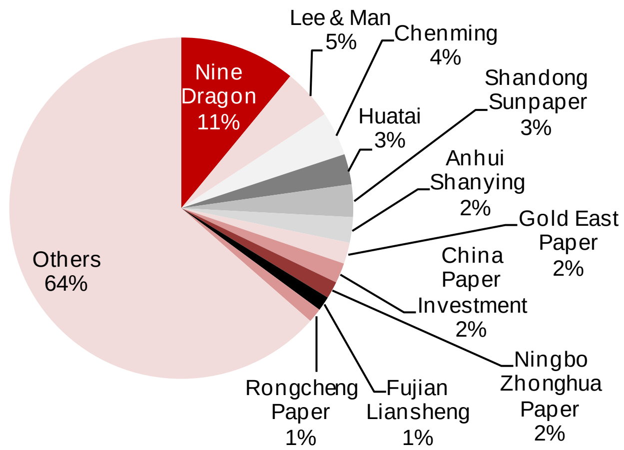
Source: WIND

Fig. 56: China: Total capacity shutdown (all categories of paper and paperboard)



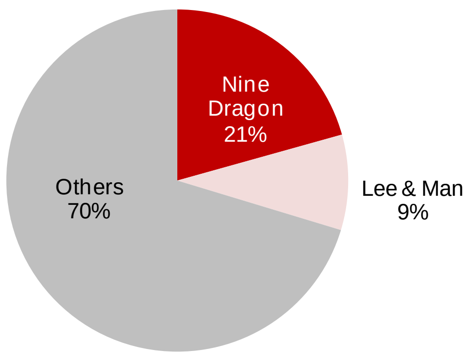
Source: China Paper Association

Fig. 57: China: Paper and paper packaging market share (2013)



Source: China Paper Association

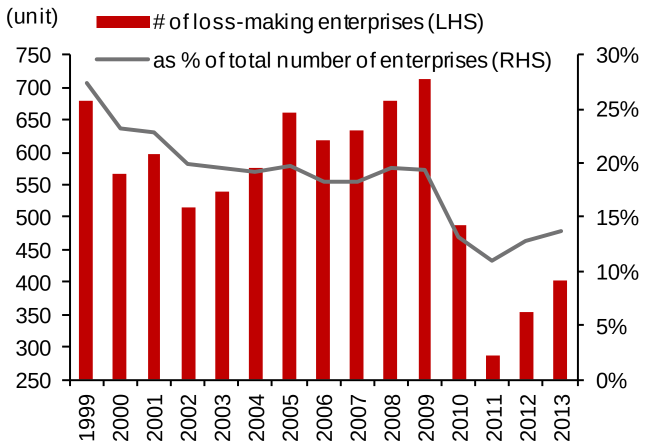
Fig. 58: China: Containerboard market share (2013



Source: China Paper Association

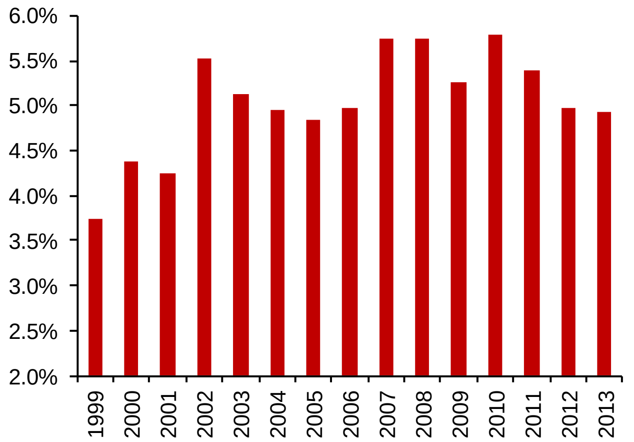
Nevertheless, we believe current weak profitability and increasingly strict environmental protection controls required by the government (hence higher entry barriers) will dilute interest in the industry from potential new entrants and reduce the likelihood of existing manufacturers' adding capacity, which should see capacity growth slow. We note that in 2013 the total number of loss-making enterprises jumped by 13% to 401 (14% of the total number of enterprises), while average net profit margin fell to 4.9%, from a peak of 5.8% in 2010. We believe that even with an improved profitability outlook, which could help to attract more capacity, such new capacity would likely only come on stream after two years, the time it typically takes from planning to start of operation for new capacity.

Fig. 59: China: Number of loss-making paper enterprises



Source: WIND

Fig. 60: China: Paper industry net profit margin trend



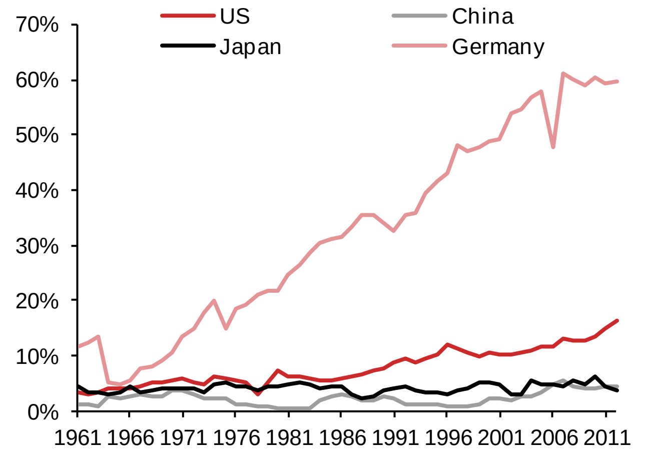
Source: WIND, Nomura estimates

Recent developments indicate that the government is stepping up its efforts to help to solve the overcapacity problem in the paper industry.

1) The government has encouraged enterprises to close down obsolete capacity since 2007 and put more emphasis on this in 2010, which saw total capacity retired jump significantly from 2010 to 2012. We estimate some 32mn tonnes of capacity was closed down between 2007 and 2013, equivalent to about 32% of total production volume in 2013. According to the MIIT, the government targets to close 2.65mn tonnes of paper and paperboard capacity in 2014, vs the 4.55mn tonnes targeted and 7.26mn tonnes actually completed in 2013. The higher-than-targeted capacity closures, we think, may have been driven by attractive government compensation packages offered to manufacturers to close down their capacity. We believe that total capacity closed in 2014 may again beat the government's target of 2.65mn tonnes.

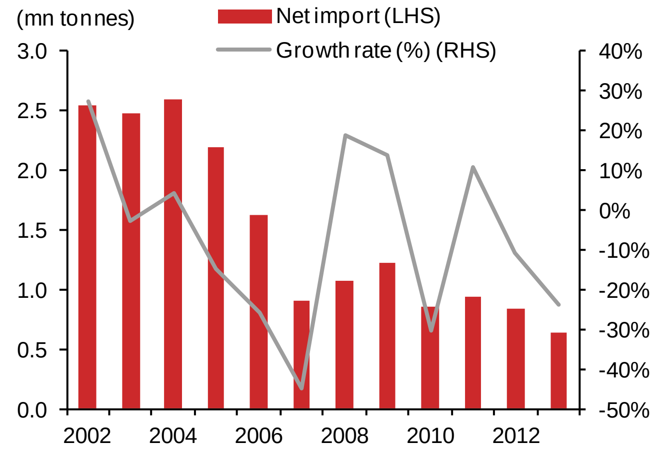
2) During the March 2014 NPC, NPC delegate Li Jianhua proposed to resume recovered paper processing trade (废纸加工贸易政策), which has been banned since March 2008. Should the proposal be accepted, this would likely create incentives for manufacturers to export paper products. Under the proposed policy, products exported via the processing trade would be exempted from the 17% VAT, while products exported under normal trade policy are subject to the 17% VAT, which gives manufacturers little incentive to export products, which are no longer competitive after paying 17% VAT. We note that packaging paper export volumes as a percentage of total production volumes are just 2% in China, vs 62% in Germany and 18% in the US (based on 2012 data). Although such a low export ratio may imply that domestic demand is very strong, with all production consumed in China (we note that China is still a net importer of containerboard products), with the expected slowdown in China's domestic demand growth, we would expect a resumption of export trading business to help to ease the overcapacity problem.

Fig. 61: Comparison of export volumes as % of total packaging paper production volume



Source: FAO, Nomura research

Fig. 62: China: Containerboard net import volume trend



Source: China Paper Association

3) The government continues to impose increasingly strict environmental protection rules for enterprises. This may increase operating costs and force some smaller players to exit the industry altogether amid the weak profitability outlook.

Fig. 63: Discharge standard of water pollutants for pulp and paper industry

	1-Jan-01	1 May 2009 to 30 Jun 2011	1 July 2011*	Speical arrangement
pH	6-9	6-9	6-9	6-9
Color	Nil	50	50	50
Suspended Substance (mg/L)	100	50	30	10
BODs (mg/L)	70-100	30	20	10
COD_{Cr} (mg/L)	350-450	120	90	60
Ammonia Nitrogen (mg/L)	Nil	10	8	5
Total Nitrogen (mg/L)	Nil	15	12	10
Total phosphorus (mg/L)	Nil	1	0.8	0.5
AOX (mg/L)	Nil	15	12	8
Dioxins (pgTEQ/L)	Nil	Nil	30	30
Benchmark effluent volume per unit product (tonne)	100-300	20	40	25

Source: General Administration of Quality Supervision, Inspection and Quarantine of China (AQSIQ)
Note: *Effective 1 August 2008 for new joiners

Although new discharge standards became effective in July 2011, some provinces were not in compliance. With more emphasis recently put on the government's anti-corruption campaign, we believe enterprises that don't comply with the discharge standards are now being forced to either replace old machines with a new high-standard machine or to retire the obsolete machine. Since a new machine is very expensive, at CNY1.0-1.2bn, most small paper manufacturers are more likely to eventually opt for machine disposal.

Some provinces have recently increased their discharge standards to even higher than the national standard. For example, Fujian province said it would increase its discharge standard on 1 Jan 2014 with a COD limit at 80mg/L, versus the national standard of 90mg/l. From September 2013, Guangdong province also increased its discharge standard on COD and ammonia nitrogen limits to be in line with the "national special arrangement" standards, ie, a COD limit at 60mg/l. Shandong province also has COD limits set at 60mg/L. Based on our checks, the industry is now studying the possibility of implementing the "national special arrangement" standards across the country.

Should all provinces increase their discharge standards to the "national special arrangement" standards, we believe more small companies will be forced to close amid high replacement costs and a weak earnings outlook. We note that costs on environmental protection are not cheap, eg, Nine Dragons' 7-8% fixed assets (or estimated CNY3.3bn) are related to environmental protection facilities construction and last year the company spent CNY20mn+ on upgrading its facilities in order to meet the government's new discharge standard.

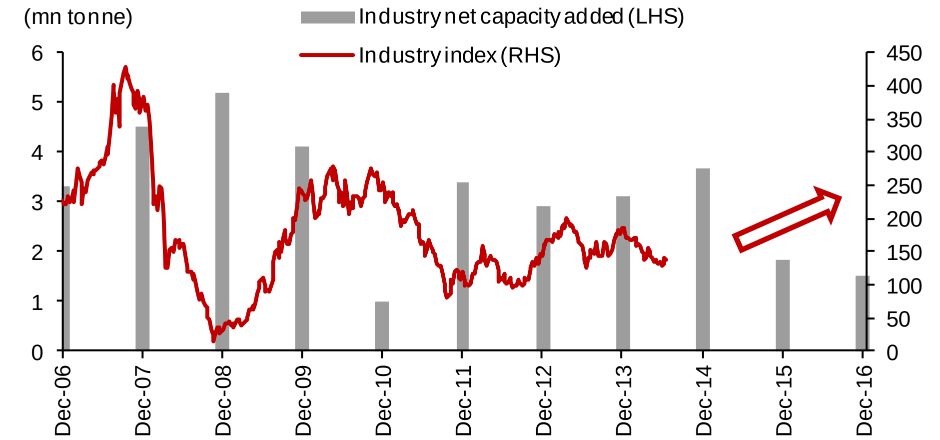
Apart from increasing the discharge standard, the government also set another criterion to phase out some small factories. Previously, factories were required to be closed down if their annual production volume was less than 100k tonnes; however, the criterion has now increased to annual production volume of 200-300k tonnes.

We expect that the total capacity closure in 2014F will eventually come out higher than the government's target given the much stricter environmental protection rules implemented by the provincial governments recently and likely another round of anti-corruption measures which may force enterprises to comply with the discharge standards. We believe the process of capacity shutdowns is just half-way to completion — we estimate there is still some 10mn tonnes of capacity of containerboard (or 21% of total capacity of containerboard in 2013) that needs to be phased out, despite an estimated 10mn tonnes already having been retired in recent years.

Overall, we believe the supply will come down significantly in the next two years and the industry is moving towards a more balanced supply/demand level, from oversupply in the past three years.

We note that the sector's share price average is negatively correlated with net-added capacities. Based on our analysis, the average share price of containerboard firms tends to bottom when industry net capacity added peaks, while share prices tend to peak when the industry's net added capacity troughs and starts to increase. We currently expect the industry's net added capacity to peak in 2013/14F and come down significantly into 2016F. Hence, should our low capacity growth forecasts prove to be correct, we believe the average share price of containerboard firms should regain its increasing trend from late CY14F until CY16F.

Fig. 64: Share price performance vs industry's net capacity added



Source: Bloomberg, China Paper Association, Nomura estimates. Industry index was calculated from the average share price of Nine Dragons and LMP

Profitability: margin to improve

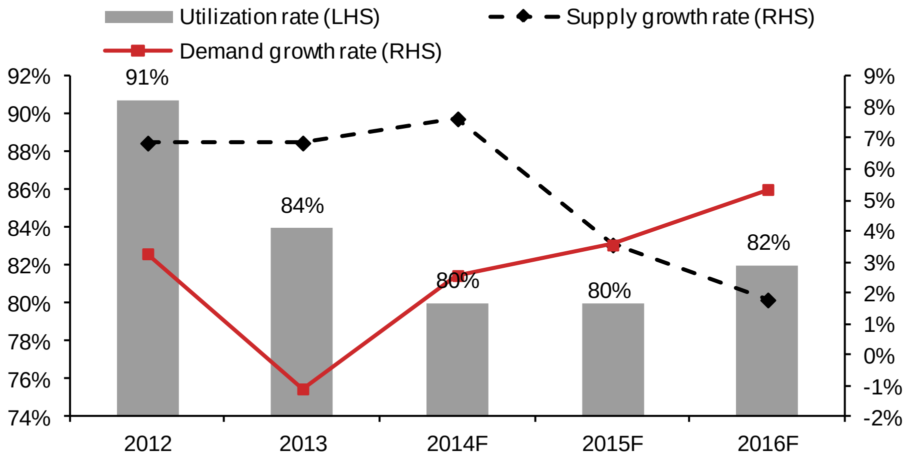
As we are looking for production to come off significantly to a CAGR of 3.8% in the next three years, while expecting demand to grow moderately at a CAGR of 3.3%, we believe supply/demand will become more balanced in the next two years. We expect that the utilisation rates may continue to decline in 2014F, stabilise in 2015F and resume growth in 2016F; this may also imply that prices will be expected to be relatively stable or even with some upside should demand turn out to be better than expected amid a stronger-than-expected economy and faster-than-expected reduction in obsolete capacity.

