June 22, 2007

ACTION

Buy

Aluminum Corporation of China (H) (2600.HK)

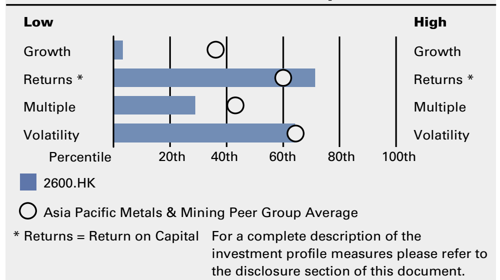
Return Potential: 18%

Key beneficiary of two mega trends; reiterate Conviction Buy

Source of opportunity

Despite a share price rise of 83% ytd from a deep trough, we believe Chalco could be a key beneficiary of two mega trends, going forward: (1) **Theme #1**: We are at the start of a government crackdown on energy-intensive sectors in a high energy price environment (for China, high coal prices), a potential tipping point for the peak in the aluminum capex/volume ramp-up cycle. (2) **Theme #2**: We are in the early stages of a 2nd/3rd-tier city urbanization process, the key reason for ytd 40% aluminum demand growth. (3) The parent's smelter injections, adding 44% capacity, improve potential upside leverage (18% upside to 2008E EPS) and downside protection.

Investment Profile: Aluminum Corporation of China



Catalyst

(1) Implemented "fuel cost pass-through" from rising coal prices, potentially discouraging smelter capacity additions. (2) Further central government measures urging local governments to control smelter additions, including evidence of punitive power tariffs. (3) Evidence of further real estate and power grid spending growth, key reasons for the continued rise in demand, in our view. (4) Acceleration of smelter injections could enable Chalco to leverage aluminum price upside. (5) Injection of downstream extrusion assets could lower earnings volatility and boost margins.

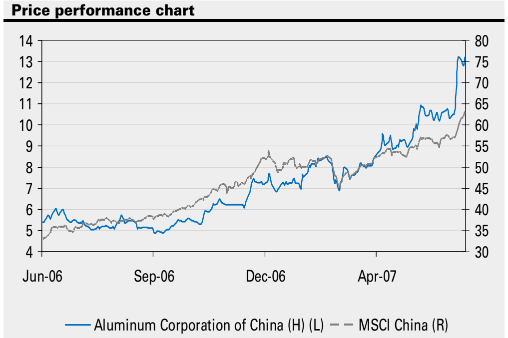
Key data	Current
Price (HK$)	13.18
12 month price target (HK$)	15.50
Market cap (HK$ mn / US$ mn)	169,845.1 / 21,741.4
Foreign ownership (%)	--

	12/06	12/07E	12/08E	12/09E
EPS (HK$)	1.02	1.06	1.18	1.02
EPS growth (%)	66.8	4.0	11.5	(13.8)
EPS (diluted) (Rmb)	1.03	1.01	1.15	0.99
EPS (basic, pre-ex) (Rmb	1.03	1.05	1.15	0.99
P/E (X)	12.9	12.4	11.1	12.9
P/B (X)	3.4	2.7	2.3	2.1
EV/EBITDA (X)	3.9	7.0	6.3	6.7
Dividend yield (%)	1.5	2.4	2.7	2.3
ROE (%)	30.6	24.7	22.1	16.7

Valuation

Our 12-month price target of HK$15.5 is based on peak level 2008E P/E of 13.1X, implying aluminum price of US$1.22/lb, not assuming any cyclical upturn. The current share price implies an aluminum price of US$1.12/lb, an 8% discount to the spot level. If we mark 2008's price assumption of US$1.12/lb to the current spot, the resultant 27% earnings upside to EPS of HK$1.50 would push down 2008E P/E to 8.8X, close to the mid-cycle level of 8.6X, still 33% below the peak level.

Price performance chart



Share price performance (%)	3 month	6 month	12 month
Absolute	68.5	76.2	148.7
Rel. to MSCI China	31.6	34.6	28.2

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 6/21/2007 close.

Key risks

Key risks include an unexpected sharp macro slowdown.

INVESTMENT LIST MEMBERSHIP

Asia Pacific Buy List

Asia Pacific Conviction Buy List

Coverage View: Neutral

China:

Metals & Mining

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Aluminum Corporation of China (H): Summary financials

Profit model (Rmb mn)	12/06	12/07E	12/08E	12/09E
Total revenue	**61,896.3**	**68,003.3**	**78,241.9**	**81,434.6**
Cost of goods sold	(41,894.3)	(45,941.8)	(53,619.6)	(59,170.9)
SG&A	(3,050.8)	(3,650.3)	(4,098.2)	(4,699.5)
R&D	(113.5)	(147.6)	(125.4)	(115.4)
Other operating profit/(expense)	381.1	55.8	42.9	32.8
EBITDA	**20,715.7**	**22,314.8**	**25,022.6**	**22,545.1**
Depreciation & amortization	(3,496.9)	(3,995.4)	(4,581.2)	(5,063.5)
EBIT	**17,218.7**	**18,319.4**	**20,441.5**	**17,481.6**
Interest income	183.5	91.8	82.6	82.6
Interest expense	(715.7)	(446.8)	(288.1)	(108.1)
Income/(loss) from uncons. subs.	93.7	0.0	0.0	0.0
Others	0.0	0.0	0.0	0.0
Pretax profits	**16,780.2**	**17,816.8**	**20,110.5**	**17,340.6**
Income tax	(4,393.6)	(4,454.2)	(5,027.6)	(4,335.2)
Minorities	(642.0)	(286.8)	(323.7)	(279.1)
Net income pre-preferred dividends	**11,744.7**	**13,075.8**	**14,759.2**	**12,726.3**
Preferred dividends	0.0	0.0	0.0	0.0
Net income (pre-exceptionals)	**11,744.7**	**13,075.8**	**14,759.2**	**12,726.3**
Post-tax exceptionals	0.0	0.0	0.0	0.0
Net income	**11,744.7**	**13,075.8**	**14,759.2**	**12,726.3**
EPS (basic, pre-except) (Rmb)	1.03	1.05	1.15	0.99
EPS (basic, post-except) (Rmb)	1.03	1.05	1.15	0.99
EPS (diluted, post-except) (Rmb)	1.03	1.01	1.15	0.99
DPS (HK$)	0.19	0.31	0.36	0.31
Dividend payout ratio (%)	18.3	29.1	30.0	30.0
Free cash flow yield (%)	8.4	3.3	4.2	6.0

