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Overweight Unchanged

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环保冲击 造纸: 行业前瞻

投资要点

超出预期的环保风暴 我们在之前的报告中曾多次提出，严格的环保政策会影响造纸行业。越来越多事实证明，环保调查影响了箱板纸的供给。在五月，我们看到华北，华中地区和福建省的很多造纸厂受到停产整顿等处罚措施。通过我们的渠道获悉，福建的 38 家箱板纸工厂和湖南的 15 家工厂被环保局勒令停业。值得注意的是我们发现在这其中很多是二线的造纸厂而并非小型造纸厂。我们认为对于二线造纸厂的惩处措施只是一个开始，在下半年将会出台更多严格的规章制度。例如，在许多省份 6 月展开的第三次针对合理周期性产业的环境调查中，颇受关注的是 7 月 1 日前所有的造纸企业都须获得污染排放许可，否则造纸厂将会面临停产或其他处罚。

热电、气电迫使小产能退出 另外一个影响造纸行业的环境规制是电力改造。我们发现东莞玖龙造纸厂的纸机为了从煤电转换到热电已经停产 40 天。其他一些竞争对手现在也开始使用自备的热电厂，而煤电已不允许为新产能所用。在上海，由于无法负担煤电转气电所带来的运营成本上升，台湾正隆纸业已经宣布在 2018 年撤出上海。现在，热电和气电的使用只是一个开始，我们相信一旦政府要求在造纸行业大量使用热电和气电，小型造纸厂将难以负荷，行业集中度将会提升。

结构性变化下的价格上涨 箱板纸和废旧瓦楞纸的价格在五月快速上升。在我们上一次的报告之后，箱板纸的价格攀升到了 100-200 元人民币/吨。在 6 月初，玖龙纸业持续调高他的平均销售价格至 50 元人民币/吨。由于旺季已渐渐来临，以及环境规制下的供给不足，我们预计在 17 年下半年纸品价格会持续上涨。我们对于造纸行业的供给侧动态保持长期乐观态度。根据官方统计，在新产能 2018 年中期投入运营之前，现阶段的生产无法满足消费。

维持超配 由于行业结构性改善，我们对箱板纸的纸价长期看好。我们对玖龙的目标价为港币 12.0 元，对应 1.5 倍前瞻市净率；我们给予理文的目标价为港币 8.2 元，对应 1.5 倍前瞻市净率。玖龙是我们在箱板纸行业的首选。

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Our channel checks find evidence of more paper mills halting production across China, as tougher environmental policy is enforced. In particular, we highlight that it is not only the small mills which are closing, as we previously anticipated, but also some mid-range paper producers. The findings reaffirm our view that the paper and packaging industry will undergo a significant process of consolidation, and we remain Overweight the sector.

New clampdown. We found a number of paper mills ceased production in northern and central Chinese regions and Fujian Province in May, following regulatory injunctions. Our channel checks reveal 38 containerboard manufacturers have been closed down by the local environment bureau in Fujian, as well as some 15 mills in Hunan Province. In particular, we note that the shutdowns have extended to tier-two paper producers, rather than just small mills. We believe sanctions on these larger mills marks a beginning of a broadened campaign to suppress output and an explicit policy to this effect may be released later this year. We note that the latest round of government on-the-ground environmental inspections of selected industries has extended to a large number of regions so far in June and that in this current round the inspections are focused primarily on paper companies' pollutant discharge approvals. Those paper mills without permits to discharge pollutants will have to suspend production from 1 July and face additional penalties.

Power restrictions. A new source of environmental regulation impact on the containerboard industry are incoming power policies restricting use of relatively low-cost coal-fired power. We found that one of paper machine in Nine Dragons Paper Holdings' (2689:HK – BUY) Dongguan (Guangdong Province) –based paper plants has halted production for 40 days to switch from coal-fired power to a thermal power source, and that a number of the firm's competitors have been developing in-house power supply in their capacity additions as paper mills are now barred from using coal-fired power for new capacity. In Shanghai, Taiwan Hung Lung Paper's plant, with a c.450,000t annual capacity) announced it will close in 2018 due rising operating cost of using gas-fired power. We expect the government to require widespread use of non-coal-fired sources of power in the paper industry, at which point an increasing number of small mills will be forced to shut up shop, raising industry concentration.