Fig. 65: Supply and demand for China containerboard industry

(mn tonnes)	2012	2013	2014F	2015F	2016F	CAGR (2001-2012)	CAGR (2013-2016F)
Production	41.0	40.6	41.6	43.1	45.4	13.1%	3.8%
Net import	0.8	0.6	0.4	0.2	0.1	-7.6%	n.a
Consumption	41.8	41.2	42.0	43.3	45.5	11.5%	3.3%
Capacity	45.2	48.3	52.0	53.8	55.3	11.7%*	4.6%
Utilization rate (%)	91%	84%	80%	80%	82%		

Source: China Paper Association, Nomura estimates, *CAGR for the 2005-2012 period

Fig. 66: Supply/demand picture: More balanced supply/demand estimated in the next two years

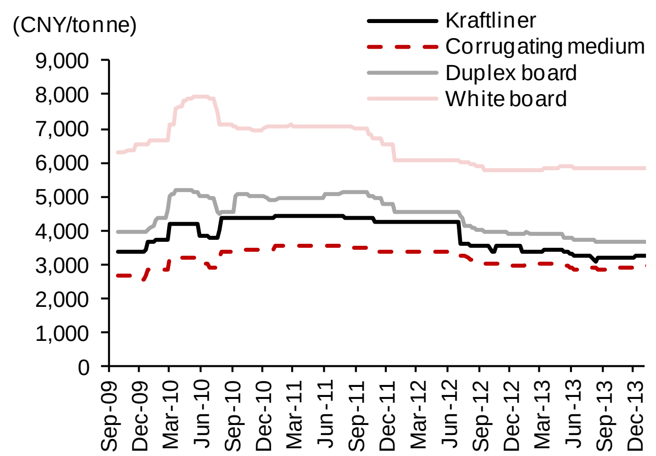


Source: China Paper Association, Nomura estimates

We note that ex-factory prices for different products have been relatively stable recently with kraftliner's year-to-date ex-factory price edging down slightly by 1% compared to 2013's average (or down 4% compared to the same period last year). We note that kraftliner's ex-factory price bottomed in August/September 2013 and has rebounded by 4% from the recent trough, while corrugating medium and duplex board's ex-factory prices also increased by 2% and 1%, respectively, from the recent trough. Although Nine Dragons cut its selling prices by CNY50-100/tonne in April 2014 due to the low season in 2Q, management has just proposed an increase of CNY50/tonne in June 2014 for some of its products. However, customers' acceptance levels are still unclear, and we don't have high expectations of price hikes in 2014F, especially when prices of its raw material (old corrugated containers) are still falling.

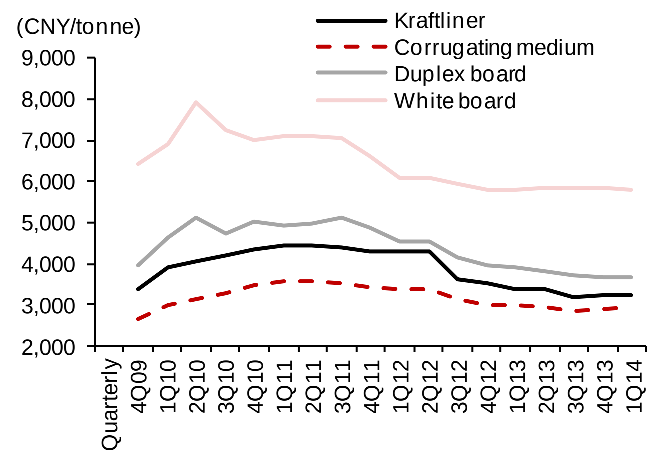
We expect containerboard's average price to see a decline of 2% in 2014F and increase by 1% in 2015F and 3% in 2016F.

Fig. 67: Ex-factory price of different products



Source: WIND

Fig. 68: Quarterly ex-factory price of different products

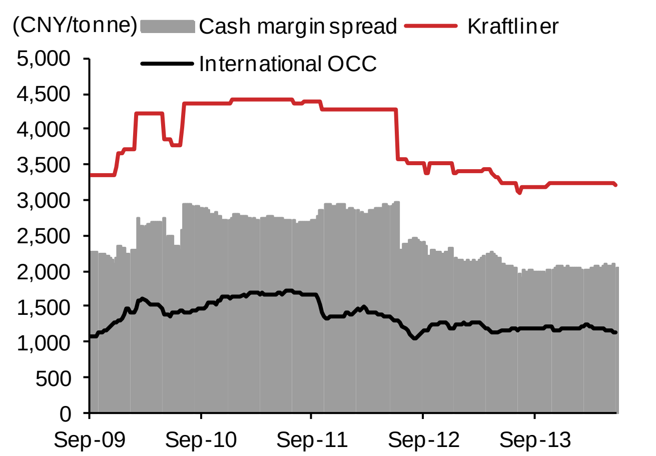


Source: WIND, 2Q14 data was updated to 9 June 2014

Costs also play an important part in the trend of profitability. Among different types of costs, costs from recovered paper (mainly from old corrugated containers, or "OCC") are estimated by us to account for 60-70% of total operating costs. Generally speaking, prices of containerboard products and recovered paper track each other fairly closely, while prices of containerboard products may increase much more than the hike in recovered paper prices during the growth period (eg, in 2009 and 2010 when the PRC government implemented the stimulus package), which should result in a higher cash margin spread expansion. On the contrary, during a recession period, the magnitude of price drop in containerboard products could also be higher than the decline for recovered paper and, hence, cash margin spread will contract. Also, there will be some laggard effect or timing mismatch of product sales and the procurement of recovered paper. We believe the timing mismatch might range from a month (for domestically sourced recovered paper) up to almost three months (for imported recovered paper).

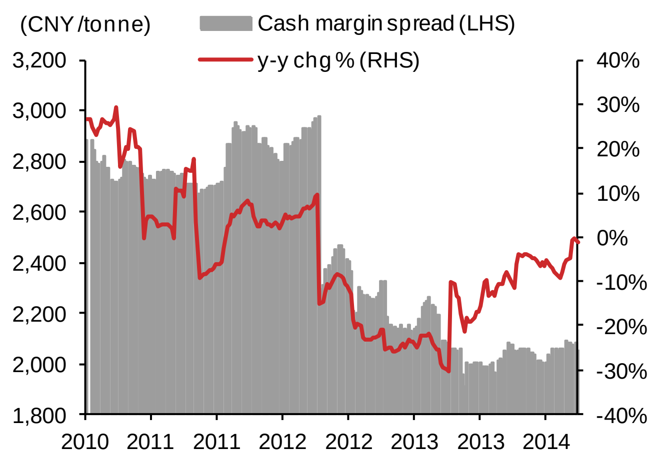
We note that cash margin spread has gradually picked up sequentially, albeit year-on-year growth remains in negative territory.

Fig. 69: Linerboard ex-factory price vs OCC



Source: WIND, Nomura's Int'l (HK)

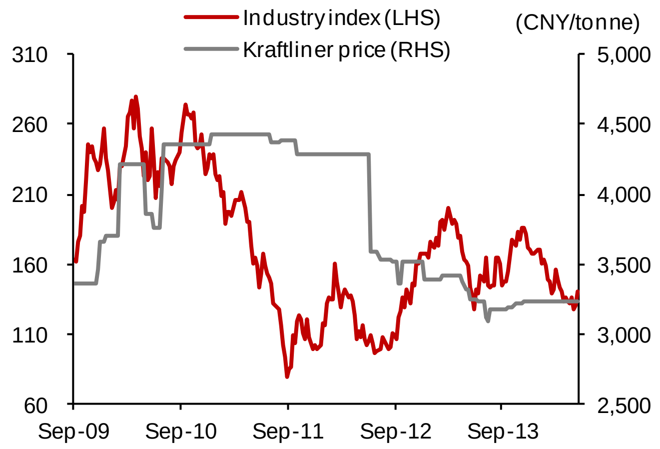
Fig. 70: Linerboard's cash margin spread change



Source: WIND, Nomura's Int'l (HK)

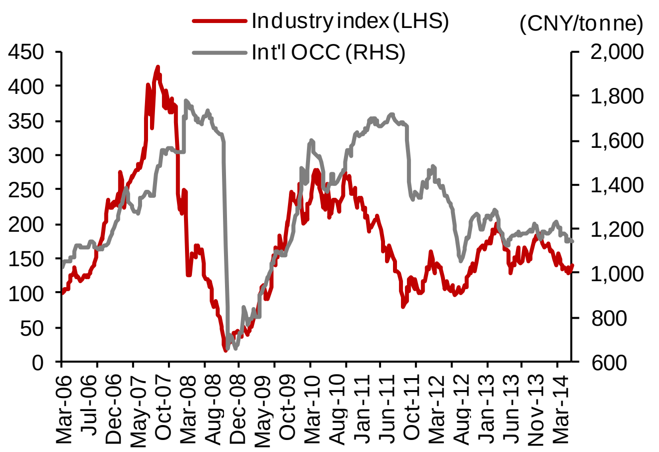
As recovered paper's costs are generally tracking closely with price of containerboard products. As such, we would not be surprised to see that the share prices of the companies in this sector are positively correlated with the international OCC price, despite the fact that OCC is containerboard companies' major cost item.

Fig. 71: Sector share price vs kraftliner price



Source: Bloomberg, WIND, sector share price is calculated based on the average price of ND and LMP. 6 March 2006 = Rebased to 100

Fig. 72: Sector share price vs international OCC price



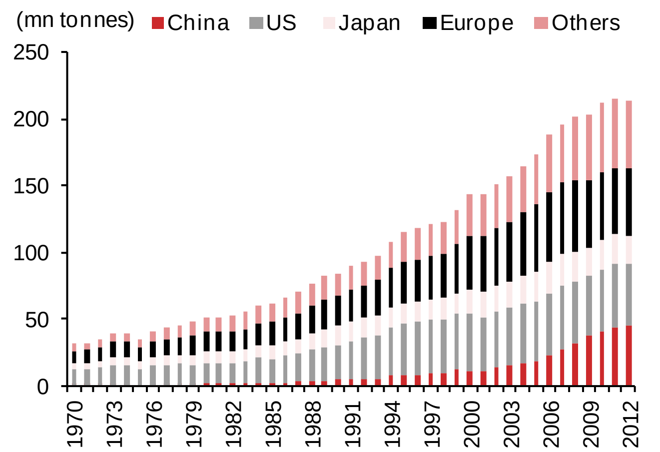
Source: Bloomberg, WIND, sector share price is calculated based on the average price of ND and LMP. 6 March 2006 = Rebased to 100

Although recovered paper's price tracks the price of containerboard products, there is room for management to reduce costs on recovered paper, for example by sourcing recovered paper from China's domestic market, where the price of recovered paper is generally cheaper than in the international market. We note that containerboard manufacturers have continued to increase recovered paper purchases from China's domestic market (eg, China domestic recovered paper contributed 34% of Nine Dragons' total recovered paper consumption in 1HFY14, compared to just 20% in FY09).

Historically, containerboard manufacturers tend to source OCC from the international market (including the US, Japan and Europe), although the China domestic market's OCC is generally cheaper than in the international market. We believe this is mainly due to: 1) higher paper quality from international OCC, 2) more stable supplies from the overseas markets as China domestic market's OCC volume is not sufficient for demand of OCC given its relatively low recovered rate. Although China ranked number one on total paper and paperboard consumption in the world, its recovered paper's production volume was still below that of the US and Europe in 2012. According to FAO, China's recovered paper's production volume was 44.7mn, compared to Europe's 49.9mn tonnes and US' 46.4mn tonnes in 2012.

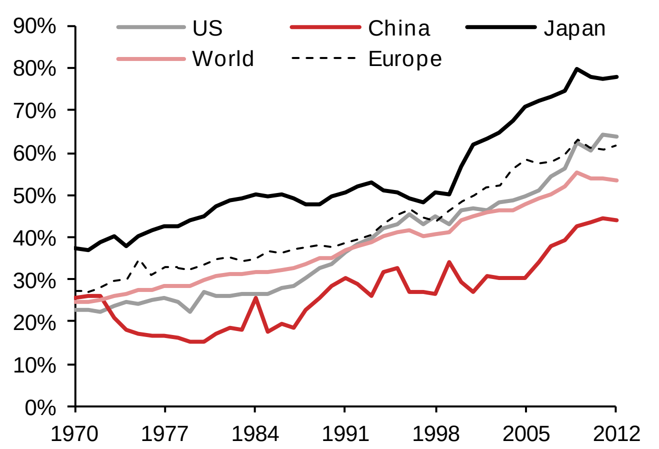
We calculated China recovered rate to be at 44% in 2012, this compared to Japan's 78%, the US's 64% and Europe's 62% over the same period.

Fig. 73: Recovered paper production by countries



Source: FAO

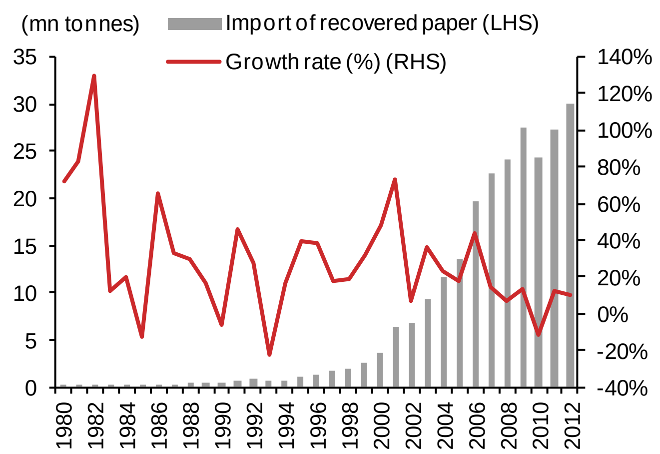
Fig. 74: Recovered rate by countries



Source: FAO, Nomura research

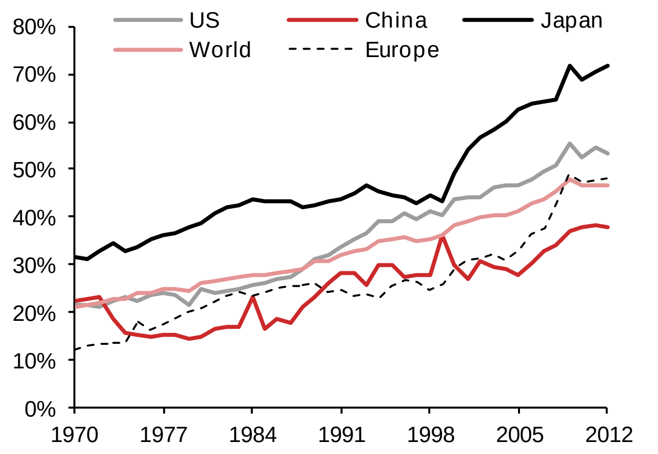
With a relatively low recovered ratio, containerboard manufacturers hence tend to import recovered paper from overseas in order to meet the demand for OCC for product production. We estimate China's recovered paper production volume will contribute only 38% of total paper and paperboard's production volume (if we assume 100% of raw material is from recovered paper for producing paper and paperboard), compared to 72% for Japan, 53% for the US and 48% in Europe in 2012.