Growth & margins (%)	12/06	12/07E	12/08E	12/09E
Sales growth	66.8	9.9	15.1	4.1
EBITDA growth	65.5	7.7	12.1	(9.9)
EBIT growth	72.3	6.4	11.6	(14.5)
Net income growth	67.2	11.3	12.9	(13.8)
EPS growth	61.5	2.0	9.3	(13.8)
Gross margin	32.3	32.4	31.5	27.3
EBITDA margin	33.5	32.8	32.0	27.7
EBIT margin	27.8	26.9	26.1	21.5

Cash flow statement (Rmb mn)	12/06	12/07E	12/08E	12/09E
Net income pre-preferred dividends	11,744.7	13,075.8	14,759.2	12,726.3
D&A add-back	3,496.9	3,995.4	4,581.2	5,063.5
Minorities interests add-back	642.0	286.8	323.7	279.1
Net inc/(dec) working capital	(2,772.2)	(1,706.2)	(1,554.7)	(1,661.0)
Other operating cash flow	112.5	(286.8)	(323.7)	(279.1)
Cash flow from operations	**13,224.0**	**15,365.0**	**17,785.7**	**16,128.8**
Capital expenditures	(6,568.2)	(9,756.8)	(10,684.5)	(6,100.0)
Acquisitions	0.0	0.0	0.0	0.0
Divestitures	0.0	0.0	0.0	0.0
Others	(676.0)	0.0	0.0	0.0
Cash flow from investments	**(7,244.2)**	**(9,756.8)**	**(10,684.5)**	**(6,100.0)**
Dividends paid (common & pref)	(4,529.9)	(3,922.8)	(4,427.8)	(3,817.9)
Inc/(dec) in debt	(646.2)	(9,000.0)	(3,500.0)	(4,200.0)
Common stock issuance (repurchase)	4,390.5	8,162.4	0.0	0.0
Other financing cash flows	11.0	286.8	323.7	279.1
Cash flow from financing	**(774.7)**	**(4,473.6)**	**(7,604.0)**	**(7,738.8)**
Total cash flow	**5,205.0**	**1,134.6**	**(502.9)**	**2,290.0**

Balance sheet (Rmb mn)	12/06	12/07E	12/08E	12/09E
Cash & equivalents	12,802.8	13,937.4	13,434.5	15,724.5
Accounts receivable	2,026.2	3,726.2	4,287.2	4,462.2
Inventory	9,036.4	10,806.0	12,433.0	12,494.1
Other current assets	1,862.6	2,046.4	2,354.5	2,450.5
Total current assets	**25,727.9**	**30,516.0**	**32,509.2**	**35,131.3**
Net PP&E	48,637.5	54,399.0	60,502.3	61,538.9
Net intangibles	1,364.7	1,324.7	1,284.7	1,244.7
Total investments	1,291.4	1,291.4	1,291.4	1,291.4
Other long-term assets	982.7	1,022.7	1,062.7	1,102.7
Total assets	**78,004.3**	**88,553.8**	**96,650.4**	**100,309.1**
Accounts payable	2,887.5	5,034.7	5,876.1	6,322.4
Short-term debt	10,098.0	6,098.0	3,598.0	898.0
Other current liabilities	8,575.1	8,375.1	8,475.1	6,700.0
Total current liabilities	**21,560.6**	**19,507.8**	**17,949.2**	**13,920.3**
Long-term debt	8,480.7	3,677.8	2,677.8	1,177.8
Other long-term liabilities	197.1	0.0	0.0	0.0
Total long-term liabilities	8,677.8	3,677.8	2,677.8	1,177.8
Total liabilities	**30,238.4**	**23,185.6**	**20,627.0**	**15,098.1**
Common stock & premium	29,165.8	37,328.2	37,328.2	37,328.2
Other common equity	15,058.9	24,212.0	34,543.4	43,451.8
Total common equity	**44,224.7**	**61,540.2**	**71,871.6**	**80,780.1**
Minority interest	3,541.2	3,828.0	4,151.7	4,430.8
Total liabilities & equity	**78,004.3**	**88,553.8**	**96,650.4**	**100,309.1**
BVPS (HK$)	**3.77**	**4.84**	**5.76**	**6.48**

Ratios	12/06	12/07E	12/08E	12/09E
ROE (%)	30.6	24.7	22.1	16.7
ROA (%)	17.1	15.7	15.9	12.9
ROACE (%)	26.8	23.8	23.4	18.6
Inventory days	70.9	78.8	79.1	76.9
Receivables days	8.8	15.4	18.7	19.6
Payable days	24.1	31.5	37.1	37.6
Net debt/equity (%)	13.1	(6.8)	(10.0)	(16.9)
Interest cover - EBIT (X)	32.4	51.6	99.5	683.8

Valuation	12/06	12/07E	12/08E	12/09E
P/E (analyst) (X)	12.9	12.4	11.1	12.9
P/B (X)	3.4	2.7	2.3	2.1
EV/EBITDA (X)	3.9	7.0	6.3	6.7
Dividend yield (%)	1.5	2.4	2.7	2.3

Note: Last actual year may include reported and estimated data.

