



Rating
Buy

Asia
China

Resources
Metals & Mining

Company
China Hongqiao Group Ltd.

Reuters
1378.HK

Bloomberg
1378 HK

Exchange
HSI

Ticker
1378

Date
21 October 2015

Company Update

Price at 19 Oct 2015 (HKD)	4.19
Price target - 12mth (HKD)	5.90
52-week range (HKD)	8.40 - 3.15
HANG SENG INDEX	23,076

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Hongqiao trip key takeaways

Impressive capacity ramp-ups on aggressive capex

We visited China Hongqiao's six major production bases out of seven in total last week. During the trip, we also met Hongqiao's CEO/CFO and its major client Shandong Innovation. We are quite impressed by China Hongqiao's efficiency in capacity expansion and advanced technology such as the world's first 600KA aluminium reduction potlines, which are more energy efficient and less labour intensive. However, heavy capex (~RMB17bn/RMB15bn in 2015/16) during a commodity down-cycle remains our major concern. We maintain our Buy rating on undemanding valuation.

New capacity all around

During the trip, we visited China Hongqiao's major existing production bases including Binzhou, Huiming and Zouping, as well as its newly ramped-up production bases like Yangxin, Beihai and Zhanhua. We are quite impressed by Hongqiao's expansion scale and efficiency, with construction cycles around 10-12 months and 12-14 months for aluminium and power plants, respectively. Per our field trip and discussion with management, we envision the company's alumina/aluminium/power capacity reaching 7mt/5mt/9GW by 2015 and further extending to 9mt/6mt/10GW by 2016, with associated capex around RMB17bn and RMB15bn in 2015 and 2016, respectively.

Remaining cautious on the aluminium industry

Despite relatively better aluminium demand growth vs. other metals in 2015 YTD, aluminium fundamentals still look quite challenging to us, given 1) the stickiness of China's high cost supplies (local contacts talk about Chalco's Liancheng capacity as likely to be resumed on lower electricity cost offered by local government), and 2) new capacities from lower-cost producers like China Hongqiao. Mr. Zhang Bo (CEO of China Hongqiao) also believes that China's economy has yet to hit the bottom, and he deems this down-cycle a great opportunity to grab market share.

Maintaining Buy on undemanding valuation; risks

Our target price of HKD5.9 for Hongqiao is based on DCF with a WACC of 9.6%. We adopt 11.2% as the cost of equity, reflecting a risk-free rate of 3.9%, a market risk premium of 5.6% and beta of 1.3. The stock is trading at 0.62x/0.54x in 2015/16DBE BVPS, with its ROE c.14%/16% in 2015/16E; we reiterate Buy. Risks: lower aluminium price, higher interest expenses and cost.

Price/price relative



Performance (%)	1m	3m	12m
Absolute	4.5	-38.0	-24.5
HANG SENG INDEX	5.3	-9.2	0.0

Source: Deutsche Bank

Forecasts And Ratios

Year End Dec 31	2013A	2014A	2015E	2016E	2017E
EBITDA (CNYm)	10,588.6	12,214.6	13,966.2	16,648.1	20,898.9
Reported NPAT (CNYm)	5,592.7	5,313.6	4,673.5	6,126.0	8,984.7
% Change	0.0%	0.0%	-5.5%	0.4%	-
PER (x)	3.7	5.1	4.7	3.6	2.5
Yield (net) (%)	8.0	6.4	5.5	7.1	10.4

Source: Deutsche Bank estimates, company data

¹ DB EPS is fully diluted and excludes non-recurring items

² Multiples and yields calculations use average historical prices for past years and spot prices for current and future years, except P/B which uses the year end close

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Model updated: 20 October 2015

Running the numbers

Asia

China

Metals & Mining

China Hongqiao Group Ltd.