Fig. 75: Import recovered paper volume in China



Source: FAO

Fig. 76: Recovered paper contribution to paper products



Source: FAO

Following consumers' increasing awareness on environmental protection and government's increasing efforts on promoting a "green" policy, we believe recovered paper's recovered rate will continue to increase, and this will therefore provide more supplies to containerboard manufacturers. We note that the government targets to increase the recovered rate to 46.7% by the end of FY15F, from 44% currently.

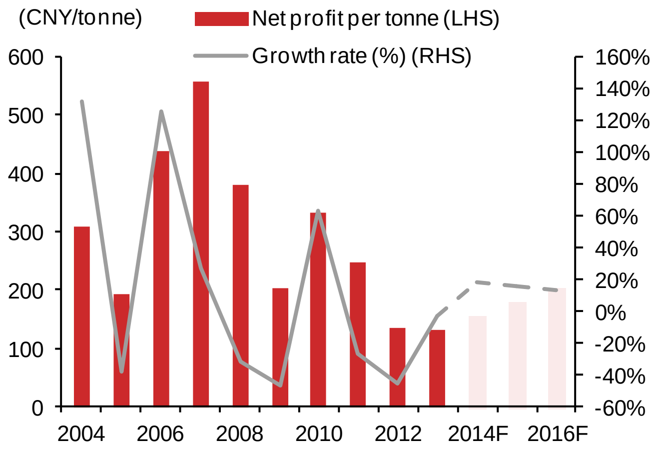
As the price of China domestic OCC price is generally cheaper than international OCC, the continued increasing purchase of China domestic recovered paper will help to lower operating costs and hence improve margin. Some upside surprise may come if the government decides to resume the VAT tax rebate on China domestic OCC. We note that, during the March 2014 NPC, NPC delegate Li Jianhua proposed to resume such a tax rebate for domestic recovered paper's VAT.

It may be recalled that the government had introduced the VAT tax rebate on China domestic OCC in 2009-2010. The companies were able to get a 70% VAT tax rebate in 2009 and a 50% tax rebate in 2010, before the policy was cancelled in 2011.

With our projection of likely stable or slightly upward trend on pricing and slower pace of average OCC price hike (assuming manufacturers to source more recovered paper from China's domestic market where the price is relatively cheaper than in the international market), we believe containerboard manufacturers' net dollar margin will increase.

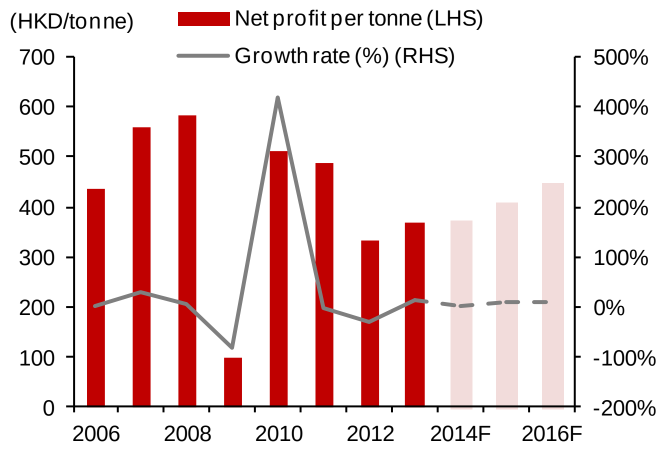
We are currently looking for ND to see pre-exceptional net profit per tonne increase by CAGR of 16% in FY2014-2016F, while LMP may record pre-exceptional net profit per tonne edging up by 7% in FY14-16F.

Fig. 77: ND – Net dollar margin trends



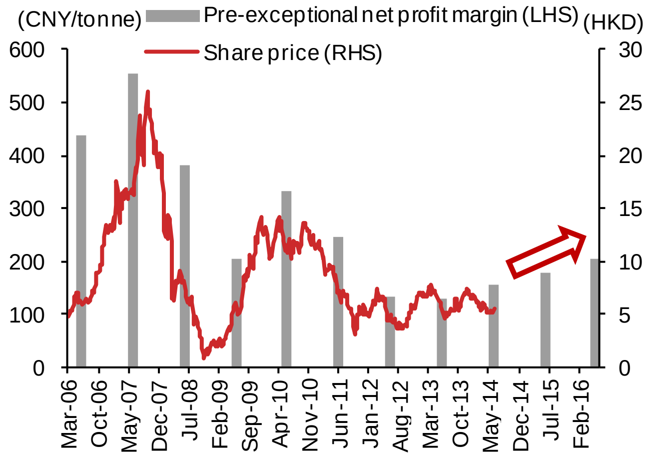
Source: Company data, Nomura estimates. Net dollar margin is calculated based on recurrent earnings

Fig. 78: LMP – Net dollar margin trends



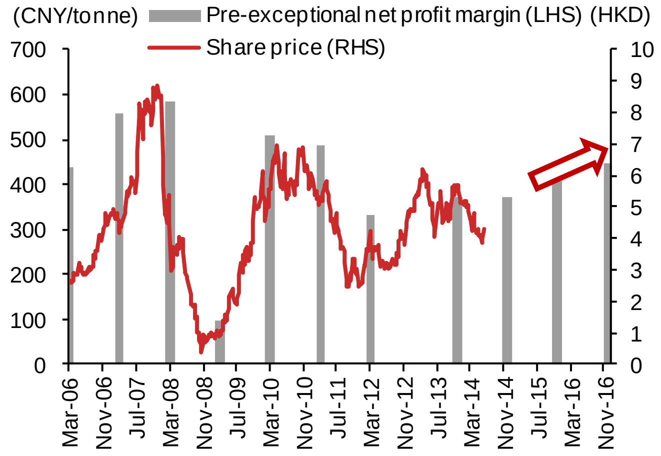
Source: Company data, Nomura estimates, Net dollar margin is calculated based on recurrent earnings

Fig. 79: ND – share price vs net dollar margin trends



Source: Bloomberg, company data, Nomura estimates

Fig. 80: LMP – share price vs net dollar margin trends



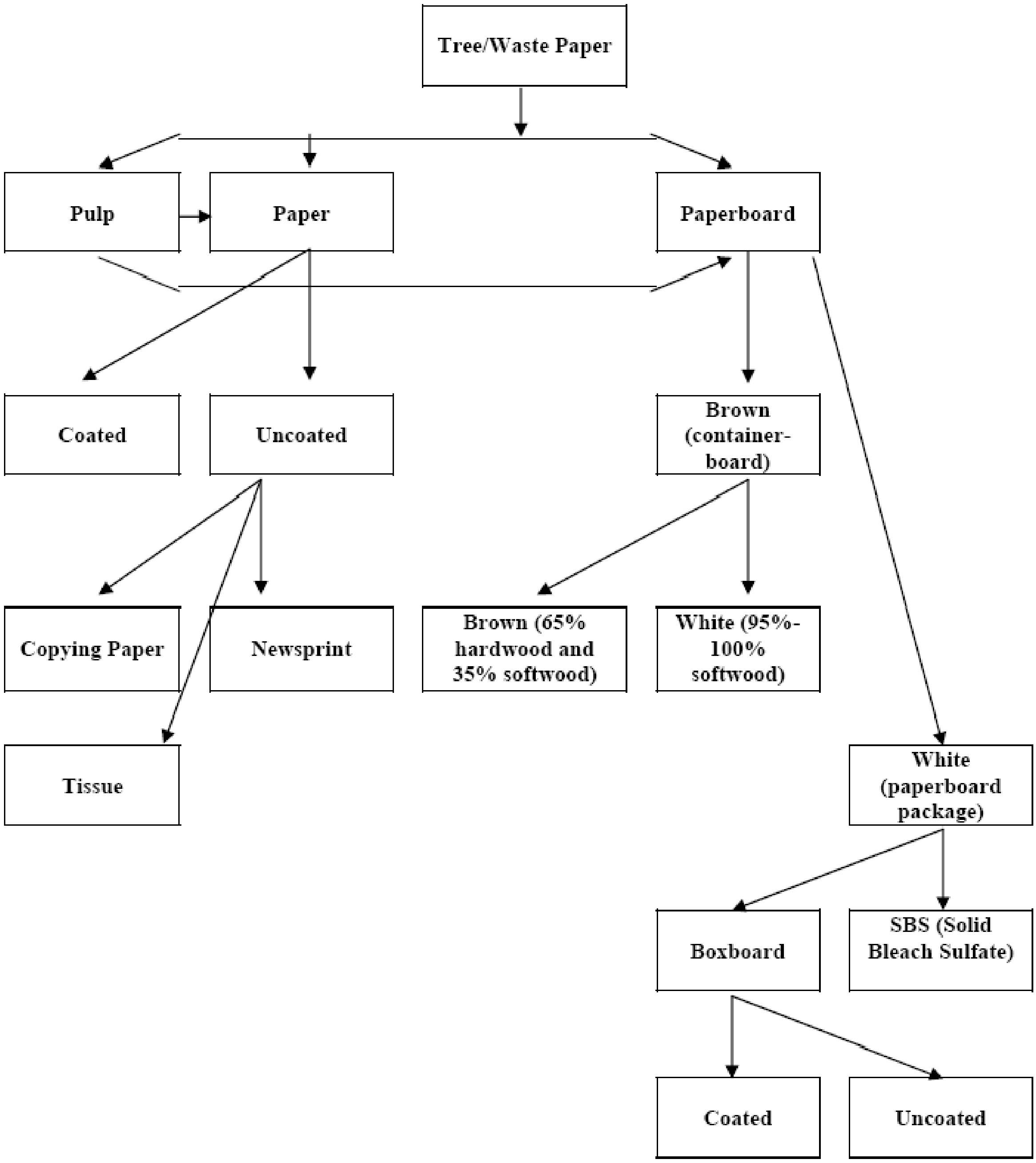
Source: Bloomberg, company data, Nomura estimates

Appendix

Classification of paper and paperboard

Paper products can be broadly categorised into packaging paper (linerboard, corrugating medium and white board) and graphic paper (for printing and writing, newsprint). In China, packaging paper accounted for 62% of total paper and paperboard consumption in 2012. Within that, containerboard (mainly linerboard and corrugating medium) accounted for 67% of total packaging paper or 42% of total paper and paperboard consumption in 2012, according to the China Paper Association.

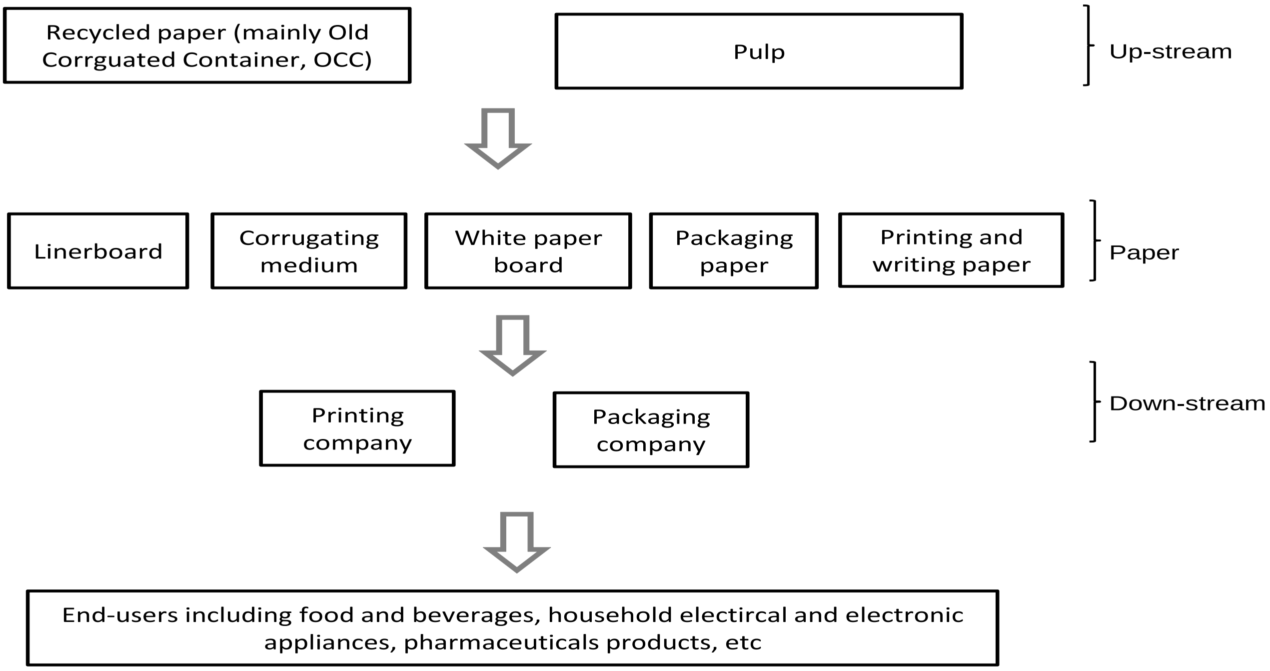
Fig. 81: Paper product chart: Containerboard



Source: Georgia Tech

Paper industry supply chain

Fig. 82: Paper industry supply chain

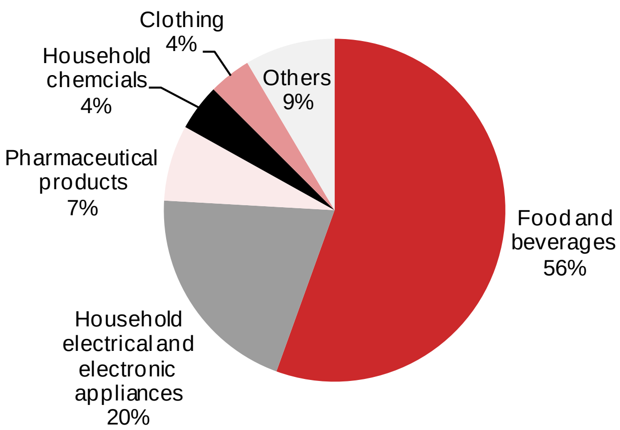


Source: Nomura research

End-user profile

Typical customers of containerboard products (eg, linerboard, corrugating medium and coated duplex board) are the corrugators who use containerboard products to manufacture corrugated containers for their end-user customers. Coated duplex board packaging and printing companies are also the key customers for containerboard products. They use containerboard to manufacture printed packaging boxes according to the specifications of their end-user customers. These containers and packaging boxes are widely used in a variety of industries including F&B, apparels, footwear, electronics, electrical appliances, pharmaceutical products, household goods, etc.