Source: Company data, Goldman Sachs Research estimates.

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EXPECTED NEWS FLOW/EVENTS

DATE	EVENT	COMMENT
2H2007	Parent's injection of aluminum smelters, including Baotou Aluminum, into Chalco	We believe this could enhance Chalco's earnings and leverage to potential aluminum price upside
2H2007	Government's intensifying effort to implement - punitive power tariffs - fuel cost pass-through	We think this could discourage smelter expansion in China, tightening the supply side
2H2007	Parent's downstream extrusion asset injection into Chalco	This could allow Chalco to enhance margins, in our view

Source: Company data, Goldman Sachs Research estimates.
The prices in the body of this report are based on the market close of June 21, 2007.

Investment view: Key beneficiary of two mega trends, Conviction Buy

We have long been negative on Chalco due to concerns about rapid capacity additions and the subsequent potential oversupply and downside aluminum price risk. However, our recent on-the-ground investigation has turned us positive: the government's crackdown on energy-intensive sectors finally makes a peak in the capex cycle possible, in our view, enabling Chalco to leverage accelerating demand growth and benefit from the two key fundamental themes we mention on the cover of this report.

While the market generally is still bearish on aluminum, we believe Chalco's downside protection comes from:

- Sharp rise in the price of coal, the main energy source in China, makes it difficult for high energy-consuming industries to expand quickly. We have started seeing smelters canceling capacity addition plans after failing to secure below-the-market power tariffs.
- Key takeaways from our recent on-the-ground investigation, meetings with government officials, smelters, aluminum extruders and industry contacts: We believe we are potentially at the beginning of a government crackdown on energy intensive/environment-polluting sectors, finally putting pressure on local governments, the key force behind aluminum smelter expansion in the past.
- An acceleration in property construction in $2^{nd}/3^{rd}$-tier cities, after riding on this round of the resource boom, means that even if demand growth were to slow to the mid-20%s in 2008 from 35% in 2007 (a two standard-deviation move), we could see the market balance continuing to tighten.
- Chalco's 44% aluminum capacity addition from the parent's smelter injections has significantly improved its downside protection. We estimate Chalco can maintain flat

earnings growth from 2007 to 2008 even if the aluminum price drops by 8% yoy to US$1.04/lb, a level that could shut down 0.8mt of global high-cost production, or 3% of global capacity.

We believe Chalco's earnings upside comes from:

- The aluminum price has lagged that of base metals by 71% and copper by 93% since the beginning of 2005. Any potential fundamental upturn could enable aluminum to be a strong catch-up play.
- High leverage to aluminum prices. For each 1% aluminum price change, Chalco's 2008E earnings would fluctuate 2.3%. We currently assume a 2008 aluminum price of US$1.12/lb, an 8% discount to spot. If we mark the price assumption to the current spot, the resultant 27% earnings upside to EPS of HK$1.50 would push down 2008E P/E to 8.8X, close to the mid-cycle level of 8.6X, still 33% below the peak level.

Exhibit 1: We forecast robust aluminum demand growth in China in the next 2-3 years, thus upside potential for prices

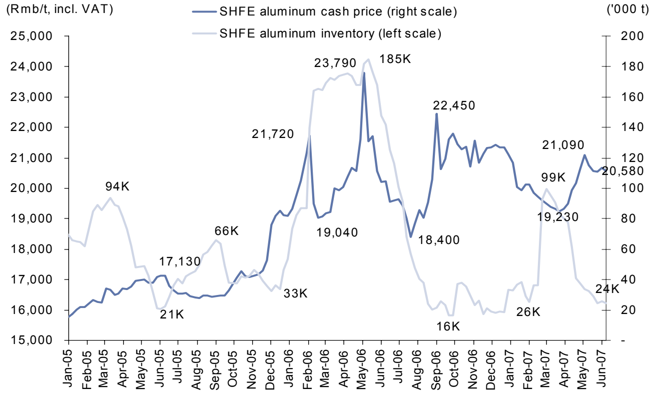
Fundamentals of the aluminum industry in China

('000 tonnes)	2000	2001	2002	2003	2004	2005	2006	2007E	2008E	2009E
Demand - Aluminum	3,252	3,539	4,318	5,151	6,104	7,156	8,670	11,705	14,748	18,287
% change yoy	13%	9%	22%	19%	19%	17%	21%	35%	26%	24%
Supply - Aluminum	2,794	3,425	4,387	5,517	6,631	7,830	9,350	12,529	15,411	18,493
% change yoy	7%	23%	28%	26%	20%	18%	19%	34%	23%	20%
Capacity	3,336	3,884	5,044	6,618	8,983	10,800	10,908	15,500	18,000	20,000
Operating rate	84%	88%	87%	83%	74%	73%	86%	81%	86%	92%
Implied aluminum export						674	680	825	663	206
Alumina required	5,588	6,850	8,774	11,034	13,262	15,660	20,200	25,932	32,051	38,061
Chalco supply		4,700	5,131	6,050	6,816	7,871	9,400	10,150	11,550	12,350
Domestic non-Chalco					224	640	3,900	10,000	16,000	21,000
Imports of alumina	1,882	3,346	4,571	5,603	5,866	6,981	6,900	5,782	4,501	4,711
Implied import dependency ratio		49%	52%	51%	44%	45%	34%	22%	14%	12%
Chalco realized aluminum price										
In USc/lb	77	66	65	68	75	81	102	113	112	105
In US$/t	1,694	1,455	1,429	1,506	1,662	1,782	2,243	2,487	2,468	2,315
Yoy %		-14%	-2%	5%	10%	7%	26%	11%	-1%	-6%
Chalco realized alumina price										
In Rmb/t, ex-VAT	1,983	1,896	1,656	2,410	3,230	3,268	3,609	3,261	3,173	3,175
Yoy %		-4%	-13%	46%	34%	1%	10%	-10%	-3%	0%

Source: Antaike, CRU, Goldman Sachs Research estimates, GSJBW Research estimates.