Price hikes throughout structural change. Containerboard and old corrugated container (OCC) prices rose rapidly in May. Since our latest NDP report, containerboard prices have risen another Rmb100-200/t. Nine Dragons Paper raised its average selling price Rmb50/t in early June. As the peak season approaches, and supply remains constrained given the tightening environmental regulations, we expect continued price hikes throughout 2H17. We retain our positive long-term view that tighter supply and steady growth in demand will lift prices. Based on official statistics, current production (until new capacity is scheduled to come online in mid-2018) is not sufficient to support current levels of consumption.

Remain Overweight. As the paper industry structure improves, we are bullish on the long-term outlook of containerboard paper leading firms. Our top pick remains Nine Dragons Paper, with a target price of HK\$12.00 (1.5x 17E PB); we also like Lee & Man Paper Manufacturing (2314:HK – outperform) with a target price of HK\$8.20 (1.5x 17E PB).

Environmental impact

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Fig 1: Full scale environment investigation and penalties

No.	Region	Company	Sanctions
Fujian Province			
1	Fu'an	Xiangan Paper	Administrative penalty
2	Fuzhou	Hongkuan Fuli Paper	Strengthen supervision and immediate corrections
3	Fuzhou	Qunce Paper	Remove illegal buildings
4	Fuzhou	Nanyu Meilin Artware	Seal up the factory and penalty 30,000 RMB
5	Fuzhou	Tianhong Packaging Neikeng Shenzhen	Put on record for punishment; penalty 40,000 RMB
6	Fuzhou	Jianhui Carton	Put on record and investigate; cease production; penalty 20,000 RMB; force to power off
7	Fuzhou	Baian Hongan Carton	Force to power off and cease production
8	Fuzhou	Wengang Packaging	Put on record and investigate; penalty 31,400 RMB
9	Fuzhou	Jinlin Paper	Cease production and corrections
10	Longhai	Huafa Paper	Quick corrections and finish in 15 days Restart upon the qualification improvement; continuous regulations
11	Longyan	Dongming Paper Quanzhou Xiangjiang	
12	Nan'an	Paper Shuitou Hengsheng	Start production after inspection
13	Nan'an	Carton	Remove illegal buildings and penalty 30,000 RMB
14	Nan'an	Sanlong Xingshenghui Industrial Trade Company	Cease production and corrections Strengthen regulations to ensure the cease or elimination of coal-fired boiler
15	Quanzhou	Fuyuan Zhisu	Strengthen regulations and investigate and prosecute in time for illegal actions
16	Quanzhou	Jiehui Packaging	Strengthen regulations and ensure the emission of pollution to reach the standard
17	Quanzhou	Jinbaoshu Packaging	Stop using and remove the pulping machine Set obvious mark on sewage pipes and remove abandoned pipes
18	Quanzhou	Longying Paper	
19	Quanzhou	Xiangjiang Paper	Only start production after the approval
20	Quanzhou	Guige Paper	Strengthen regulations to ensure the emissions to reach the standard
21	Quanzhou		

22	Sanming	Shaxian Qingzhou Paper	Immediate corrections and file the case for investigation
23	Sanming	Huafeng Paper	Immediate corrections
24	Xiamen	Deyan Paper	Immediate corrections and penalty 40,000 RMB
25	Xiamen	Jinbo Packaging	Seal up 3 printers and total penalty 35,000 RMB
26	Xiamen	Bochen Industrial Trade	Investigation in process
27	Xiamen	Shengbaoxiang Packaging	Investigation in process
28	Xiamen	Huayuanfa Paper	Set hazardous waste mark and total penalty 40,000 RMB and corrections
29	Xiamen	Caiyilong Printing	Cease the color printing; immediate corrections; total penalty 180,000 RMB
30	Xiamen	Weifu Packaging	Close down
31	Zhangzhou	Yingsheng Paper	Immediate corrections
32	Zhangzhou	Dunxin Paper	Immediate corrections and continuous monitoring
33	Zhangzhou	Youlida Paper	Listed as key object for regulation and regulated twice a month
34	Zhangzhou	Gangxing Paper	Impose restrictions on production and penalty 33,285 RMB
35	Zhangzhou	Yueqing Color Printing Company	Penalty 33,085 RMB and restart upon completing environmental procedures
36	Zhangzhou	Xinlong Packaging	Cease the polluted air emission; finish the environmental procedures; penalty 150,000 RMB
37	Zhangzhou	Sanlida Environmental Technology	Strengthen the management and operation to the plants and ensure the emissions to meet the standard
38	Zhangzhou	Yida Paper	Corrections and put on record for investigation