Fig. 83: Paper-based packaging industry: End-user profile by production value



Source: The ASKCI Report, China Packaging Holdings

China paper and paperboard production heat map

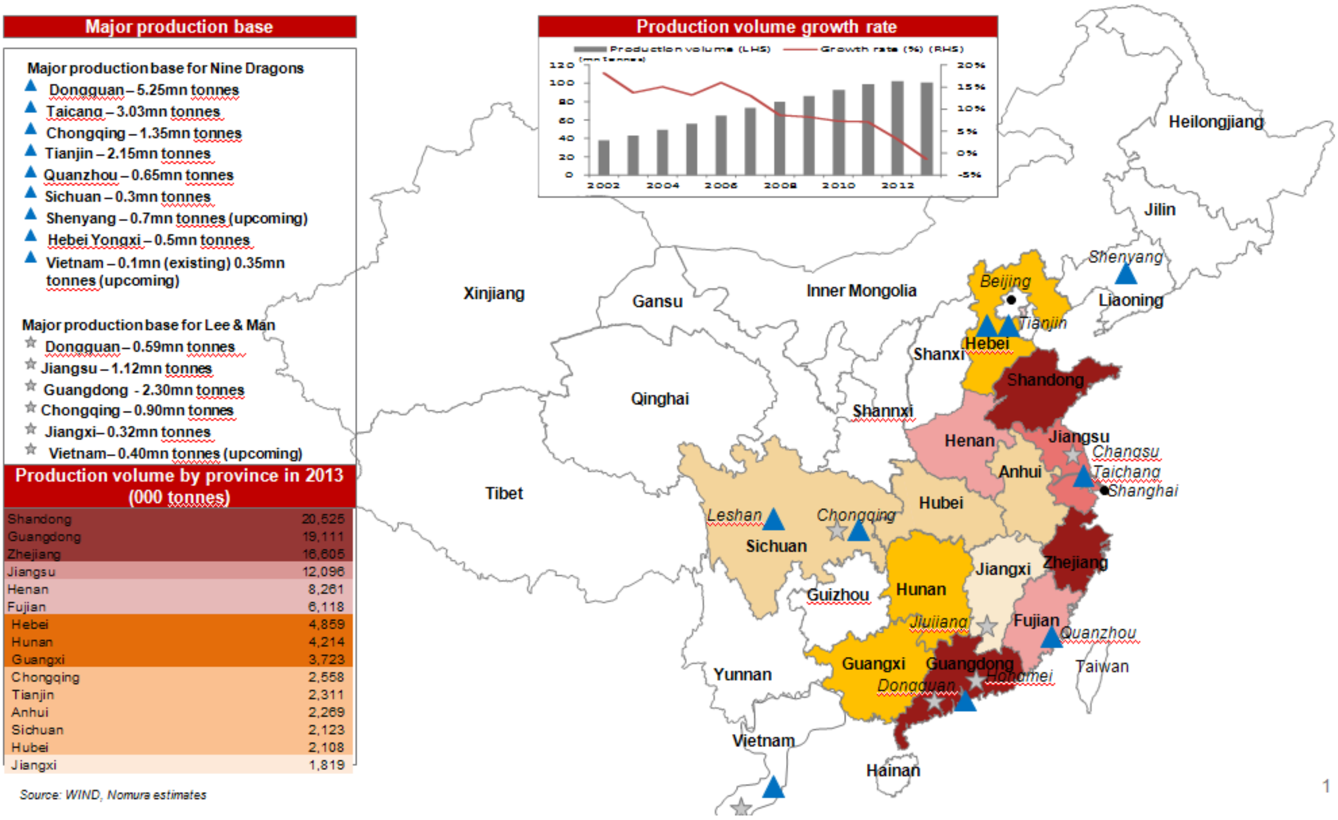
In terms of the overall paper and paperboard production volume breakdown by provinces in 2013, Shandong ranked number 1, taking 18% of the market, followed by Guangdong province, which contributed 17%.

The top 10 provinces contributed 86% to the country's overall paper and paperboard production volume in 2013, with most production bases located along the coastal provinces including Shandong, Zhejiang, Guangdong, Jiangsu and Fujian. We believe this may due to: 1) proximity to water, which is essential for producing paper, 2) much cheaper transportation costs for sea transport of goods and raw materials compared to land transportation, 3) more manufacturing factories setting up along the coastal provinces for shipping goods overseas.

Given the recent slowdown of export growth amid weaker demand from the US and Europe and factories inland having lower operating costs, we believe containerboard manufacturers may expand their networks to inland China or other countries. We note that Nine Dragons will set up a new production base in Shenyang in 2014, its Sichuan production base has also just begun operations in January 2014, and both Nine Dragons and LMP will expand their footprint into Vietnam in 2015F.

Being the largest containerboard manufacturer in China, Nine Dragons has built up an extensive regional network in China from east to west and from south to north; it has a total of eight production bases in China, with Dongguan being the largest, contributing 37% to the group's overall capacity (include existing and planned). LMP, as the second largest containerboard manufacturer in China, is more concentrated in Guangdong province, with 59% of its capacity allocated in that province.

Fig. 84: China paper and paperboard production volume by province



Production volume by province in 2013 (000 tonnes)

Shandong	20,525
Guangdong	19,111
Zhejiang	16,605
Jiangsu	12,096
Henan	8,261
Fujian	6,118
Hebei	4,859
Hunan	4,214
Guangxi	3,723
Chongqing	2,558
Tianjin	2,311
Anhui	2,269
Sichuan	2,123
Hubei	2,108
Jiangxi	1,819

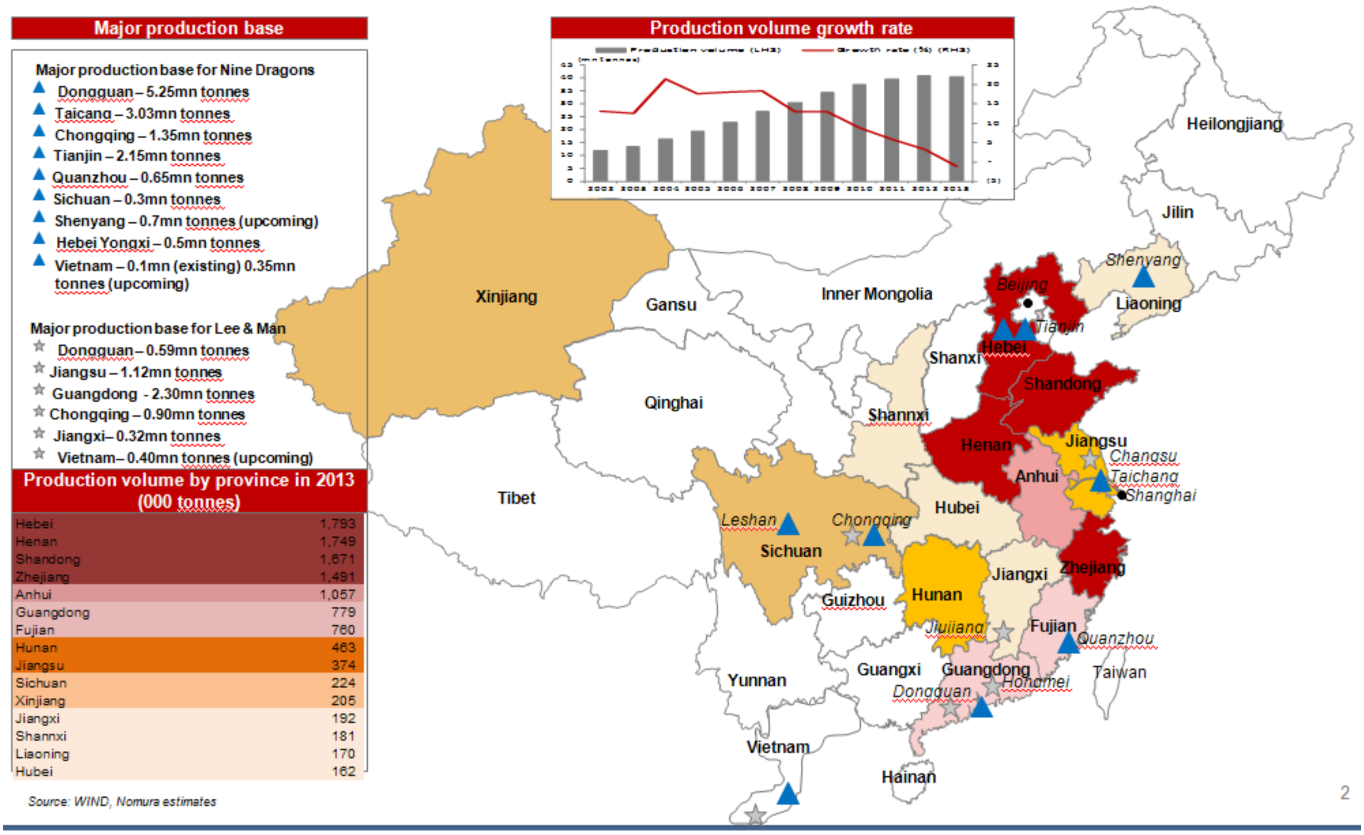
Source: WIND, company data, Nomura research

China linerboard production heat map

In terms of linerboard production volume, Hebei ranked number 1 in 2013, followed by Henan, Shandong and Zhejiang, while Guangdong ranked number 6. Linerboard is one of the major products of containerboard manufacturers, accounting for 50% of total containerboard production volume in 2013, according to the China Paper Association.

The top 10 provinces' total containerboard production volume accounted for 51% of the country's overall linerboard production volume in 2013.

Fig. 85: China containerboard production volume by province



Source: WIND, company data, Nomura research

NOMURA

Lee & Man Paper Manufacturing

2314.HK 2314 HK

EQUITY: SMALL AND MID CAPS

Focused on high-margin products

Known for steady execution

Global Markets Research

26 June 2014

Rating Remains	**Buy**
Target price Reduced from 7.00	HKD 5.90
Closing price 23 June 2014	HKD 4.31
Potential upside	+36.9%

Action: Assume coverage with Buy

Following transfer of analyst coverage, we assume coverage of Lee & Man Paper (LMP) with a Buy rating and a TP of HKD5.90. As the second-largest containerboard manufacturer in China, LMP is known to be more prudent on capacity expansion compared to its peers, hence it has a relatively stronger balance sheet and a more stable and profitable earnings profile. Although there are some more capacities in the pipeline (PM19-23), with PM20 to come online in 2014 and PM19 to commence operation in 2015, we believe management will continue with its disciplined capacity addition. We expect a pre-exceptional net profit CAGR of 13% for 2014-16F. We note that LMP continues to deliver stronger pre-exceptional net profit per tonne as compared to Nine Dragons (ND) owing to: 1) its lower gearing ratio, 2) its greater concentration on high-margin linerboard, which contributed 81% of total revenues (vs 49% for its main competitor ND), and 3) its greater geographical concentration (58% of capacities allocated in Guangdong province, vs 37% for ND). We expect LMP's pre-exceptional net profit per tonne to remain higher than ND's; however, the gap will likely narrow as ND makes efforts to strengthen its balance sheet.

Catalysts: Possible ASP hike in 2015-16F and continuing slowdown of industry capacity growth

Valuation: Buy with TP of HKD5.90

We value LMP at HKD5.90/share based on its mid-cycle valuation of 12.3x P/E on 2015F EPS of HKD0.48. We believe the stock should not trade at one-standard deviation below mid-cycle as we expect an earnings CAGR of 13% for 2014-16F. Historically, the stock has traded at one-standard deviation below mid-cycle only when its pre-exceptional earnings declined 29% in 2012. Our TP of HKD5.90 translates to 1.4x 2015F book value of HKD4.13.

Anchor themes

ASP growth momentum should resume from 2015F to 2016F, after a three-year downcycle, backed by more favourable supply/demand dynamics from 2015F amid a substantial capacity growth slowdown.

Nomura vs consensus

Our 2014F profit is 4% below consensus.

Research analysts

China Basic Materials

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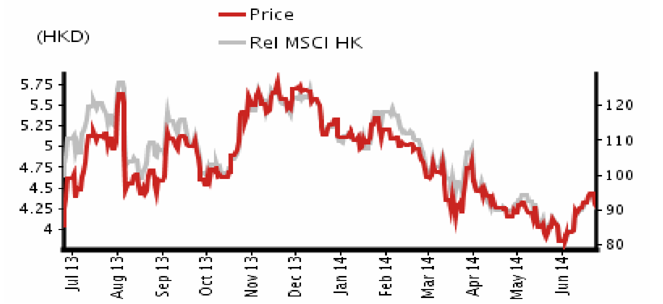
Year-end 31 Dec	FY13	FY14F		FY15F		FY16F	
Currency (HKD)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	16,970	20,165	18,203	23,469	19,324		20,922
Reported net profit (mn)	1,948	2,376	2,008	2,724	2,254		2,552
Normalised net profit (mn)	1,781	2,376	1,946	2,724	2,244		2,557
FD normalised EPS	37.87c	50.35c	41.43c	57.73c	47.79c		54.44c
FD norm. EPS growth (%)	48.0	20.8	9.4	14.7	15.3		13.9
FD normalised P/E (x)	11.4	N/A	10.4	N/A	9.0	N/A	7.9
EV/EBITDA (x)	11.5	N/A	10.6	N/A	9.3	N/A	7.8
Price/book (x)	1.2	N/A	1.1	N/A	1.0	N/A	1.0
Dividend yield (%)	3.4	N/A	3.5	N/A	3.9	N/A	4.4
ROE (%)	13.1	15.3	11.7	15.8	12.1		12.6
Net debt/equity (%)	62.7	57.8	59.4	51.1	52.2		45.2

Source: Company data, Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart

Key data on Lee & Man Paper Manufacturing

Relative performance chart



Source: Thomson Reuters, Nomura research

Notes:

Performance

(%)	1M	3M	12M		
Absolute (HKD)	6.7	0.2	4.6	M cap (USDmn)	2,602.5
Absolute (USD)	6.7	0.3	4.7	Free float (%)	30.4
Rel to MSCI HK	7.9	-5.8	-8.6	3-mth ADT (USDmn)	2.7

Income statement (HKDmn)

Year-end 31 Dec	FY12	FY13	FY14F	FY15F	FY16F
Revenue	14,716	16,970	18,203	19,324	20,922
Cost of goods sold	-12,647	-14,069	-14,996	-15,715	-16,720
Gross profit	2,068	2,902	3,207	3,609	4,202
SG&A	-842	-934	-1,038	-1,102	-1,193
Employee share expense					
Operating profit	1,226	1,968	2,169	2,507	3,008
EBITDA	1,792	2,647	2,898	3,267	3,799
Depreciation	-566	-680	-730	-760	-791
Amortisation					
EBIT	1,226	1,968	2,169	2,507	3,008
Net interest expense	-86	-139	-151	-150	-297
Associates & JCEs	0	0	0	0	0
Other income	253	196	196	196	196
Earnings before tax	1,393	2,025	2,213	2,552	2,907
Income tax	-185	-244	-267	-308	-351
Net profit after tax	1,208	1,781	1,946	2,244	2,557
Minority interests	0	0	0	0	0
Other items					
Preferred dividends					
Normalised NPAT	1,208	1,781	1,946	2,244	2,557
Extraordinary items	143	167	62	10	-5
Reported NPAT	1,351	1,948	2,008	2,254	2,552
Dividends	-460	-686	-703	-789	-893
Transfer to reserves	891	1,263	1,305	1,465	1,659
Valuations and ratios					
Reported P/E (x)	15.0	10.4	10.1	9.0	7.9
Normalised P/E (x)	16.7	11.4	10.4	9.0	7.9
FD normalised P/E (x)	16.9	11.4	10.4	9.0	7.9
Dividend yield (%)	2.3	3.4	3.5	3.9	4.4
Price/cashflow (x)	13.0	15.9	11.1	9.3	8.6
Price/book (x)	1.5	1.2	1.1	1.0	1.0
EV/EBITDA (x)	16.2	11.5	10.6	9.3	7.8
EV/EBIT (x)	23.7	15.5	14.2	12.1	9.9
Gross margin (%)	14.1	17.1	17.6	18.7	20.1
EBITDA margin (%)	12.2	15.6	15.9	16.9	18.2
EBIT margin (%)	8.3	11.6	11.9	13.0	14.4
Net margin (%)	9.2	11.5	11.0	11.7	12.2
Effective tax rate (%)	13.3	12.1	12.1	12.1	12.1
Dividend payout (%)	34.1	35.2	35.0	35.0	35.0
ROE (%)	na	13.1	11.7	12.1	12.6
ROA (pretax %)	na	7.0	6.9	7.6	8.7
Growth (%)					
Revenue	4.9	15.3	7.3	6.2	8.3
EBITDA	-25.5	47.8	9.5	12.7	16.3
Normalised EPS	-29.6	47.3	9.2	15.3	13.9
Normalised FDEPS	-27.1	48.0	9.4	15.3	13.9