Exhibit 2: Domestic exchange inventory is down 75% from recent high

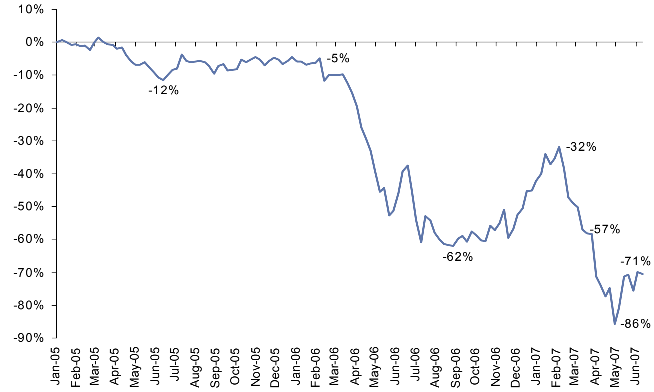
Domestic (SHFE) aluminum cash price vs. inventory



Source: Great Wall Futures, Shanghai Futures Exchange (SHFE).

Exhibit 3: Aluminum price has underperformed the base metals suite by 71% since Jan 2005

Relative LME cash price performance of aluminum vs. base metals suite of aluminum, copper, lead, zinc, nickel and tin



Source: Datastream, Goldman Sachs Research estimates.

Valuation: Not assuming any cyclical upturn

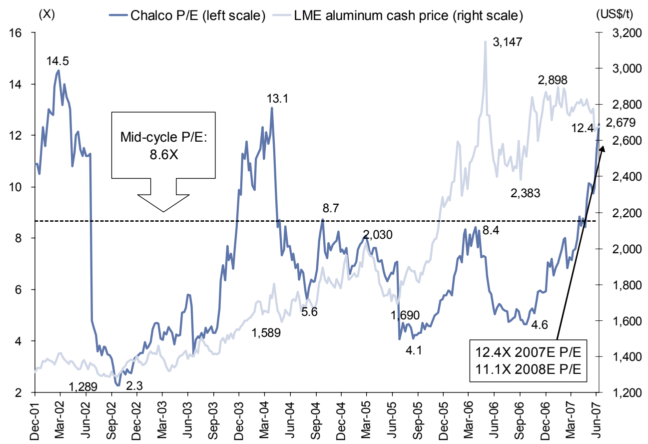
Our 12-month target price of HK$15.5 for Chalco implies an aluminum price of US$1.22/lb, i.e. at current spot level. Smelter injections coupled with a cyclical upturn could suggest a "blue sky" valuation scenario of as high as HK$36.

P/E-based 12-month target price of HK$15.5 provides 18% potential upside

We base our 12-month target price of HK$15.5 on 2008E P/E of 13.1X, the historical peak reached in March 2004.

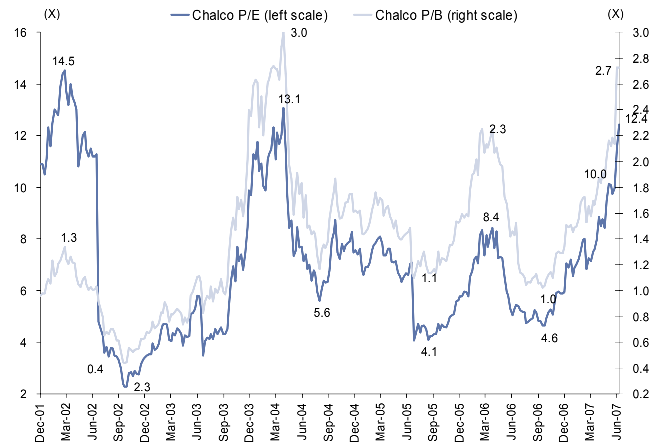
We forecast Chalco to generate a 2008E ROIC of 20% and ROE of 22%, similar to levels reached in the last peak in 2004 (2004 ROIC of 17% and ROE of 23%).

Exhibit 4: Chalco's P/E tracks aluminum prices closely
Chalco's P/E vs. LME aluminum cash price



Source: Datastream, Company data, Goldman Sachs Research estimates.

Exhibit 5: Chalco's P/E and P/B follow a similar trend, but P/E has no major distortion, unlike P/B
Chalco's P/E vs. P/B



Source: Datastream, Company data, Goldman Sachs Research estimates.

A switch from P/B-based measures

We have switched from a P/B-based valuation methodology to more earnings-based measures to reflect:

- Increased earnings visibility on the cycle.
- Distortion in book value from Chalco's series of smelter injections.
  - In 2006, Chalco paid Rmb1,385mn to purchase four smelters (100% Fushun Aluminum, 61.29% Zunyi, 55% Huayu and 51% Hualu Aluminum) with total net assets of Rmb1,563mn – representing 13% of the Rmb11.6bn increase in shareholders' equity on Chalco's balance sheet in 2006.
  - With five more smelters to be potentially injected in 2H2007-2008, this will lead to further distortions in book value.
- No major distortion from earnings-based measures, as shown in Exhibit 5.

"Blue sky" from parent smelter injections would provide at least 18% potential earnings upside

Assuming that Chalco's parent injects all five smelters (for details, please refer to page 14 at the top of Catalyst #4), we estimate Chalco's capacity would be boosted by 44% (on top of 20% expected organic growth).