Reuters: 1378.HK

Bloomberg: 1378 HK

Buy

Price (19 Oct 15) HKD 4.19

Target Price HKD 5.90

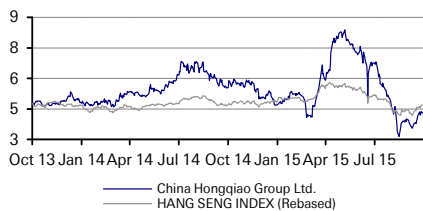
52 Week range HKD 3.15 - 8.40

Market Cap (m) HKDm 25,814
USDm 3,331

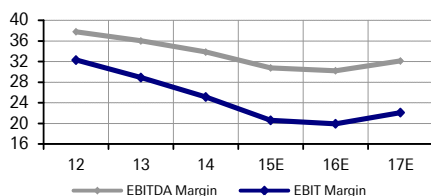
Company Profile

China Hongqiao is a primary aluminium producer based in Shandong, China. The company has four production bases with a designed aluminium capacity of 2,456kt and 65% self-sufficient ratio in alumina and electricity by 30 June 2013. The company was listed in HKEX in March 2011. -

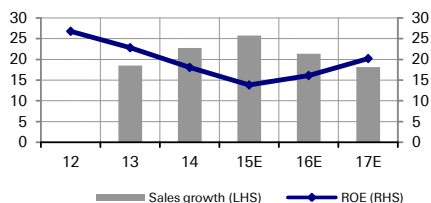
Price Performance



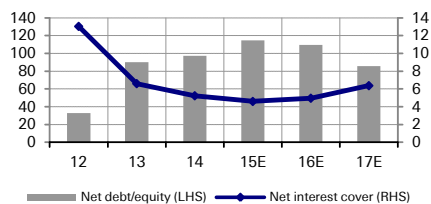
Margin Trends



Growth & Profitability



Solvency



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Fiscal year end 31-Dec

Financial Summary

	2012	2013	2014	2015E	2016E	2017E
DB EPS (CNY)	0.91	0.92	0.86	0.73	0.95	1.39
Reported EPS (CNY)	0.91	0.92	0.86	0.73	0.95	1.39
DPS (CNY)	0.21	0.27	0.28	0.19	0.24	0.36
BVPS (CNY)	3.8	4.5	5.2	5.6	6.4	7.6
Weighted average shares (m)	5,885	5,885	5,974	6,265	6,368	6,368
Average market cap (CNYm)	17,539	19,955	26,272	21,180	21,180	21,536
Enterprise value (CNYm)	24,938	44,359	58,149	62,487	66,351	63,592

Valuation Metrics

P/E (DB) (x)	3.3	3.7	5.1	4.7	3.6	2.5
P/E (Reported) (x)	3.3	3.7	5.1	4.7	3.6	2.5
P/BV (x)	0.83	0.93	0.80	0.62	0.54	0.45
FCF Yield (%)	nm	nm	1.0	nm	nm	31.8
Dividend Yield (%)	6.9	8.0	6.4	5.5	7.1	10.4
EV/Sales (x)	1.0	1.5	1.6	1.4	1.2	1.0
EV/EBITDA (x)	2.7	4.2	4.8	4.5	4.0	3.0
EV/EBIT (x)	3.1	5.2	6.4	6.7	6.0	4.4

Income Statement (CNYm)

Sales revenue	24,805	29,404	36,086	45,369	55,059	65,057
Gross profit	9,365	10,229	12,435	14,200	17,064	21,507
EBITDA	9,374	10,589	12,215	13,966	16,648	20,899
Depreciation	1,362	2,086	3,138	4,609	5,659	6,504
Amortisation	0	0	0	0	0	0
EBIT	8,012	8,503	9,076	9,357	10,989	14,395
Net interest income/(expense)	-614	-1,287	-1,731	-2,034	-2,213	-2,257
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinaries	0	0	0	0	0	0
Other pre-tax income/(expense)	2	164	-17	-1,010	-500	0
Profit before tax	7,401	7,379	7,328	6,313	8,276	12,137
Income tax expense	1,948	1,793	2,026	1,640	2,150	3,153
Minorities	0	-6	-12	0	0	0
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	5,453	5,593	5,314	4,674	6,126	8,985
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	5,453	5,593	5,314	4,674	6,126	8,985

Cash Flow (CNYm)

Cash flow from operations	6,221	252	9,522	11,753	14,214	15,356
Net Capex	-10,708	-13,982	-9,255	-17,464	-14,565	-8,395
Free cash flow	-4,487	-13,730	267	-5,711	-350	6,961
Equity raised/(bought back)	0	0	1,353	0	0	0
Dividends paid	-1,536	-1,218	-1,261	-1,361	-967	-1,247
Net inc/(dec) in borrowings	9,315	13,951	9,726	9,000	2,000	-2,461
Other investing/financing cash flows	-1,601	-1,816	-8,771	-2,358	-2,547	-2,598
Net cash flow	1,690	-2,813	1,314	-430	-1,865	654
Change in working capital	-1,293	-8,479	-579	436	216	-2,390