Hunan Province

1	Liuyang	Hongyuan Paper	Eliminate the impact of waste to environment; put on record for investigation; 24 hours' regulations
2	Liuyang	Yinhu Paper	Cease water intaking and waste discharge
3	Liuyang	Hongxin Paper	Cease water intaking and waste discharge
4	Liuyang	Hengxing Paper	Cease water intaking and waste discharge; remove outdated capacity
5	Liuyang	Gugang Specialized Paper	Cease water intaking and waste discharge
6	Liuyang	Yangjianong Paper	Cease production
7	Liuyang	Mingren Paper	Cease production and penalty 200,000 RMB
8	Liuyang	Zhongwang Paper	Cease production and remove outdated capacity
9	Liuyang	Minghui Paper	Cease production and remove outdated capacity
10	Liuyang	Jingxing Paper	Cease production
11	Liuyang	Xinghua Paper	Cease production and remove outdated capacity
12	Liuyang	Yanghua Fuli Paper	Remove outdated capacity
13	Liuyang	Mingxia Paper	Remove outdated capacity
14	Liuyang	Xinhua Paper	Remove outdated capacity
15	Liuyang	Huimei	Remove outdated capacity

Source: Risi, SWS Research

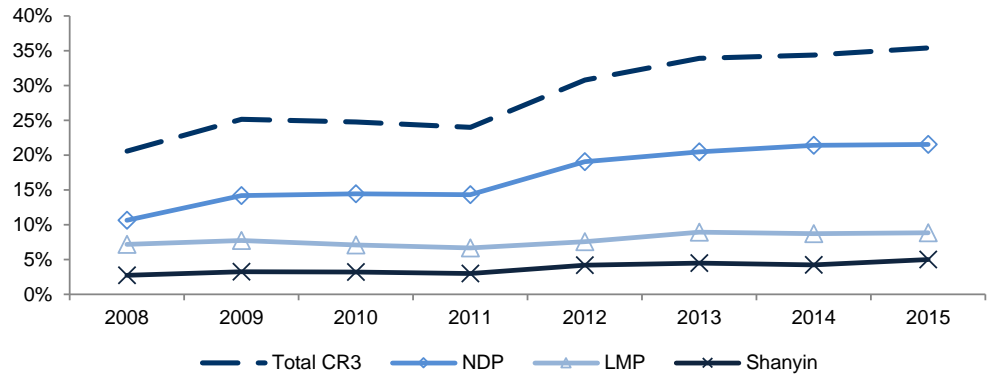
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Fig 2: Electricity price up will force small mills out

Self Power plant	Unit Cost (Rmb/kwh)
Coal power	0.15-0.20
Thermoelectricity	0.15-0.20
Gas power	0.75-1.00

Source: Risi, SWS Research

Fig 3: Paper packaging concentration rate



Source: RISI, Wind, SWS Research

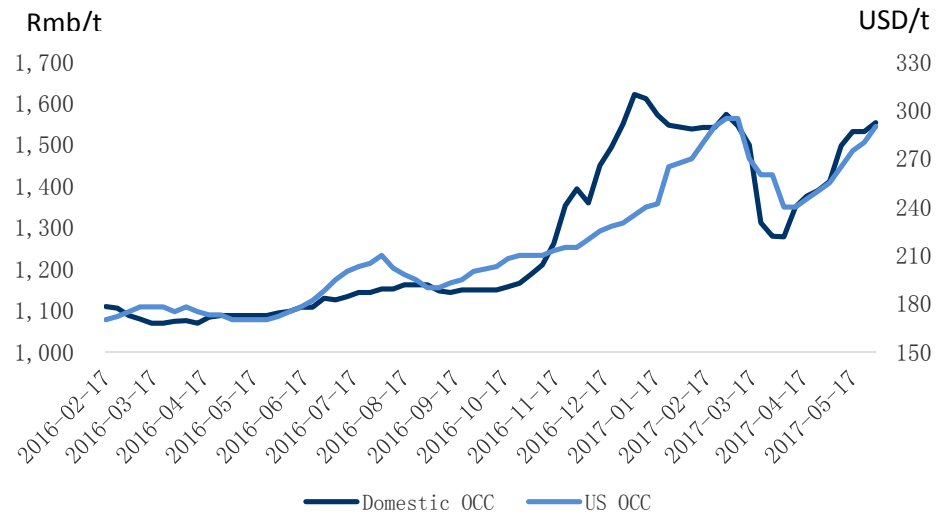
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Fig 4: NDP's containerboard price back to high level