Even if we assume a flat aluminum price, 2008E earnings could be boosted by 18% and our implied valuation could rise to HK$18 based on 2008E P/E of 13.1X, as shown in Exhibits 6 and 7. If the aluminum price re-tests the previous cyclical high of US$1.48/lb, we estimate earnings could potentially be lifted to HK$2.74 per share and our implied valuation would rise to HK$36.

Exhibit 6: Our "blue sky" scenario implies an 18% earnings boost even assuming a flat aluminum price
2008E EPS under Chalco's different realized aluminum and alumina price assumptions and "blue sky" scenario

Aluminum price (USc/lb)	Alumina price (Rmb/t, excl. VAT)	2008E EPS (HK$)	Upside/downside from base-case 2008E EPS
77	2,244	0.05	-96%
82	2,377	0.24	-79%
87	2,510	0.44	-63%
92	2,642	0.63	-47%
97	2,775	0.82	-31%
102	2,908	1.01	-14%
107	3,040	1.20	2%
112	**3,173**	**1.40**	**18%**
117	3,306	1.59	34%
122	3,439	1.78	51%
127	3,571	1.97	67%
132	3,704	2.17	83%
137	3,837	2.36	99%
142	3,969	2.55	115%
147	**4,102**	**2.74**	**132%**

Note: Historical high of LME aluminum price is US$1.48/lb reached in May 2006.

Source: Datastream, Goldman Sachs Research estimates.

Exhibit 7: Potential upside in our best-case scenario yields an implied valuation of HK$36
Implied valuations suggested by 2008E EPS under different price assumptions and "blue sky" scenario

2008E EPS (HK$)	Valuation implied by 13.1X P/E (HK$)	Suggested upside from target price	Suggested upside from current share price
0.05	0.7	-96%	-95%
0.24	3.2	-79%	-76%
0.44	5.7	-63%	-57%
0.63	8.2	-47%	-38%
0.82	10.8	-31%	-18%
1.01	13.3	-14%	1%
1.20	15.8	2%	20%
1.40	**18.3**	**18%**	**39%**
1.59	20.8	34%	58%
1.78	23.3	51%	77%
1.97	25.9	67%	96%
2.17	28.4	83%	115%
2.36	30.9	99%	134%
2.55	33.4	116%	153%
2.74	**35.9**	**132%**	**173%**

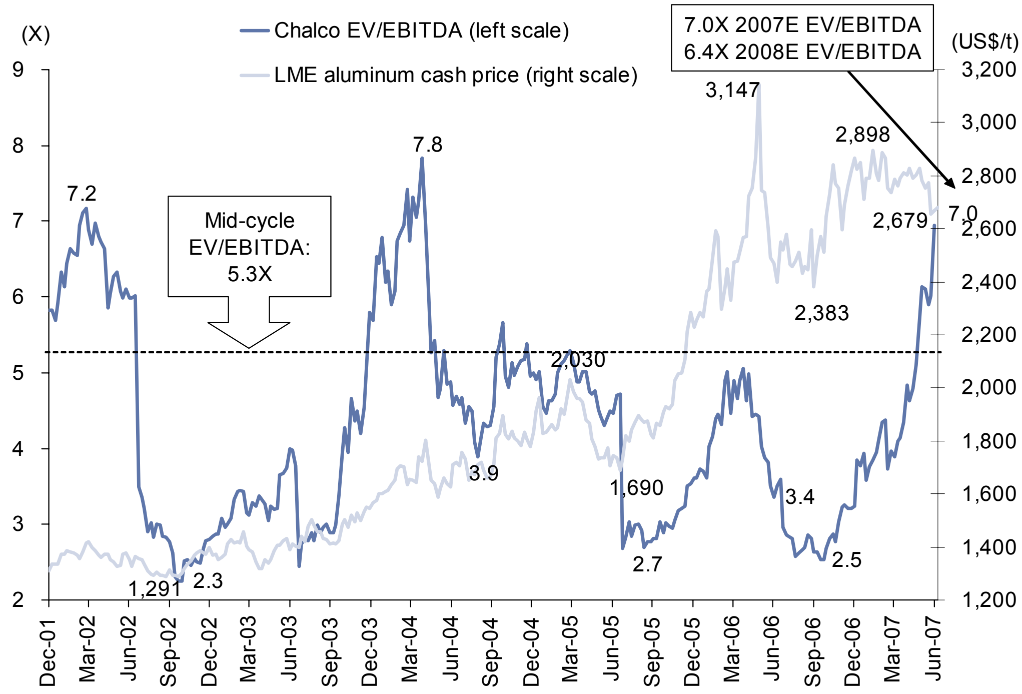
Source: Datastream, Goldman Sachs Research estimates.

Other valuation metrics generate similar results

EV/EBITDA-based valuation of HK$15.9

Valuation by EV/EBITDA metric can also capture earnings dynamics and is free from distortions in book value from Chalco's series of smelter injections. Chalco's EV/EBITDA has historically tracked the aluminum price trend closely, as with P/E. Its mid-cycle EV/EBITDA is 5.3X, vs. a peak of 7.8X. If we use peak 7.8X 2008E EV/EBITDA, we come up with a valuation of HK$15.9.

Exhibit 8: Chalco is now trading at 6.4X 2008E EV/EBITDA, vs. peak 7.8X
Chalco's EV/EBITDA vs. LME aluminum cash price



Source: Datastream, company data, Goldman Sachs Research estimates.

DCF suggests valuation of HK$18.1

We believe that DCF can capture longer-term volume growth potential as well as industry fundamentals since China, the key disruptive force on the supply side, has started to rein in capacity additions in a high energy consumption environment.