Source: Company data, Nomura estimates

Cashflow statement (HKDmn)

Year-end 31 Dec	FY12	FY13	FY14F	FY15F	FY16F
EBITDA	1,792	2,647	2,898	3,267	3,799
Change in working capital	-449	-314	-412	-373	-539
Other operating cashflow	223	-1,061	-660	-722	-899
Cashflow from operations	1,566	1,272	1,827	2,172	2,361
Capital expenditure	-2,879	-2,272	-1,660	-1,000	-1,000
Free cashflow	-1,313	-1,000	167	1,172	1,361
Reduction in investments		0	0	0	0
Net acquisitions					
Dec in other LT assets		-217	-27	-28	-29
Inc in other LT liabilities		168	0	0	0
Adjustments	35	-8	27	28	29
CF after investing acts	-1,278	-1,056	167	1,172	1,361
Cash dividends	-600	-578	-514	-703	-789
Equity issue	0	-184	0	0	0
Debt issue	1,444	1,857	-72	-30	-336
Convertible debt issue					
Others	-61	-59	0	0	0
CF from financial acts	782	1,035	-586	-732	-1,125
Net cashflow	-497	-21	-419	439	236
Beginning cash	1,229	731	711	291	730
Ending cash	732	711	291	730	966
Ending net debt	8,827	10,249	10,596	10,127	9,555

Balance sheet (HKDmn)

As at 31 Dec	FY12	FY13	FY14F	FY15F	FY16F
Cash & equivalents	731	711	291	730	966
Marketable securities					
Accounts receivable	4,033	4,291	4,603	4,886	5,290
Inventories	3,124	3,123	3,340	3,526	3,768
Other current assets	1,242	1,336	1,432	1,520	1,644
Total current assets	9,130	9,460	9,666	10,662	11,668
LT investments					
Fixed assets	16,923	20,830	22,231	22,912	23,536
Goodwill					
Other intangible assets	0	0	0	0	0
Other LT assets	688	905	932	960	988
Total assets	26,741	31,195	32,829	34,534	36,193
Short-term debt	2,896	5,661	5,589	6,089	6,230
Accounts payable	2,455	2,175	2,319	2,430	2,586
Other current liabilities	756	1,072	1,142	1,215	1,290
Total current liabilities	6,106	8,909	9,050	9,734	10,106
Long-term debt	6,664	5,298	5,298	4,768	4,291
Convertible debt	0	0	0	0	0
Other LT liabilities	473	641	641	641	641
Total liabilities	13,243	14,848	14,990	15,144	15,039
Minority interest	0	0	0	0	0
Preferred stock					
Common stock	117	117	117	117	117
Retained earnings	5,686	6,949	8,596	10,061	11,720
Proposed dividends	460	686	531	617	722
Other equity and reserves	7,234	8,595	8,595	8,595	8,595
Total shareholders' equity	13,498	16,346	17,840	19,391	21,154
Total equity & liabilities	26,741	31,195	32,830	34,535	36,193
Liquidity (x)					
Current ratio	1.50	1.06	1.07	1.10	1.15
Interest cover	14.3	14.2	14.3	16.7	10.1
Leverage					
Net debt/EBITDA (x)	4.93	3.87	3.66	3.10	2.52
Net debt/equity (%)	65.4	62.7	59.4	52.2	45.2
Per share					
Reported EPS (HKD)	28.82c	41.51c	42.75c	48.00c	54.34c
Norm EPS (HKD)	25.76c	37.94c	41.43c	47.79c	54.44c
FD norm EPS (HKD)	25.58c	37.87c	41.43c	47.79c	54.44c
BVPS (HKD)	2.88	3.48	3.80	4.13	4.50
DPS (HKD)	0.10	0.15	0.15	0.17	0.19
Activity (days)					
Days receivable	87.6	89.5	89.2	89.6	89.0
Days inventory	87.9	81.0	78.7	79.7	79.8
Days payable	61.8	60.1	54.7	55.2	54.9
Cash cycle	113.7	110.5	113.1	114.2	113.9

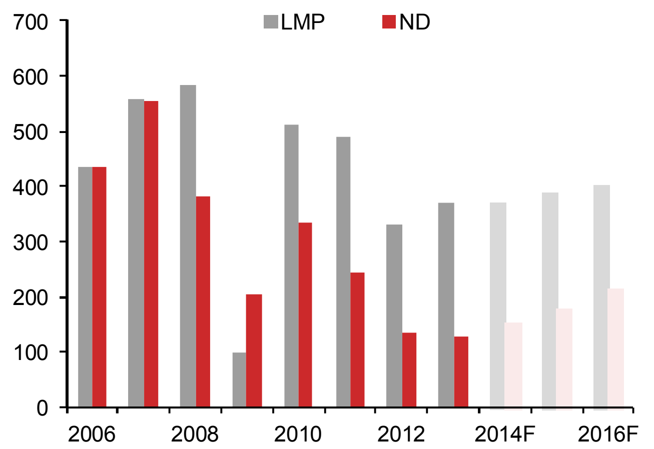
Source: Company data, Nomura estimates

Quality play with stable earnings and stronger balance sheet

As the second-largest containerboard manufacturer in China, Lee & Man Paper (LMP) is known to be more prudent on capacity expansion compared to its peers and hence has a relatively stronger balance sheet and a more stable and profitable earnings profile.

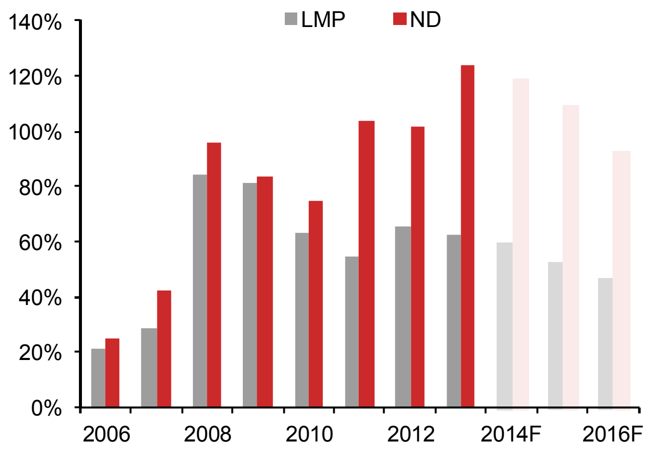
As at the end of 2013, LMP's net gearing ratio was 63%, compared to 124% for ND in FY13 (year-end June). With its relative stronger balance sheet (and hence lower interest expenses burden), LMP has consistently delivered stronger pre-exceptional net profit per tonne than ND over the past few years. Although we expect LMP to continue to deliver higher pre-exceptional net profit per tonne in the next three years, we expect the gap between the two companies to narrow going forward as ND refocuses on balance sheet control.

Fig. 86: Comparison of pre-exceptional earnings per tonne trends



Source: Company data, Nomura estimates, ND in CNY/tonne, LMP in HKD/tonne.

Fig. 87: Comparison of net gearing ratio

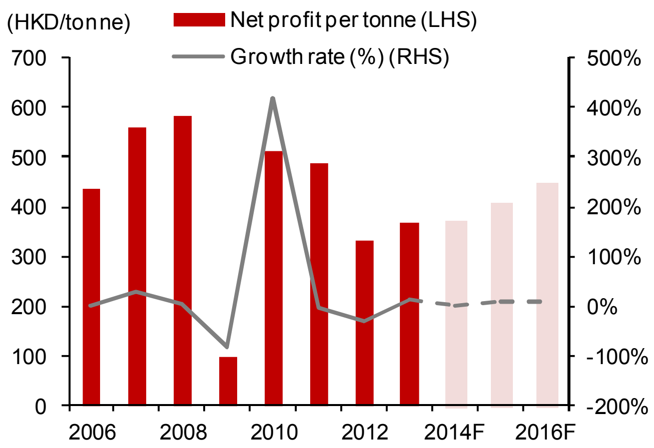


Source: Company data, Nomura estimates

Pre-exceptional net profit to see CAGR of 13% growth

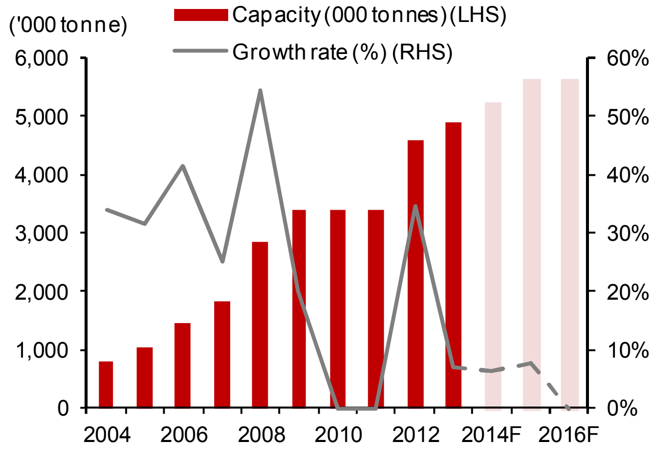
As at end-2013, LMP operated 18 machines in China, compared to 37 machines operated by ND over the same period. LMP plans to bring PM19 online in Vietnam in 2015 and PM20 is likely to commence operation in 2H2014. Although there are some more capacities in the pipeline (PM21-23), their location and timelines on completion and commencement have not been confirmed, and we believe management will continue with its disciplined capacity addition. We expect its pre-exceptional net profit to see a CAGR of 13% during 2014-2016F, and pre-exceptional net profit per tonne to see a CAGR of 7% during the same period. This compares to ND's pre-exceptional net profit CAGR and pre-exceptional net profit per tonne CAGR of 22% and 16%, respectively, during FY14-16F, on our estimates.

Fig. 88: LMP: Pre-exceptional net profit per tonne growth trends



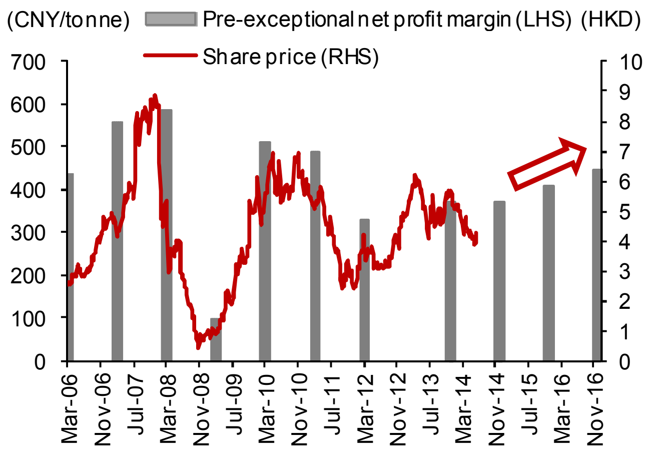
Source: Company data, Nomura estimates

Fig. 89: LMP: Capacity growth trends



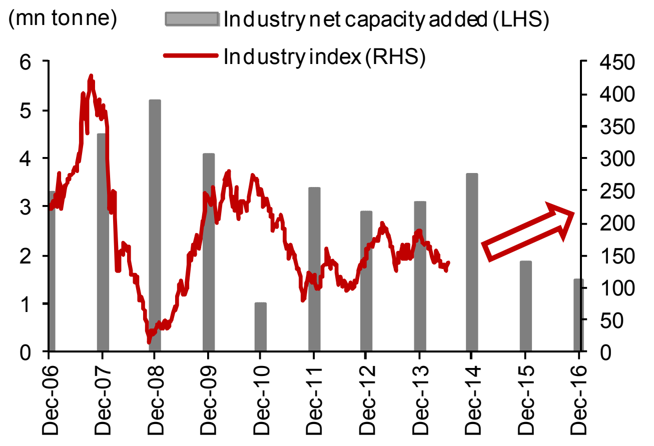
Source: Company data, Nomura estimates

Fig. 90: Share price vs pre-exceptional net profit per tonne



Source: Bloomberg, Nomura estimates

Fig. 91: Industry Share price vs industry net added capacity



Source: Bloomberg, Nomura estimates

Assume coverage with Buy and TP of HKD5.90

Following transfer of analyst coverage, we assume coverage of LMP and maintain our Buy rating.

We revise downwards our earnings estimates due to weaker-than-expected ASP growth in 2013 and 2014 YTD. We are currently looking for ASPs to decline by 1% (vs previous expectation of +4%) in 2014F, and increase by 1% (vs previous expectation of +6%) in 2015F and 4% in 2016F.

Fig. 92: Changes in earnings estimates

	FY2013A			FY2014F			FY2015F			FY2016F		
(HKD mn)	Acutal	Old	chg %	New	Old	chg %	New	Old	chg %	New	Old	chg%
Revenue	16,970	17,561	(3.4)	18,203	20,165	(9.7)	19,324	23,469	(17.7)	20,922	-	n.a
EBIT	1,968	1,980	(0.6)	2,169	2,498	(13.2)	2,507	2,948	(15.0)	3,008	-	n.a
Profit before taxation	2,025	2,264	(10.6)	2,213	2,748	(19.5)	2,552	3,170	(19.5)	2,907	-	n.a
Pre-exceptional profit	**1,781**	**1,968**	**(9.5)**	**1,946**	**2,376**	**(18.1)**	**2,244**	**2,724**	**(17.6)**	**2,557**	**-**	**n.a**
Net profit	**1,948**	**1,968**	**(1.0)**	**2,008**	**2,376**	**(15.5)**	**2,254**	**2,724**	**(17.3)**	**2,552**	**-**	**n.a**

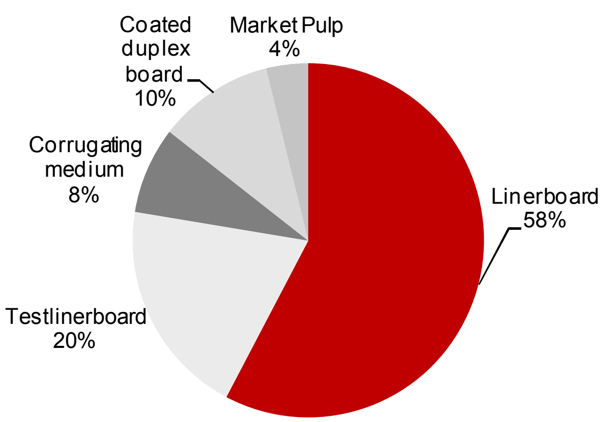
Source: Company data, Nomura estimates

In comparison to ND, LMP's product mix is more focused on high margin product - linerboard, which contributed 81% to the group's overall revenues in 2013, compared to 49% for ND (in FY13).