Balance Sheet (CNYm)

Cash and other liquid assets	9,175	6,362	7,676	7,246	5,382	6,036
Tangible fixed assets	26,711	39,997	54,853	67,739	76,677	78,602
Goodwill/intangible assets	0	0	80	80	80	80
Associates/investments	0	0	0	0	0	0
Other assets	8,490	18,820	20,746	22,468	23,457	25,340
Total assets	44,377	65,179	83,356	97,534	105,595	110,058
Interest bearing debt	16,550	30,558	39,209	48,209	50,209	47,748
Other liabilities	5,489	7,738	11,713	13,578	14,481	13,668
Total liabilities	22,039	38,296	50,922	61,787	64,690	61,415
Shareholders' equity	22,313	26,674	32,090	35,402	40,561	48,298
Minorities	25	208	344	344	344	344
Total shareholders' equity	22,338	26,883	32,434	35,747	40,905	48,643
Net debt	7,375	24,196	31,532	40,962	44,827	41,712

Key Company Metrics

Sales growth (%)	nm	18.5	22.7	25.7	21.4	18.2
DB EPS growth (%)	na	1.6	-6.5	-14.8	29.0	46.7
EBITDA Margin (%)	37.8	36.0	33.8	30.8	30.2	32.1
EBIT Margin (%)	32.3	28.9	25.2	20.6	20.0	22.1
Payout ratio (%)	22.3	28.4	31.5	25.5	25.5	25.5
ROE (%)	26.8	22.8	18.1	13.8	16.1	20.2
Capex/sales (%)	43.2	47.6	25.7	38.5	26.5	12.9
Capex/depreciation (x)	7.9	6.7	2.9	3.8	2.6	1.3
Net debt/equity (%)	33.0	90.0	97.2	114.6	109.6	85.8
Net interest cover (x)	13.0	6.6	5.2	4.6	5.0	6.4

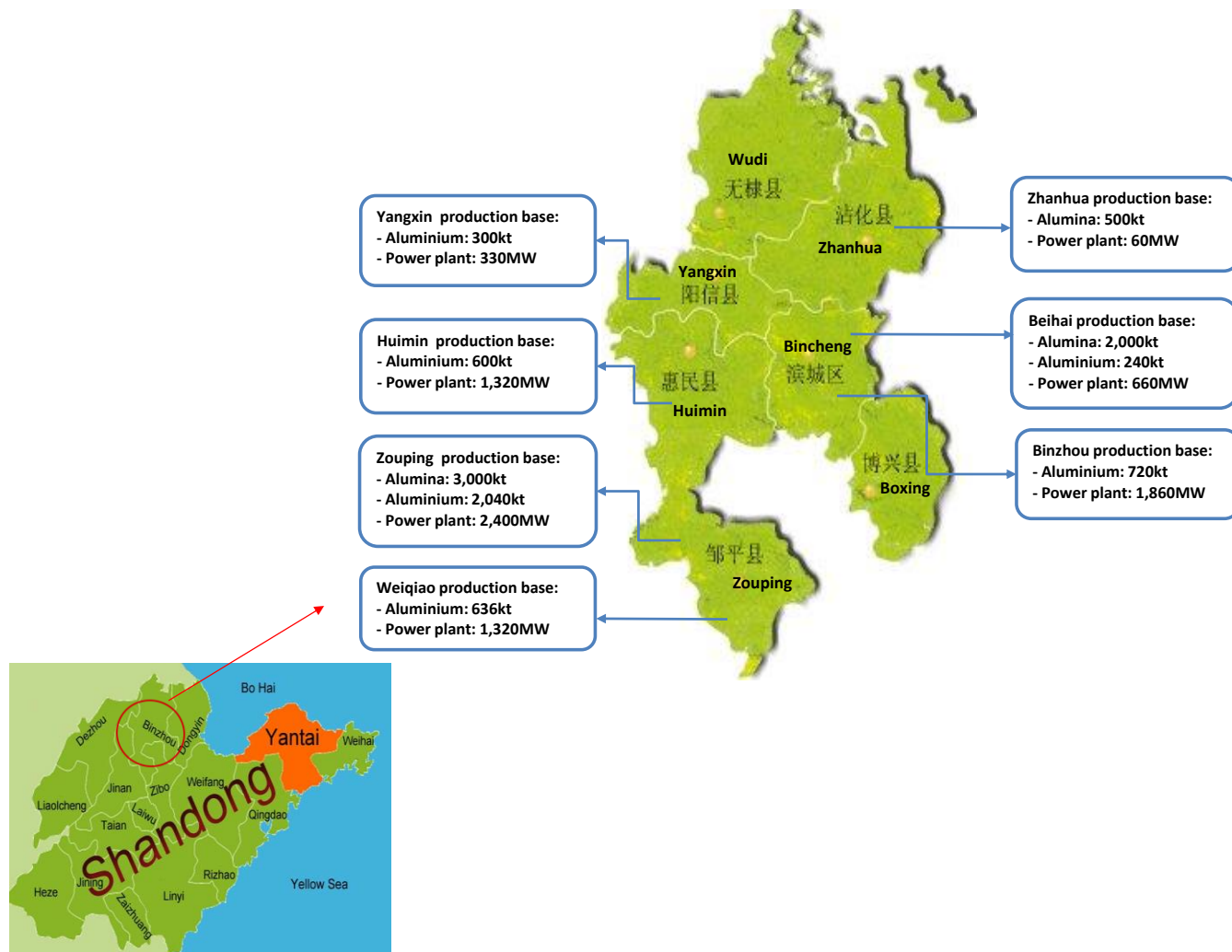
Source: Company data, Deutsche Bank estimates