Assuming a long-term aluminum price of US$1.06/lb (in 2012 nominal terms) from 2012 onwards, our DCF valuation generates a valuation of HK$12.9 per share for 2008E based on a WACC of 11.2% and a terminal growth rate of 3%. Using a global major, such as Alcan's, peak P/DCF multiple of 1.4X, we derive a valuation of HK$18.1.

Peer comparison also attractive

Chalco is trading at a 14% discount to global majors

We believe the first step in a potential re-rating is for Chalco to trade toward the global majors' average. At 2008E 11.1X P/E and 6.4X EV/EBITDA, Chalco is trading at average discounts of 12% in terms of P/E, and 16% in terms of EV/EBITDA to Alcoa and Alcan while generating higher ROE than Alcoa and Alcan, and higher ROIC than Alcoa, as shown in Exhibit 9.

Global majors are also trading at the low end of their trading range, as shown in Exhibits 10-11.

Exhibit 9: Chalco is trading at a double-digit discount to global peers while offering similar ROIC and higher ROE
Chalco valuation comps vs. Alcoa and Alcan

		GS		6/21/2007	Mkt cap	P/E (X)		P/B (X)		EV/EBITDA (X)		EBITDA mgn		ROE		Gearing		Dividend yield		FCF yield		ROIC	
	Ticker	rating	Ccy	Price	(US$mn)	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E	2007E	2008E
Chalco	**2600.HK**	**Buy ***	**HKD**	**13.18**	**21,737**	**12.4**	**11.1**	**2.7**	**2.3**	**7.0**	**6.4**	**33%**	**32%**	**25%**	**22%**	**-7%**	**-10%**	**2%**	**3%**	**3%**	**4%**	**20%**	**20%**
Chalco at target price				**15.50**		14.6	13.1	3.2	2.7	8.8	7.7	33%	32%	25%	22%	-7%	-10%	2%	2%	3%	4%	20%	20%
Vs global comps																							
Alcoa	AA	NR	USD	40.25	34,957	12.2	12.0	2.0	1.7	7.4	7.6	21%	21%	17%	14%	36%	24%	2%	2%	3%	5%	25%	17%
Alcan	AL	NR	USD	83.10	30,211	12.6	13.4	2.3	2.0	7.4	7.7	19%	18%	18%	15%	36%	18%	1%	1%	4%	N.A.	21%	N.A.
Global majors average						**12.4**	**12.7**	**2.1**	**1.8**	**7.4**	**7.6**	**20%**	**20%**	**17%**	**15%**	**36%**	**21%**	**1%**	**1%**	**4%**	**5%**	**23%**	**17%**

Note: “Buy*” indicates that the stock is on the Asia Pacific Conviction Buy List. “NR” indicates the stock is Not Rated.
Chalco’s 12-month target price is derived by P/E. Key risks include unexpected macro slowdown.

Source: Datastream, company data, Goldman Sachs Research estimates.

Against other commodity peers

Chalco’s 2008E P/E and EV/EBITDA are at a 24% and 5% premium, respectively, to H-listed Jiangxi Copper (0358.HK, Buy). We believe the premium is justified by Chalco’s strong organic volume growth (2006-09E 3-year CAGR of 14%) and higher EBITDA margin (32% in 2008E vs. JXC’s 24%).

Chalco is also trading at a double-digit discount to the coal and cement sectors in terms of 2008E P/E, EV/EBITDA and P/B.

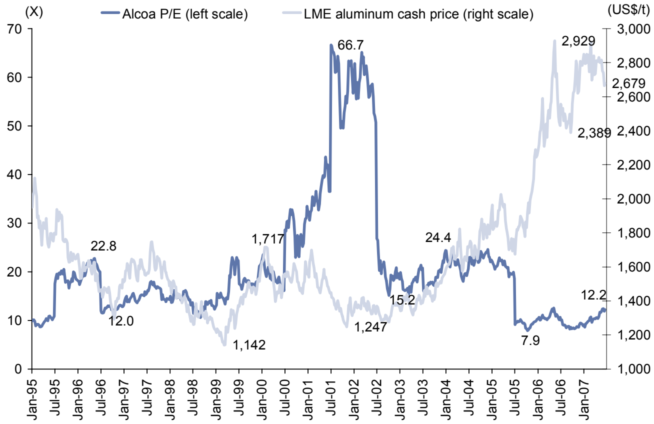
Against H share market

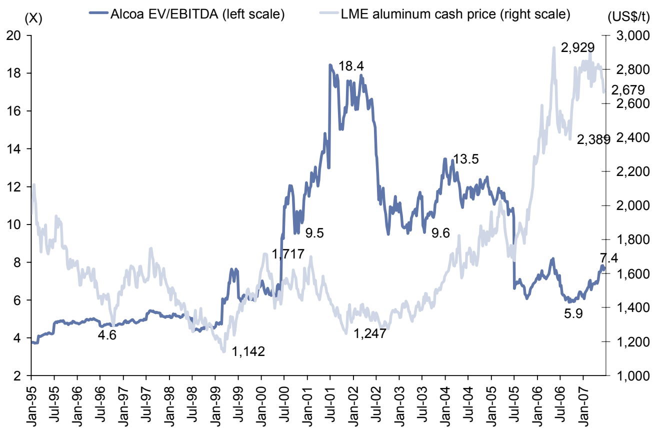
Chalco’s valuation is also attractive relative to the H-share market. Its 2008E P/E is at a sharp 30% discount to the H-share market’s, while Chalco’s EV/EBITDA and P/B are both at 14%-15% discounts to those of the H share market’s, despite Chalco’s 23% premium in terms of ROE.

Our 12-month target price of HK$15.5 for Chalco still puts it at an 18% discount to the H-share market in terms of P/E, and only at a 1%-4% premium for both P/B and EV/EBITDA.