On costs breakdown, however, LMP spent ~70% of its operating costs in 2013 on recovered paper, compared to only 58% for ND in FY13.

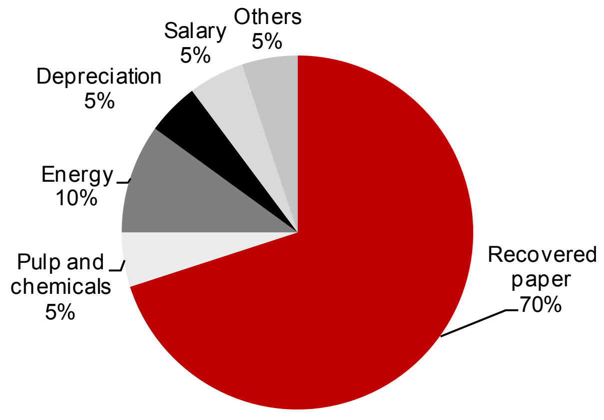
In general, LMP's business is more concentrated either in terms of product mix or in terms of geographic location. We note that LMP allocated 59% of its capacity in Guangdong province, compared to ND's 37%. Hence, in other words, ND's business model is more diversified in terms of both product and location.

Fig. 93: Revenue breakdown by product in 2013



Source: Company data

Fig. 94: Cost breakdown in 2013



Source: Company data

Valuation methodology and risks

We value LMP at HKD5.90/share based on its mid-cycle valuation of 12.3x P/E on 2015F EPS of HKD0.48. We believe the stock should not trade at one-standard deviation below mid-cycle as we expect its earnings to see a CAGR of 13% in 2014-2016F. Historically, the stock has traded at one-standard deviation below mid-cycle only when its pre-exceptional earnings saw a decline of 29% in 2012.

Our TP of HKD5.90 translates to 1.4x 2015F P/B on 2015F book value of HKD4.13.

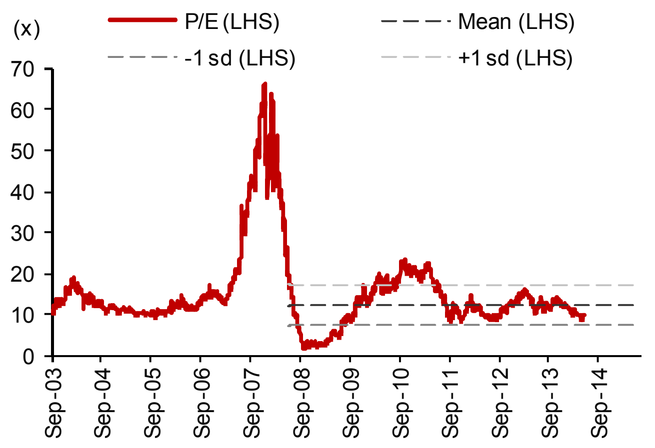
Although LMP is likely to report lower EPS CAGR of 13% compared to ND's EPS CAGR of 22%, we value LMP based on mid-cycle valuation compared to ND's half-standard deviation below mid-cycle in order to reflect LMP's much stronger balance sheet and steady earnings growth profile with less sensitivity to change in ASP, interest rate and CNY appreciation against USD.

Investment risks

Risks to our Buy recommendation include:

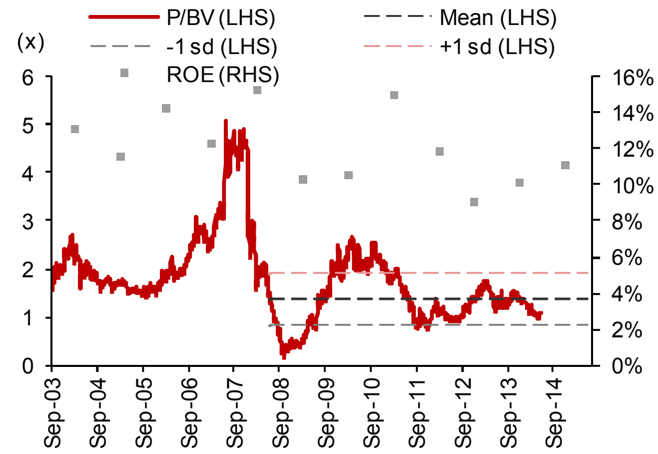
1. Higher-than-expected capacity coming online in the next two years, compared to our current estimate of substantial decline in newly added capacities in 2015-16F.
2. Much weaker-than-expected demand amid a slower economy in China.
3. Higher-than-expected CNY depreciation, which may also drag down earnings; we are currently expecting CNY to depreciate slightly by 0.3% in 2015F.
4. Increasing financial leverage for aggressive expansion.

Fig. 95: LMP: Forward P/E on pre-exceptional earnings



Source: Datastream, Nomura estimates

Fig. 96: LMP: Forward P/B vs ROE



Source: Datastream, Nomura estimates

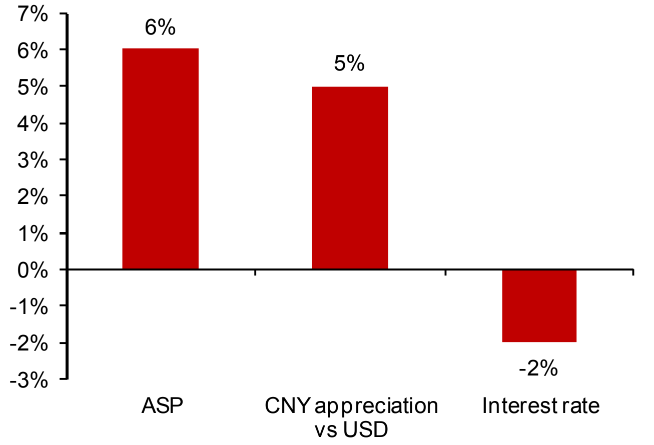
Sensitivity analysis

Similar to ND, LMP is also relatively sensitive to ASP change compared to a change in CNY appreciation against USD and a change in interest rates. However, we note that LMP is less sensitive to either ASP or interest rate change as compared to ND, which we believe may be due to its lower leverage compared to ND.

While LMP and ND are likely to see an earnings impact if CNY appreciates by 1%, we note that the currency impacts on both companies are different:

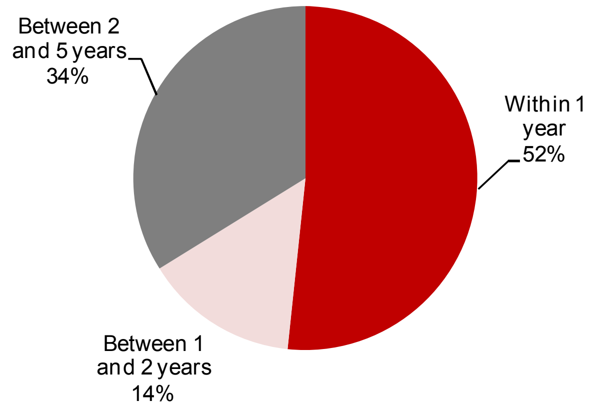
- For ND, the impact from CNY appreciation may come from debt, as around 55% of its debts is denominated in USD or HKD, while impact on revenue and costs may be limited, as most of them are denominated in CNY.
- On the contrary, CNY appreciation doesn't have any impact to LMP's debt given its accounting currency is in HKD and 100% of its debt is in either HKD or USD. However, given ~80-90% of its revenue is in CNY and most of its costs are in CNY as well, so the CNY appreciation may have an affect on LMP's revenues and costs.

Fig. 97: Sensitivity analysis for every 1% hike in ASP, CNY appreciation against USD, and interest rate in FY15F



Source: Nomura estimates

Fig. 98: Breakdown of debt in terms of maturity in FY2013



Source: Company data

NOMURA

Nine Dragons Paper Holdings

2689.HK 2689 HK

EQUITY: SMALL AND MID CAPS

Ambitious national play

From network expansion to balance sheet focus

Action: Assuming coverage at Buy; biggest beneficiary from ASP recovery relative to peers

Being the largest containerboard manufacturer in China (according to FAO) and having completed its national-wide network construction (hence peak out of capex cycle and gearing ratio), we believe Nine Dragons (ND) is poised to benefit from the industry's potential recovery with more favourable supply/demand dynamics after a substantial decline in upcoming supplies in the next two years. In the long term, Nine Dragons should continue to gain market share as the industry continues to consolidate as smaller paper mills are being forced to shut if they are unable to adhere to the stricter environmental protection rules and anti-corruption initiatives set in place by the government. Although its high net gearing ratio (124% in FY13) still seems to be a market concern, we note that management aims to reduce this to 70-80% by FY16F (we conservatively look for 94% in FY16F) and there are unlikely to be any new projects in the pipeline apart from what has already been announced. Management indicated that new capacity will only be added when the net gearing ratio drops to 70-80%, which may indicate the company's determination in bringing down its net gearing ratio. With c.50% of its total interest-bearing debt are in fixed interest rate, we estimate for every 1pp change in interest rates, net profit may change by 6% FY15F.

Catalysts: Possible ASP hike in FY15F and capacity consolidation due to closures following stricter adherence of environmental protection rules

Valuation: TP of HKD7.1 based on 12.7x 2015F P/E

As we look for Nine Dragons' pre-exceptional net profit to show an increased CAGR of 22% over the next three years, the stock should not trade at one-standard deviation below mid-cycle. Our TP of HKD7.1 is based on 12.7x 2015F P/E (EPS of CNY0.44) which is a half-standard deviation below mid-cycle.

Year-end 30 Jun	FY13		FY14F		FY15F		FY16F
Currency (CNY)	Actual	Old	New	Old	New	Old	New
Revenue (mn)	28,739	35,473	29,727	39,308	30,722		33,446
Reported net profit (mn)	1,561	2,509	1,802	2,988	2,020		2,493
Normalised net profit (mn)	1,358	2,509	1,723	2,988	2,065		2,493
FD normalised EPS	29.12c	53.77c	36.94c	64.05c	44.27c		53.45c
FD norm. EPS growth (%)	13.6	51.9	26.9	19.1	19.8		20.7
FD normalised P/E (x)	14.6	N/A	11.3	N/A	9.4	N/A	7.8
EV/EBITDA (x)	10.3	N/A	9.4	N/A	8.6	N/A	7.6
Price/book (x)	0.9	N/A	0.8	N/A	0.8	N/A	0.7
Dividend yield (%)	2.3	N/A	2.8	N/A	3.1	N/A	3.8
ROE (%)	7.0	10.5	7.7	11.5	8.1		9.4
Net debt/equity (%)	124.2	85.3	119.3	68.1	109.5		94.1

Source: Company data, Nomura estimates

Key company data: See page 2 for company data and detailed price/index chart

Global Markets Research

26 June 2014

Rating Remains	**Buy**
Target price Reduced from 10.00	HKD 7.10
Closing price 23 June 2014	HKD 5.28
Potential upside	+34.5%

Anchor themes

ASP growth momentum should resume from 2015F to 2016F, after a three-year downcycle, backed by more favourable supply/demand dynamics from 2015F amid a substantial capacity growth slowdown.

Nomura vs consensus

Our FY15F earnings is 13% lower than consensus as we are more conservative on the recovery and expect it to come gradually.

Research analysts

China Basic Materials

Shirley Lam - NIHK
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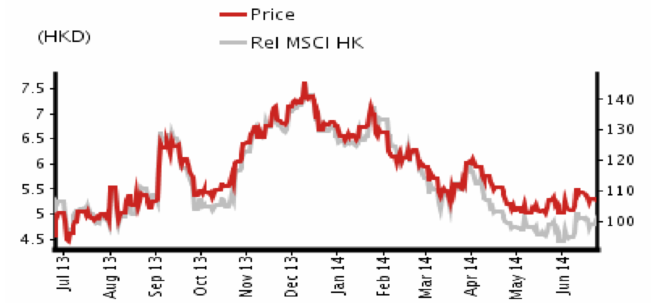
Key data on Nine Dragons Paper Holdings

Relative performance chart



Source: Thomson Reuters, Nomura research

Notes:

Performance

(%)	1M	3M	12M		
Absolute (HKD)	-0.2	-5.4	11.6	M cap (USDmn)	3,178.8
Absolute (USD)	-0.1	-5.3	11.7	Free float (%)	35.9
Rel to MSCI HK	1.0	-11.4	-1.6	3-mth ADT (USDmn)	5.3

Income statement (CNYmn)

Year-end 30 Jun	FY12	FY13	FY14F	FY15F	FY16F
Revenue	27,170	28,739	29,727	30,722	33,446
Cost of goods sold	-22,832	-24,133	-25,023	-25,679	-27,609
Gross profit	4,337	4,606	4,705	5,043	5,837
SG&A	-1,330	-1,480	-1,293	-1,336	-1,655
Employee share expense					
Operating profit	3,007	3,127	3,412	3,707	4,182
EBITDA	4,344	4,766	5,162	5,541	6,049
Depreciation	-1,336	-1,640	-1,750	-1,834	-1,867
Amortisation					
EBIT	3,007	3,127	3,412	3,707	4,182
Net interest expense	-1,450	-1,488	-1,434	-1,312	-1,258
Associates & JCEs	0	1	30	32	33
Other income	127	175	186	195	202
Earnings before tax	1,684	1,814	2,193	2,622	3,160
Income tax	-450	-426	-439	-524	-632
Net profit after tax	1,235	1,388	1,754	2,097	2,528
Minority interests	-38	-30	-31	-32	-35
Other items					
Preferred dividends					
Normalised NPAT	1,196	1,358	1,723	2,065	2,493
Extraordinary items	224	203	79	-46	0
Reported NPAT	1,420	1,561	1,802	2,020	2,493
Dividends	-326	-466	-541	-606	-748
Transfer to reserves	1,094	1,094	1,262	1,414	1,745
Valuations and ratios					
Reported P/E (x)	14.1	12.7	10.8	9.7	7.8
Normalised P/E (x)	16.8	14.6	11.3	9.4	7.8
FD normalised P/E (x)	16.8	14.6	11.3	9.4	7.8
Dividend yield (%)	1.6	2.3	2.8	3.1	3.8
Price/cashflow (x)	5.0	na	5.9	5.2	5.2
Price/book (x)	0.9	0.9	0.8	0.8	0.7
EV/EBITDA (x)	9.8	10.3	9.4	8.6	7.6
EV/EBIT (x)	14.1	15.7	14.2	12.9	10.9
Gross margin (%)	16.0	16.0	15.8	16.4	17.5
EBITDA margin (%)	16.0	16.6	17.4	18.0	18.1
EBIT margin (%)	11.1	10.9	11.5	12.1	12.5
Net margin (%)	5.2	5.4	6.1	6.6	7.5
Effective tax rate (%)	26.7	23.5	20.0	20.0	20.0
Dividend payout (%)	23.0	29.9	30.0	30.0	30.0
ROE (%)	na	7.0	7.7	8.1	9.4
ROA (pretax %)	na	5.6	5.8	6.1	6.8
Growth (%)					
Revenue	11.4	5.8	3.4	3.3	8.9
EBITDA	6.5	9.7	8.3	7.3	9.2
Normalised EPS	-36.0	13.5	26.9	19.8	20.7
Normalised FDEPS	-27.8	13.6	26.9	19.8	20.7