China Hongqiao Field Trip

China Hongqiao assets overview

Figure 1: China Hongqiao's production bases (capacity by 1H2015)



Source: Deutsche Bank, Company data

Day 1 – Binzhou, Huiming and Yangxin production base

■ Binzhou production base (11:00am, 14 October 2015)

Aluminium: 720kt by 1H15; another 240kt under construction (due in 2016)

Power: 1,860kt in total, 4*135MV+4*330MV, all acquired from Binbei New Materials; the last 2*330MV were completed in 1H2015



In late 2014, China Hongqiao acquired Binbei New Materials with 660kt aluminium capacity (480kt established) and 1,860kt (4*135MW+ 4*330MW, 2*330MW power plants were done in 1H15).

We visited the control room of its 3# and 4# power plants (shown in Figure 2 and Figure 3). Currently, those power plants are running at ~300MV with unit standard coal consumption around 308g/kwh and unit cost of ~RMB0.17/kwh (tax exclusive) according to those in charge of Binzhou power plants.

Figure 2: Power plants in Binzhou



Source: Deutsche Bank, Company data

Figure 3: Control room of 3# and 4# power plants



Source: Deutsche Bank, Company data

■ Huiming production base (1:30pm, 14 October 2015)

Aluminium: 600kt in total

Power: 4*330MW in total

Figure 4: Aluminium production line in Huiming



Source: Deutsche Bank, Company data

Figure 5: 4*330MW power plants



Source: Deutsche Bank, Company data



■ **Yangxin production base (4:00pm, 14 October 2015)**

Aluminium: 300kt established, another 300kt to be completed in late 2015

Power: 4*330MW in total (1*330MW run in January 2015, 1*330MW in August 2015 and another 2*330MW in 2016)

Figure 6: Aluminium production line in Yangxin



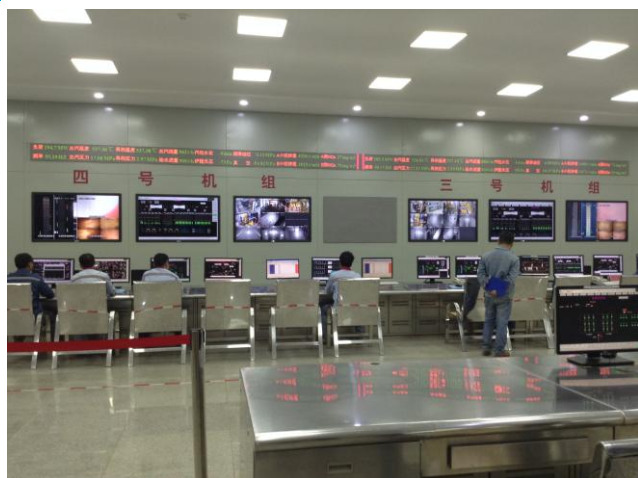
Source: Deutsche Bank, Company data

Figure 7: 4*330MW power plants



Source: Deutsche Bank, Company data

Figure 8: Control room of 3# and 4# power plants



Source: Deutsche Bank, Company data

Figure 9: Coal stocks in Yangxin production base



Source: Deutsche Bank, Company data

Day 2 – Beihai and Zhanhua production base

■ **Beihai production base (10:00am, 15 October 2015)**

Alumina: 2,000kt in total

Aluminium: 850kt planned in total, 240kt established, another 240kt to be completed in late 2015; the rest 370kt is suspended for now