Exhibit 10: Alcoa is at the low end of its trading range in terms of P/E and EV/EBITDA…

Alcoa's P/E and EV/EBITDA

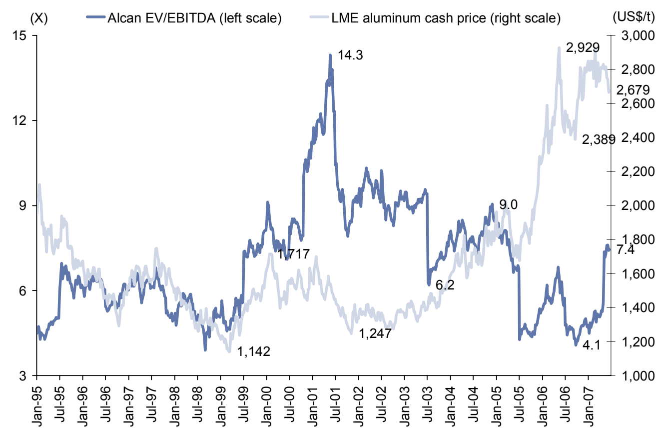




Source: Datastream, company data, Goldman Sachs Research estimates.

Exhibit 11: … so is Alcan

Alcan's P/E and EV/EBITDA



Note: Alcan's 2001 normalized EPS is negative – the relevant section of negative P/E is hidden in the chart.

Source: Datastream, company data, Goldman Sachs Research estimates.

Exhibit 12: We think Chalco's valuation is attractive compared to commodity peers and the H-share market

China commodity sector valuation comps

	Ticker	GS rating	6/21/2007 Price	Ccy	Mkt cap (US$mn)	P/E (X) 2007E	P/E (X) 2008E	P/B (X) 2007E	P/B (X) 2008E	EV/EBITDA (X) 2007E	EV/EBITDA (X) 2008E	EBITDA mgn 2007E	EBITDA mgn 2008E	ROE 2007E	ROE 2008E	Gearing 2007E	Gearing 2008E	Dividend yield 2007E	Dividend yield 2008E	FCF yield 2007E	FCF yield 2008E
Chalco (H)	**2600.HK**	**Buy ***	**13.18**	**HKD**	**21,737**	**12.4**	**11.1**	**2.7**	**2.3**	**7.0**	**6.4**	**33%**	**32%**	**25%**	**22%**	**-7%**	**-10%**	**2%**	**3%**	**3%**	**4%**
At target price			15.50	HKD		14.6	13.1	3.2	2.7	8.8	7.7	33%	32%	25%	22%	-7%	-10%	2%	2%	3%	4%
Jiangxi Copper (H)	0358.HK	Buy	13.88	HKD	5,143	8.1	9.0	2.1	1.8	5.4	6.1	25%	24%	26%	20%	14%	-5%	3%	3%	-5%	13%
Hunan Nonferrous Metals	2626.HK	Buy	5.19	HKD	2,272	18.9	16.0	3.4	2.9	11.3	10.1	10%	12%	18%	18%	69%	35%	2%	2%	-3%	10%
Yanzhou Coal (H)	1171.HK	Buy	11.28	HKD	7,100	15.1	12.5	2.6	2.2	7.8	7.1	44%	43%	17%	18%	-22%	-31%	2%	3%	4%	8%
Shenhua	1088.HK	Buy *	27.15	HKD	62,856	18.1	15.5	5.5	4.2	11.6	9.9	56%	57%	31%	27%	44%	24%	2%	2%	2%	3%
China Coal Energy	1898.HK	Buy	12.68	HKD	19,120	28.6	20.2	6.3	5.0	16.3	12.1	24%	27%	22%	25%	1%	4%	1%	1%	-2%	0%
Angang (H)	0347.HK	Neutral	17.20	HKD	13,060	13.1	9.9	3.0	2.5	7.1	6.0	30%	29%	23%	25%	88%	63%	4%	5%	-2%	7%
Maanshan Iron & Steel (H)	0323.HK	Buy *	6.33	HKD	5,230	10.8	6.4	1.6	1.3	6.3	4.3	19%	21%	15%	21%	47%	20%	2%	4%	-2%	17%
Baosteel	600019.SS	Buy	11.30	CNY	25,976	13.1	9.4	2.2	1.9	6.3	5.4	22%	23%	17%	20%	34%	16%	3%	5%	2%	10%
Wuhan Iron & Steel	600005.SS	Neutral	10.96	CNY	11,277	16.6	14.4	3.5	3.1	8.8	8.2	21%	21%	21%	21%	23%	13%	3%	3%	4%	5%
Anhui Conch (H)	0914.HK	Neutral	51.00	HKD	8,196	34.5	26.0	7.4	5.8	15.7	13.0	26%	26%	21%	22%	140%	106%	0%	1%	-4%	2%
China Nat'l Building Material	3323.HK	Neutral	13.00	HKD	3,447	32.7	30.5	5.4	4.5	16.7	15.3	21%	20%	16%	15%	101%	76%	0%	0%	-2%	3%
Zhejiang Glass	0739.HK	Buy *	5.94	HKD	548	17.1	9.6	2.4	2.0	10.0	7.4	27%	30%	14%	21%	139%	105%	2%	3%	0%	8%
H Share Index						**18.9**	**16.0**	**3.1**	**2.7**	**8.2**	**7.4**	**N.A.**	**N.A.**	**17%**	**18%**	**N.A.**	**N.A.**	**2%**	**2%**	**N.A.**	**N.A.**

"Buy*" indicates that the stock is on our Asia Pacific Conviction Buy List.

Source: Company data, Goldman Sachs Research estimates.

Five catalysts for a fundamental upturn

We see five catalysts – against the broad backdrop of the two mega themes we highlighted – that could re-rate aluminum fundamentals and help Chalco's outperformance.