Source: Company data, Nomura estimates

Cashflow statement (CNYmn)

Year-end 30 Jun	FY12	FY13	FY14F	FY15F	FY16F
EBITDA	4,344	4,766	5,162	5,541	6,049
Change in working capital	1,646	-5,554	-220	-162	-670
Other operating cashflow	-1,969	-916	-1,652	-1,592	-1,594
Cashflow from operations	4,021	-1,703	3,290	3,786	3,786
Capital expenditure	-4,577	-4,445	-3,317	-2,500	-1,000
Free cashflow	-557	-6,148	-27	1,286	2,786
Reduction in investments		0	0	0	0
Net acquisitions	0	0	0	0	0
Dec in other LT assets		-25	-2	-2	-2
Inc in other LT liabilities		210	0	0	0
Adjustments	349	-107	2	2	2
CF after investing acts	-207	-6,070	-27	1,286	2,786
Cash dividends	-466	-325	-466	-541	-606
Equity issue	0	0	0	0	0
Debt issue	2,579	8,091	-4,616	-372	-295
Convertible debt issue					
Others	-41	-44	0	0	0
CF from financial acts	2,072	7,721	-5,083	-913	-901
Net cashflow	1,864	1,651	-5,109	373	1,885
Beginning cash	2,500	4,365	6,015	906	1,279
Ending cash	4,364	6,015	906	1,279	3,164
Ending net debt	21,923	28,291	28,784	28,039	25,859

Balance sheet (CNYmn)

As at 30 Jun	FY12	FY13	FY14F	FY15F	FY16F
Cash & equivalents	4,365	6,015	906	1,279	3,164
Marketable securities					
Accounts receivable	2,921	5,600	5,793	5,987	6,518
Inventories	4,196	3,779	3,921	4,033	4,369
Other current assets	2,557	2,550	2,636	2,722	2,958
Total current assets	14,038	17,944	13,255	14,021	17,009
LT investments					
Fixed assets	42,361	44,691	46,329	46,931	46,001
Goodwill					
Other intangible assets	1,788	1,748	1,748	1,748	1,748
Other LT assets	25	50	52	53	55
Total assets	58,212	64,434	61,385	62,754	64,814
Short-term debt	5,102	8,616	11,372	8,295	14,007
Accounts payable	5,731	3,404	3,529	3,622	3,894
Other current liabilities	2,998	2,027	2,102	2,240	2,401
Total current liabilities	13,831	14,047	17,003	14,157	20,301
Long-term debt	21,192	25,690	18,318	21,023	15,016
Convertible debt					
Other LT liabilities	1,206	1,416	1,416	1,416	1,416
Total liabilities	36,230	41,153	36,737	36,595	36,733
Minority interest	431	497	528	561	596
Preferred stock					
Common stock	9,202	9,205	9,205	9,205	9,205
Retained earnings	10,933	12,028	13,289	14,703	16,448
Proposed dividends	233	373	447	513	655
Other equity and reserves	1,182	1,178	1,178	1,178	1,178
Total shareholders' equity	21,551	22,784	24,119	25,598	27,485
Total equity & liabilities	58,212	64,434	61,385	62,754	64,814
Liquidity (x)					
Current ratio	1.01	1.28	0.78	0.99	0.84
Interest cover	2.1	2.1	2.4	2.8	3.3
Leverage					
Net debt/EBITDA (x)	5.05	5.94	5.58	5.06	4.27
Net debt/equity (%)	101.7	124.2	119.3	109.5	94.1
Per share					
Reported EPS (CNY)	30.46c	33.47c	38.64c	43.29c	53.45c
Norm EPS (CNY)	25.65c	29.12c	36.94c	44.27c	53.45c
FD norm EPS (CNY)	25.64c	29.12c	36.94c	44.27c	53.45c
BVPS (CNY)	4.62	4.88	5.17	5.49	5.89
DPS (CNY)	0.07	0.10	0.12	0.13	0.16
Activity (days)					
Days receivable	43.1	54.1	69.9	70.0	68.4
Days inventory	54.0	60.3	56.2	56.5	55.7
Days payable	64.3	69.1	50.6	50.8	49.8
Cash cycle	32.8	45.3	75.5	75.7	74.3

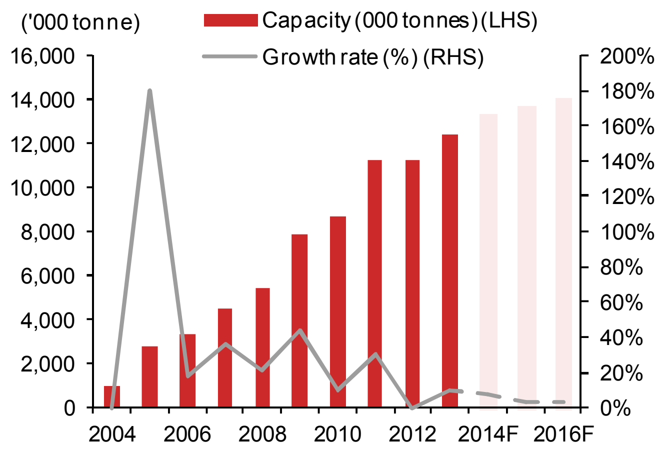
Source: Company data, Nomura estimates

From network expansion to balance sheet focus

After Nine Dragons (ND) completed its national network construction with a total of eight operation bases located in different parts of China (ranging from southern to northern and from eastern to western), management now aims to take a break on capacity expansion and refocus on strengthening the company's balance sheet for future expansion opportunities.

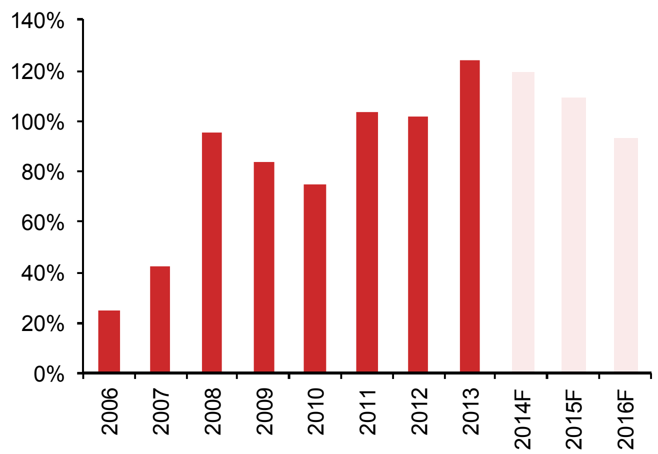
Starting from just 200k tonnes pa in 1998, the group grew its capacity aggressively to 12.55mn tonnes pa (including containerboard, printing and writing paper and pulps in China and Vietnam) by end-FY13. The expansion was accompanied by a rising gearing ratio to as high as 124% in FY13. Although capacity is slated to continue to grow into FY16 under the company's current plans, with three more projects in the pipeline – including Kraftlinerboard in Shenyang, scheduled to come online in June 2014; Kraftlinerboard in Vietnam, scheduled to commence operations in June 2015; and Testlinerboard in Shenyang, scheduled to come at end-2016 – management confirmed in June 2013 that it was shifting the group's strategy to focus more on strengthening the balance sheet. As per the announcement, management aims to bring the net gearing ratio to 70-80% by end-FY16F, compared with our current estimate of 93%.

Fig. 99: Capacity growth trends



Source: Company data, Nomura estimates

Fig. 100: Net gearing ratio trends

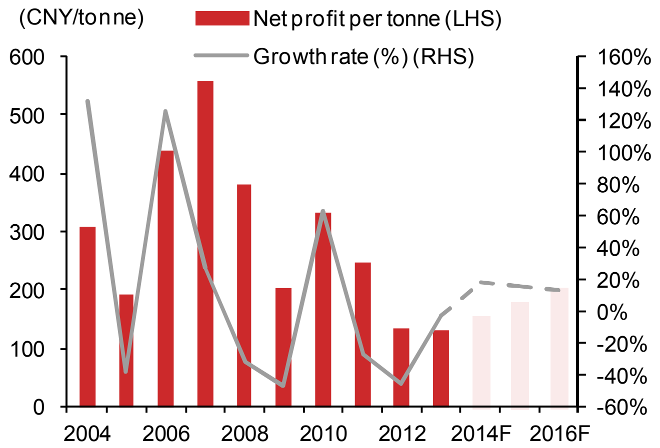


Source: Company data, Nomura estimates

Pre-exceptional net profit per tonne to see CAGR of 16%

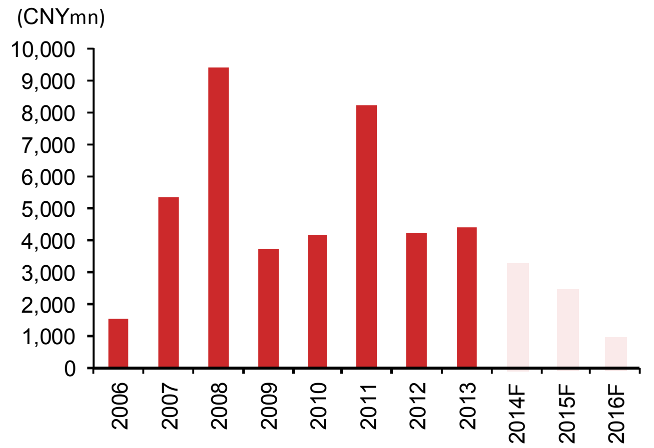
We believe management's focus on the balance sheet is positive for the group's earnings outlook, especially when we expect market demand to remain relatively weak. With the anticipated substantial decline in net added capacity in the industry, which should help the market to regain supply/demand balance from the current oversupply situation, and the reduction of interest expenses amid lower capex, Nine Dragons should be able to record a net profit per tonne CAGR of 16% over FY14-16F, on our estimates.

Fig. 101: Nine Dragons: Net profit per tonne



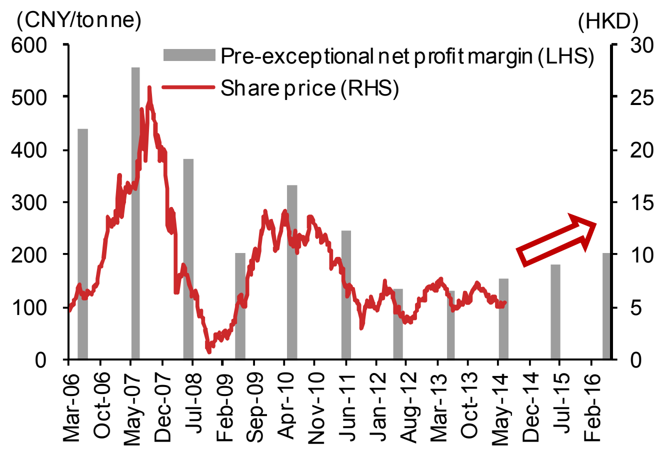
Source: Company data, Nomura estimates

Fig. 102: Nine Dragons: Capex



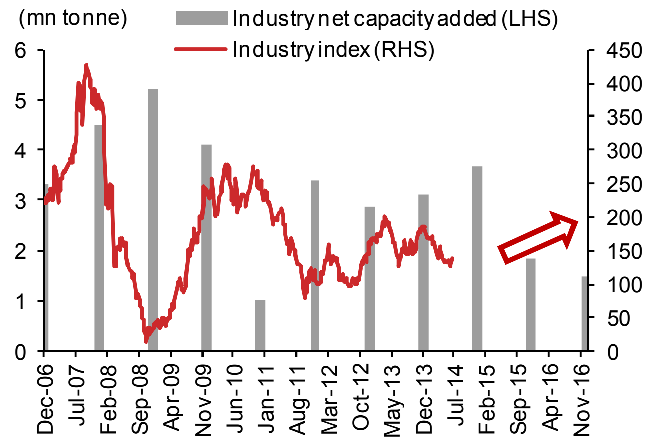
Source: Company data, Nomura estimates

Fig. 103: Nine Dragons: Share price vs pre-exceptional net profit per tonne



Source: Bloomberg, Company data, Nomura estimates

Fig. 104: Industry index vs industry net added capacity



Source: Bloomberg, Umpaper, Nomura estimates. Note: Industry index is calculated using the average share prices of Nine Dragons and Lee & Man Paper

Assume coverage at Buy and HKD7.1 TP

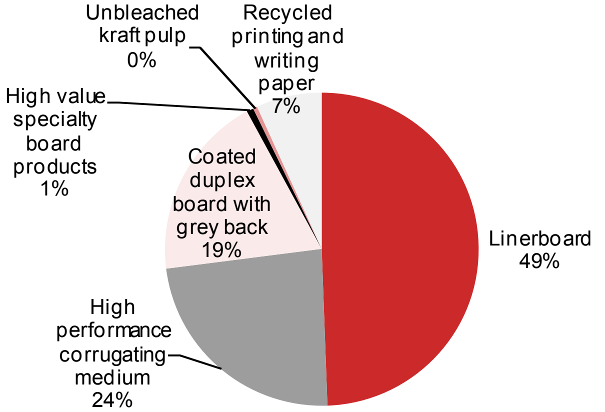
We assume coverage at Buy with a TP of HKD7.1. We revise down our earnings due to weaker-than-expected ASP growth in FY13 and YTD FY14F earnings. We now look for ASPs to decline by 4% (vs our previous forecast of +4%) in FY14F, remain flattish (vs our previous forecast of +5%) in FY15F, and increase by 2% in FY16F.

Fig. 105: Earnings revisions

	FY2013A			FY2014F			FY2015F			FY2016F		
(CNYmn)	Acutal	Old	chg %	New	Old	chg %	New	Old	chg %	New	Old	chg%
Revenue	28,739	30,924	(7.1)	29,727	35,473	(16.2)	30,722	39,308	(21.8)	33,446	-	n.a
EBIT	3,127	3,366	(7.1)	3,412	4,404	(22.5)	3,707	4,908	(24.5)	4,182	-	n.a
PBT	1,814	2,218	(18.2)	2,193	3,370	(34.9)	2,622	4,034	(35.0)	3,160	-	n.a
Pre-exceptional profit	**1,358**	**1,652**	**(17.8)**	**1,723**	**2,509**	**(31.3)**	**2,065**	**2,988**	**(30.9)**	**2,493**	**-**	**n.a**
Net profit	**1,561**	**1,652**	**(5.5)**	**1,802**	**2,509**	**(28.2)**	**2,020**	**2,988**	**(32.4)**	**2,493**	**-**	**n.a**

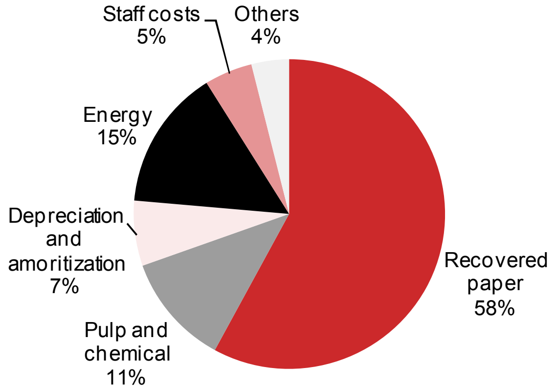
Source: Company data, Nomura estimates

Fig. 106: Revenue breakdown by product in 2013



Source: Company data

Fig. 107: Cost breakdown in 2013



Source: Company data, Nomura estimates

Our FY14F and FY15F net profits are below consensus by 6% and 13%, respectively, as we are more conservative on the demand recovery. However, the share price is already down by 32% from its peak of HKD7.72 on 25 March 2013 and now trades at one-standard deviation below mid-cycle. We think the market has the most concern over potentially slower-than-expected demand, which may have already been largely priced into the shares. We note that in September 2011 ND was trading at one-standard deviation below mid-cycle when its pre-exceptional net profit declined by 36% with pre-exceptional earnings per tonne slumped by 45% in FY12. Although we are conservative on ND's earnings, we still look for its pre-exceptional net profit to see CAGR of 22% over 2014-16F or pre-exceptional net profit per tonne to see CAGR of 16% over 2014-16F.