Power: 4*330MW in total (2*330MW run in 1H15, 1*330MW in 2H15 and another 1*330MW in 2016)



Per our discussion with those in charge of Beihai alumina plants, the unit cost of self-produced alumina is around RMB1,700-1,800/t (tax exclusive), sitting at the very left hand of industry cost curve. In the Beihai production base, the company mixes bauxite from Malaysia, Australia and India, with average conversion ratio of 3.1:1.0 (bauxite to alumina). Currently, bauxite, liquid caustic soda and steam normally account for 50%, 17% and 10% of total alumina cost.

Figure 10: Alumina plants in Beihai - I



Source: Deutsche Bank, Company data

Figure 11: Alumina plants in Beihai - II



Source: Deutsche Bank, Company data

Figure 12: Bauxite stocks



Source: Deutsche Bank, Company data

Figure 13: 4*330MW power plants



Source: Deutsche Bank, Company data

■ Zhanhua production base (3:00pm, 15 October 2015)

Alumina: 2,000kt in total, 500kt already there, and another 500kt in late 2015 and 1,000kt in 2016

Power: 4*60MW in total (1*60MW run in 1H15, 2*60MW in 2H15 and another 1*60MW in 2016)



Figure 14: Zhanhua production base overview



Source: Deutsche Bank, Company data

Figure 15: Power grid



Source: Deutsche Bank, Company data

Figure 16: Power plants 2*60MV



Source: Deutsche Bank, Company data

Figure 17: Alumina plants



Source: Deutsche Bank, Company data

Day 3 – Meetings with Shandong Innovation and China Hongqiao's management; also visited China Hongqiao Zouping production base and its aluminium alloy products plant

■ **Meeting with Mr. Wang Wei (vice general manger), Shandong Innovation**

Shandong Innovation Group, located in Zouping County, Binzhou City, Shandong province, is China Hongqiao's largest client. According to Mr. Wang Wei, vice general manager of Shandong Innovation Group, its aluminium alloy capacity had reached 3.6mt by 1H15 (robust expansion in recent years), with daily aluminium alloy products output around 7.5kt (~75%+ utilization rate).

Shandong Innovation basically covers all kinds of aluminium products. Aluminium alloys in construction, industrial, transportation alloys and electrics account for 30%, 40%, 15%-20% and 10%, respectively, of its total sales according to Mr. Wang (shown in below Figure). Despite the sluggish outlook



in construction alloys, Mr. Wang expects 5% YoY overall volume growth in 2015 on the mix shift toward industrials and electrics alloys.

Figure 18: Sales breakdown of Shandong Innovation

	Sales mix %	Customers base	Processing charges (RMB/t)
Construction	30%	Shandong	400-800
Industrial	40%	Yangtze River Delta	~1,000
Transportation	15%-20%	China Zhongwang, Conglin Group	500-1,000
Electronics	10%	Pearl River Delta	1,500-3,000

Source: Deutsche Bank, Company data

Construction, industrial and transportation alloys normally have a lower processing charge, ranging from RMB400/t to RMB1,000/t. Electronics alloys, on the other hand, enjoy higher processing fees of RMB1,500/t to RMB3,000/t and have been the recent focus of the company. Mr. Wang and his colleague mentioned that processing charges in recent months have not moved much compared to those in 1H2015.

In addition, molten, instead of ingot, is able to save another RMB300/t to RMB400/t re-melting cost given Shandong Innovation's geographic advantage.

Meeting with China Hongqiao CEO (Mr. Zhang Bo) and CFO (Mrs. Zhang Ruilian)

- **Binzhou, a well established cluster:** CEO Mr. Zhang Bo mentioned there are 16mt alumina, 6.4mt aluminium and 8mt aluminium alloys capacity in the Binzhou area, representing 24%, 17% and 19% of China's total capacity, respectively. Located in a coastal area, it has advantages in raw materials imports and end-products exports.