Source: Wind, SWS Research

Fig 5: Both domestic OCC and US OCC have increased



Source: RISI, Wind, SWS Research

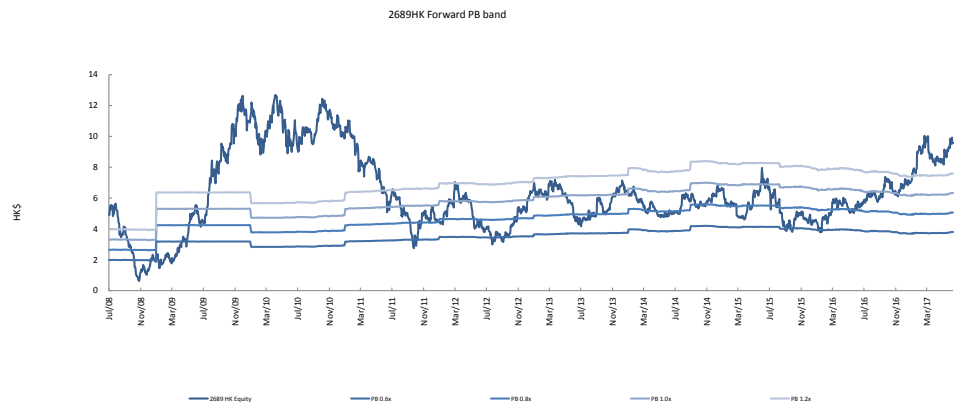
Fig 6: Containerboard supply still cannot match with demand

million tons	Production			Consumption		
	2015	2016	YoY(%)	2015	2016	YoY(%)
Containerboard	22.45	23.05	2.67	22.97	23.64	2.92
Corrugated paper	22.25	22.70	2.02	22.28	22.71	1.93

Source: Risi, SWS Research

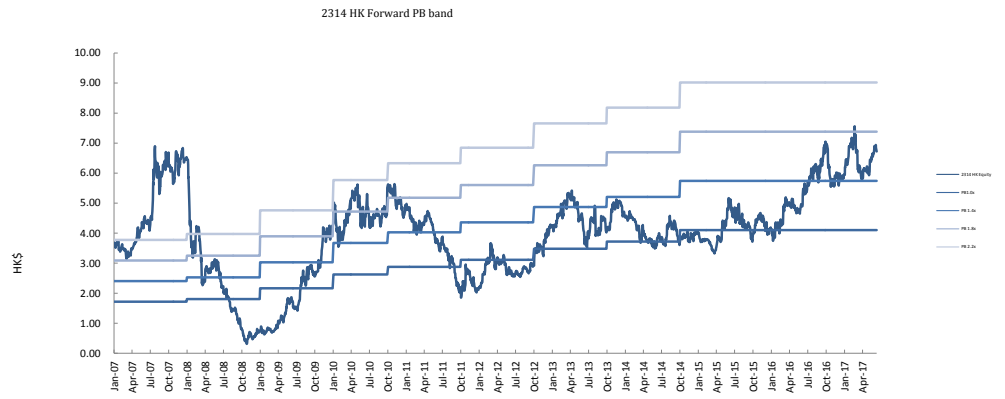
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Fig 7: Nine Dragons Paper leading PB bands



Source: Bloomberg, SWS Research

Fig 8: Lee & Man leading PB bands



Source: Bloomberg, SWS Research

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