We value Nine Dragons at HKD7.1 /share based on a half standard deviation below mid-cycle valuation of 12.7x P/E on FY15F pre-exceptional EPS of CNY0.44 and an exchange rate of CNYHKD0.79. In our view, the stock should not trade at one-standard deviation below mid-cycle as we look for its earnings to see CAGR of 25% in 2014-16F. Historically the stock has traded at one-standard deviation below mid-cycle only when its pre-exceptional earnings declined by 36% in FY12.

Our TP of HKD7.1 translates into 1.0x 2015F P/BV (BVPS of CNY5.49), this compares to its mid-cycle valuation of 1.3x.

Investment risks:

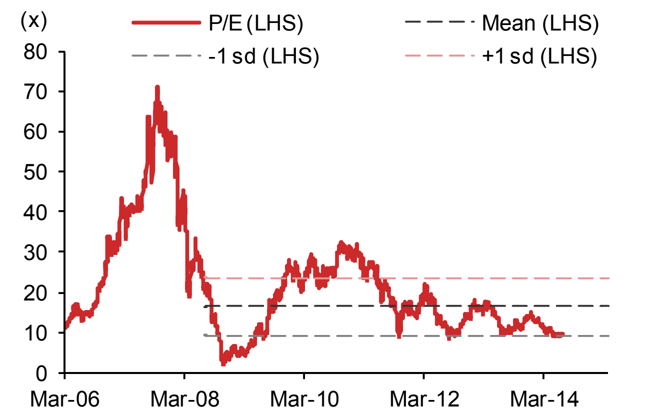
1) More-than-expected capacity coming online in the next two years vs our current estimate of a substantial decline in newly added capacities in FY15-16F;

2) Much weaker-than-expected demand amid a slower economy in China;

3) CNY depreciation, which may also drag on earnings; our economics team currently estimates CNY to depreciate slightly by 0.3% in 2015F.

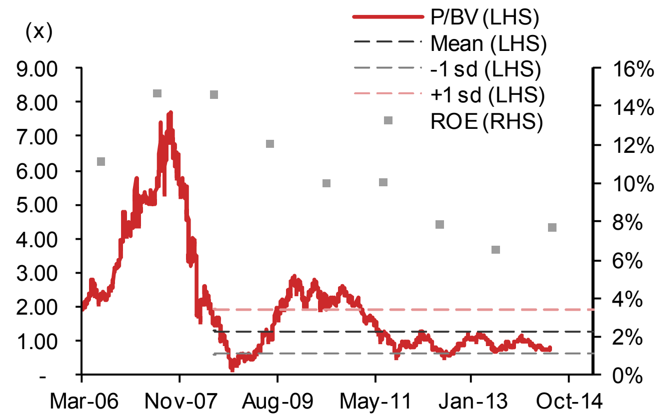
4) Continuous increase of financial leverage by management.

Fig. 108: Nine Dragons: Forward P/E on pre-exceptional earnings



Source: Bloomberg, Company data, Nomura estimates. Note: Mean and standard deviation are calculated using data since mid-2008

Fig. 109: Nine Dragons: Forward P/B vs ROE



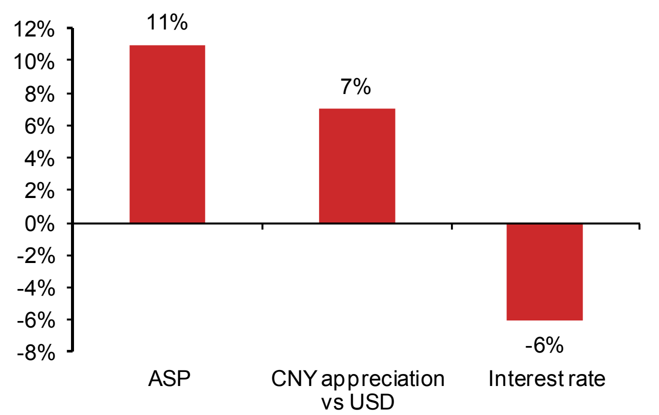
Source: Bloomberg, Company data, Nomura estimates. Note: Mean and standard deviation are calculated using data since mid-2008

Sensitivity analysis

Nine Dragons' net profit is more sensitive to ASP change compared to sensitivity to CNY appreciation again the USD and change of interest rates. Based on our forecasts, for every 1% change in ASP, FY15F net profit would change by 11%. For every 1% change in CNY appreciation against the USD, we estimate FY15F net profit would change by 7%, assuming 55% of its debt is denominated in USD and HKD. We estimate FY15F net profit would change by 6% if interest rates change by 1pp, assuming 50% of its debt has a floating interest rate.

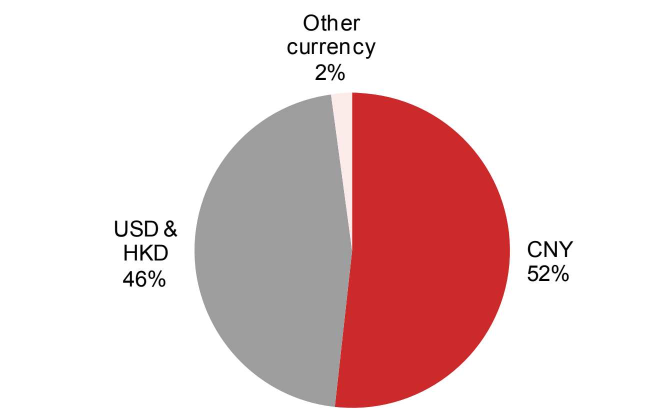
In view of the recent CNY depreciation, management has started hedging for its USD-denominated debt (ie, entered into forward contract to lock up exchange rate for USD-denominated debt which may have to be repaid in the near team). Management has reassured that the company will not participate in any complex hedging tools and will cap the hedging amount at less than 40% of its total USD-denominated debt.

Fig. 110: Sensitivity analysis for every 1% hike in ASP, CNY appreciation and interest rate in FY15F



Source: Nomura estimates

Fig. 111: Breakdown of debt in terms of currency in FY13



Source: Company data

Our TP of HKD7.1 is based on a half standard deviation below mid-cycle of 13x FY15F pre-exceptional EPS of CNY0.44 and an exchange rate of CNY:HKD0.79. Our TP also translates into 1.0x 2015F FP/BV (BVPS of CNY5.49), compared to its mid-cycle valuation of 1.3x.

Appendix A-1

Analyst Certification

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

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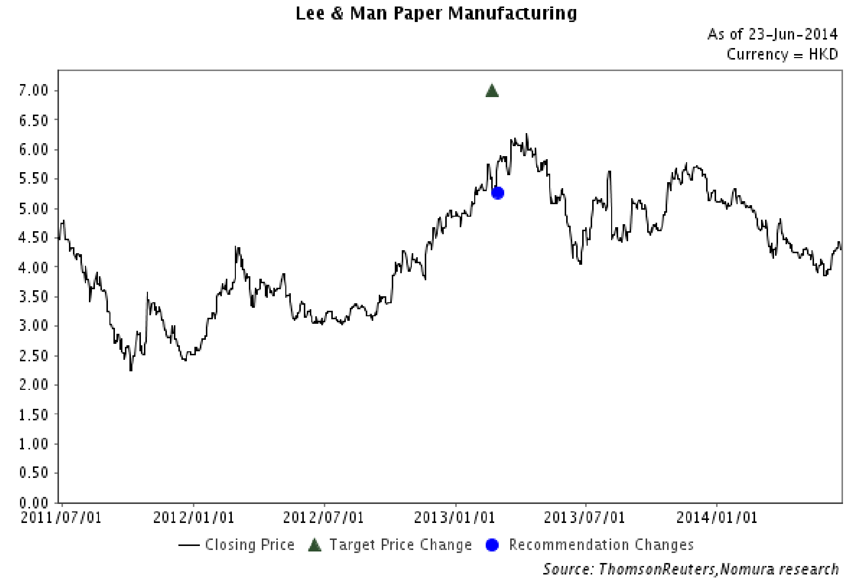
Materially mentioned issuers

Issuer	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
Lee & Man Paper Manufacturing	2314 HK	HKD 4.28	24-Jun-2014	Buy	N/A	
Nine Dragons Paper Holdings	2689 HK	HKD 5.30	24-Jun-2014	Buy	N/A	

Lee & Man Paper Manufacturing (2314 HK) **HKD 4.28 (24-Jun-2014)** Buy (Sector rating: N/A)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
21-Feb-13	Buy		5.37
21-Feb-13		7.00	5.37

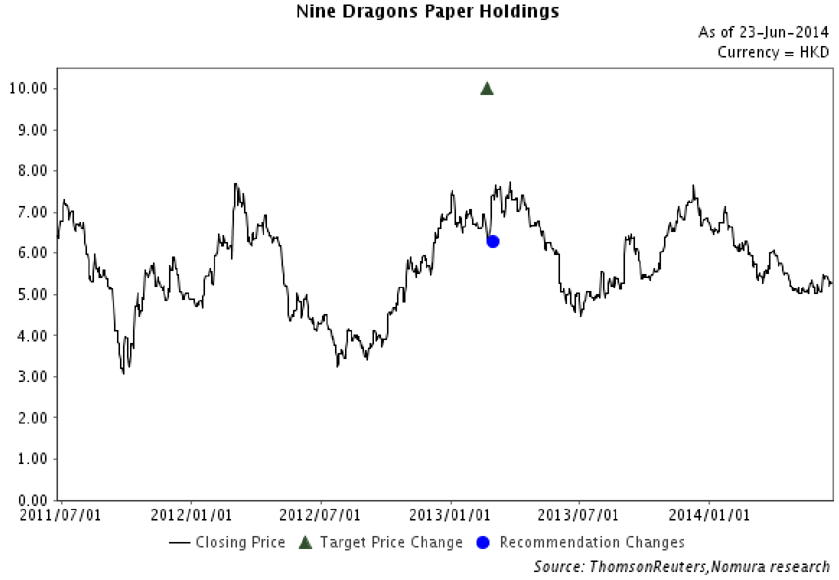
For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our TP of HKD5.90 is based on the mid-cycle valuation of 12.3x P/E on FY15F EPS of HKD0.48. Our TP also translates into 1.4x FY15F book value of HKD4.13. The benchmark index for this stock is MSCI HK.

Risks that may impede the achievement of the target price Downside risks include: 1) higher-than-expected capacity coming online in the next two years; 2)much weaker-than-expected demand; 3) higher-than-expected CNY depreciation; and 4) increasing financial leverage for aggressive expansion.

Nine Dragons Paper Holdings (2689 HK) **HKD 5.30 (24-Jun-2014)** Buy (Sector rating: N/A)

Rating and target price chart (three year history)



Date	Rating	Target price	Closing price
21-Feb-13	Buy		6.42
21-Feb-13		10.00	6.42

For explanation of ratings refer to the stock rating keys located after chart(s)

Valuation Methodology Our TP of HKD7.1 is based on a half standard deviation below mid-cycle of 12.7x FY15F pre-exceptional EPS of CNY0.44 and an exchange rate of CNY:HKD0.79. Our TP also translates into 1.0x 2015F FP/BV (BVPS of CNY5.49), compared to its mid-cycle valuation of 1.3x. The benchmark index for this stock is MSCI HK.

Risks that may impede the achievement of the target price Downside risks include: 1) industry over-capacity dragging on longer-than-expected owing to weaker-than-expected demand and/or resumption of a race to add new capacity; 2) mismanagement of working capital; and 3) ND's high financial leverage.

Rating and target price changes

Issuer	Ticker	Old stock rating	New stock rating	Old target price	New target price
Lee & Man Paper Manufacturing	2314 HK	Buy	Buy	HKD 7.00	HKD 5.90
Nine Dragons Paper Holdings	2689 HK	Buy	Buy	HKD 10.00	HKD 7.10

Important Disclosures

Online availability of research and conflict-of-interest disclosures

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11% have been assigned a Reduce rating which, for purposes of mandatory disclosures, are classified as a Sell rating; 26% of companies with this rating are investment banking clients of the Nomura Group*.

As at 31 March 2014. **The Nomura Group as defined in the Disclaimer section at the end of this report.*

Explanation of Nomura's equity research rating system in Europe, Middle East and Africa, US and Latin America, and Japan and Asia ex-Japan from 21 October 2013

The rating system is a relative system, indicating expected performance against a specific benchmark identified for each individual stock, subject to limited management discretion. An analyst's target price is an assessment of the current intrinsic fair value of the stock based on an appropriate valuation methodology determined by the analyst. Valuation methodologies include, but are not limited to, discounted cash flow analysis, expected return on equity and multiple analysis. Analysts may also indicate expected absolute upside/downside relative to the stated target price, defined as (target price - current price)/current price.

STOCKS

A rating of **'Buy'**, indicates that the analyst expects the stock to outperform the Benchmark over the next 12 months. A rating of **'Neutral'**, indicates that the analyst expects the stock to perform in line with the Benchmark over the next 12 months. A rating of **'Reduce'**, indicates that the analyst expects the stock to underperform the Benchmark over the next 12 months. A rating of **'Suspended'**, indicates that the rating, target price and estimates have been suspended temporarily to comply with applicable regulations and/or firm policies. Securities and/or companies that are labelled as **'Not rated'** or shown as **'No rating'** are not in regular research coverage. Investors should not expect continuing or additional information from Nomura relating to such securities and/or companies. Benchmarks are as follows: **United States/Europe/Asia ex-Japan**: please see valuation methodologies for explanations of relevant benchmarks for stocks, which can be accessed at: http://go.nomuranow.com/research/globalresearchportal/pages/disclosures/disclosures.aspx; **Global Emerging Markets (ex-Asia)**: MSCI Emerging Markets ex-Asia, unless otherwise stated in the valuation methodology; **Japan:** Russell/Nomura Large Cap.

SECTORS

A **'Bullish'** stance, indicates that the analyst expects the sector to outperform the Benchmark during the next 12 months. A **'Neutral'** stance, indicates that the analyst expects the sector to perform in line with the Benchmark during the next 12 months. A **'Bearish'** stance, indicates that the analyst expects the sector to underperform the Benchmark during the next 12 months. Sectors that are labelled as **'Not rated'** or shown as **'N/A'** are not assigned ratings. Benchmarks are as follows: **United States:** S&P 500; **Europe:** Dow Jones STOXX 600; **Global Emerging Markets (ex-Asia):** MSCI Emerging Markets ex-Asia. **Japan/Asia ex-Japan:** Sector ratings are not assigned.

Explanation of Nomura's equity research rating system in Japan and Asia ex-Japan prior to 21 October 2013

STOCKS

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