Figure 19: Binzhou area leads in every aspect

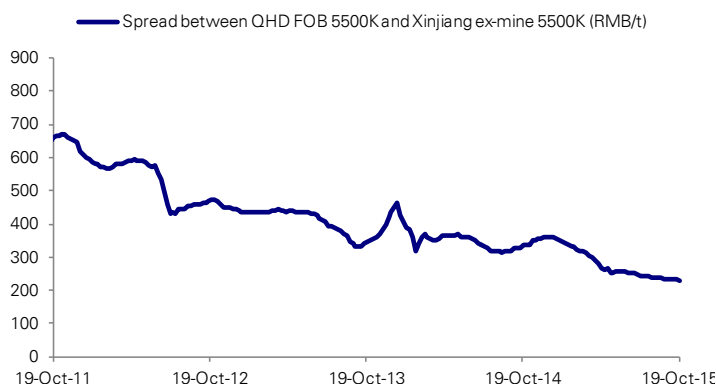
	Binzhou	China
Captive power plants %	100%	70%
Molten %	100%	60%
Electricity consumption per ton aluminium (kwh/t)	13,300	13,600
Energy consumption per ton alumina (kgce/t) *	310	380

Source: Deutsche Bank, China Hongqiao, *Energy consumption for Bayer process

- **The coastal area is more energy/cost efficient compared to western areas given the narrowed coal spread between the coastal area and Xinjiang and favourable location:** For aluminium capacity in Xinjiang, it takes roughly RMB1,500/t to cover freight, which includes transportation of 2t alumina into Xinjiang and 1t aluminium into end-users, not to mention the energy consumption and CO2 emission during the transportation.



Figure 20: Coal spread between QHD 5500k and Xinjiang ex-mine 5500k



Source: Deutsche Bank, WIND, SXCOAL

- **China economy yet to bottom out:** Mr. Zhang does not think that China's economy has hit the bottom and expects that we might need to wait until 2017. He also mentioned that Hongqiao is well prepared for the winter and is now proactively looking for acquisitions, including upstream bauxite mines, alumina & aluminium plants, as well as high-end aluminium alloy projects.
- **Aluminium demand from transportation, electrics and packaging might be the key driver in the long run:** Within the estimated aluminium demand of ~8mt in Binzhou, 40% comes from construction according to management. Despite the sluggishness in construction demand, Mr. Zhang mentioned that transportation, electronics and packaging will be the key drivers for aluminium consumption in the long term and make overall aluminium consumption relatively immune to the weak economy. In the near term, ultra high voltage (UHV) projects help to some extent.
- **China Hongqiao's capacity expansion to continue:** Management expects that capex for 2015 and 2016 will be around RMB16-17bn and RMB14-15bn, respectively, with aluminium capacity reaching 6.2mt in late 2016 or early 2017 (MIIT approved 6.2mt aluminium capacity for Hongqiao in 2014). In the meantime, the company is proactively ramping-up its captive power plants and alumina plants. We expect its captive power ratio and self-sufficient rate of alumina to reach ~90% by 2017 and ultimately achieve 100% afterwards. Meanwhile, given the uncertainty in currency (USDRMB) and Hongqiao's relatively large exposure to USD debt, the company will also try to adjust its debt structure in the future, i.e., less USD debt.

▪ Zouping production base (1:30pm, 16 October 2015)

Alumina: 3,000kt in total

Aluminium: 2,040kt in total

Power: 8*135MV+4*330MV+4*330MV (under construction, 1*330MV to be completed in 2H15, 2*330MV in 2016, and another 1*330MW in 2017)



After the meetings with Shandong Innovation Group and China Hongqiao's management, we visited China Hongqiao's first 600KA aluminium reduction pot in Zouping production base, which is also the world's first successfully installed 600KA series.

Compared to traditional pot technology, 600KA leads on energy efficiency (DC power consumption at ~12,400kwh vs. traditional average at ~13,000kwh+ per tonne aluminium) and labour productivity (c.10-20% less in headcount, and less workloads for the staff as well).

Figure 21: 600KA aluminium reduction pot - I



Source: Deutsche Bank, Company data

Figure 22: 600KA aluminium reduction pot - II



Source: Deutsche Bank, Company data

Figure 23: 600KA aluminium reduction pot -III



Source: Deutsche Bank, Company data

Figure 24: Anode



Source: Deutsche Bank, Company data



Appendix 1

Important Disclosures

Additional information available upon request

Disclosure checklist

Company	Ticker	Recent price*	Disclosure
China Hongqiao Group Ltd.	1378.HK	4.20 (HKD) 20 Oct 15	1,7

*Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/DisclosureDirectory.eqsr>.

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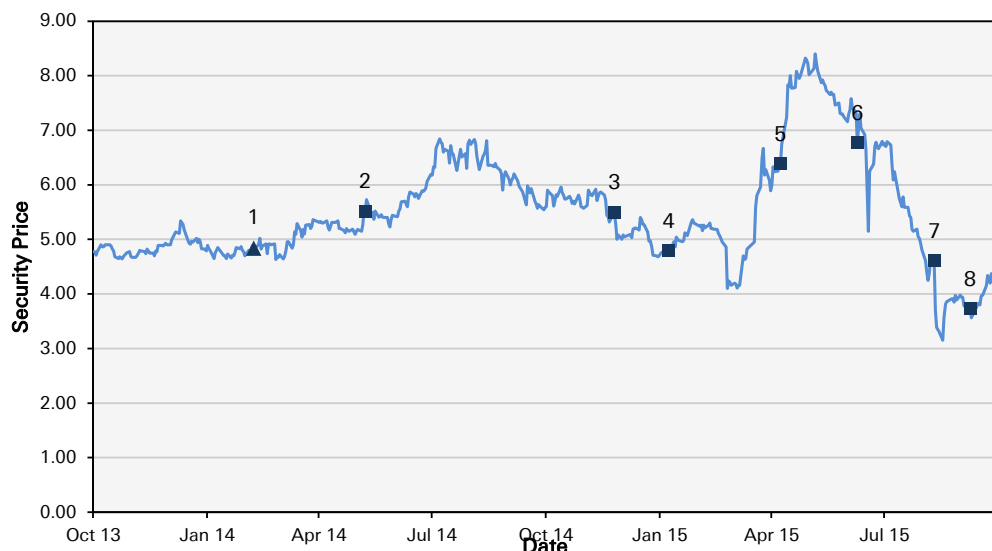
For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/Disclosure.eqsr?ricCode=1378.HK>

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Historical recommendations and target price: China Hongqiao Group Ltd. (1378.HK)
(as of 10/20/2015)



Previous Recommendations

Strong Buy
Buy
Market Perform
Underperform
Not Rated
Suspended Rating

Current Recommendations

Buy
Hold
Sell
Not Rated
Suspended Rating

*New Recommendation Structure
as of September 9, 2002

1. 28/02/2014:	Upgrade to Buy, Target Price Change HKD8.60	5. 29/04/2015:	Buy, Target Price Change HKD9.30
2. 29/05/2014:	Buy, Target Price Change HKD8.30	6. 30/06/2015:	Buy, Target Price Change HKD9.00
3. 16/12/2014:	Buy, Target Price Change HKD8.50	7. 31/08/2015:	Buy, Target Price Change HKD7.90
4. 29/01/2015:	Buy, Target Price Change HKD8.90	8. 29/09/2015:	Buy, Target Price Change HKD5.90

Equity rating key

Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield) , we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Notes:

1. Newly issued research recommendations and target prices always supersede previously published research.

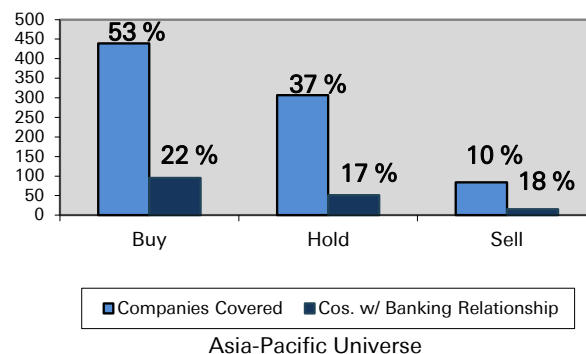
2. Ratings definitions prior to 27 January, 2007 were:

Buy: Expected total return (including dividends) of 10% or more over a 12-month period

Hold: Expected total return (including dividends) between -10% and 10% over a 12-month period

Sell: Expected total return (including dividends) of -10% or worse over a 12-month period

Equity rating dispersion and banking relationships





Regulatory Disclosures

1. Important Additional Conflict Disclosures

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