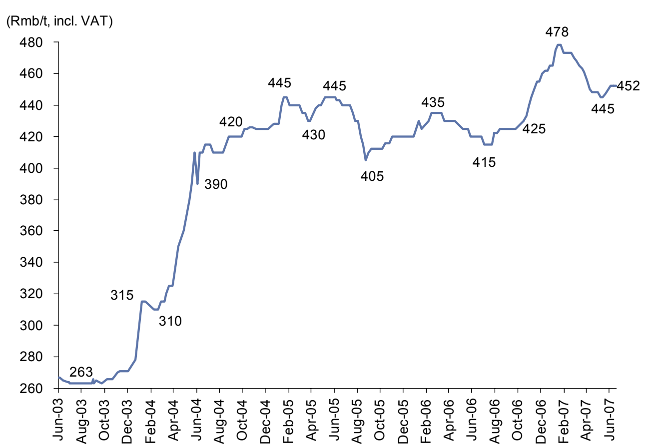
Catalyst #1: Rising coal prices and power tariffs slowing smelter expansion

Our recent channel checks with smelters surprise us on the upside on the capacity addition front. Facing rising power tariffs (30% of aluminum production cost), smelters can no longer lock in below-market cheap power and are delaying/canceling their capacity addition plans. In Guizhou province, some smelters are facing power tariffs which are four times higher when their old power supply contracts expire.

We believe that in a high energy price environment, the growth of energy-intensive industries should be slowed down. Coal, the dominant power source (85% of total power generation in China), clearly appears to be breaking into a 2-3 year up-cycle, pushing up power tariffs, in our opinion.

Exhibit 13: Coal price clearly breaking into a 2-3 year up-cycle

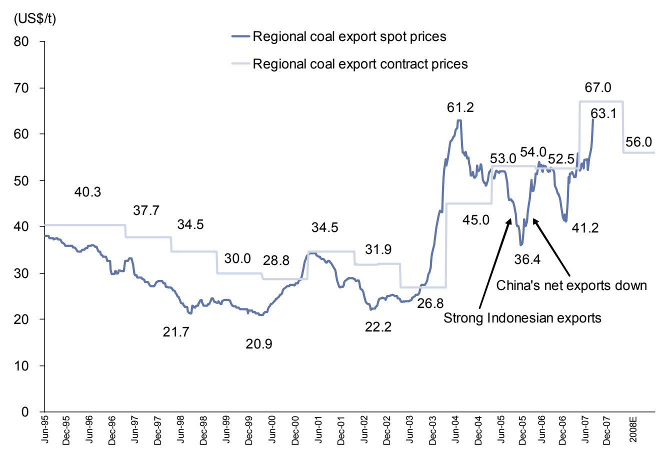
Domestic coal spot price at Qinhuangdao port



Source: China Coal Information Center.

Exhibit 14: Recent coal export settlement prices up 28% yoy

Regional coal spot and contract prices



Source: GlobalCoal, McCloskey, Tex Report, GSJBW Research estimates.

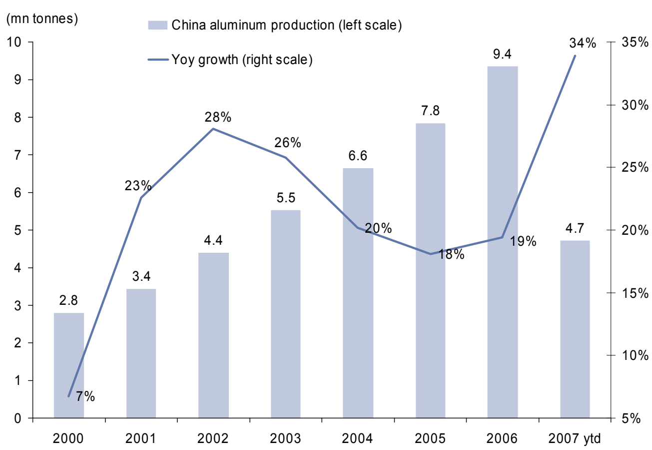
Catalyst #2: Increasing government crackdown efforts

Five years after joining the WTO and China becoming the world's fourth-largest economy, the government is shifting focus to energy efficiency and environmental protection. The government's recent measures to control overexpansion in the steel, cement, and aluminum industries reflect an increased determination to achieve its 20% of GDP energy reduction target by 2010, after missing it in 2006 (down only 1.3% vs. 4% target). However, rapid ytd growth of energy needs in high energy consumption sectors, suggests the government may miss this year's target, too.

- The government has added energy efficiency and environmental protection into local government officials' scorecards.

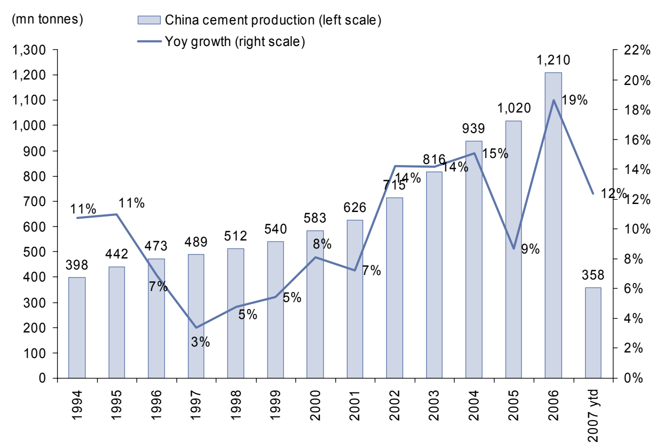
- The central government has signed written pledges with local governments to close down obsolete steel and cement capacity, the toughest measures so far. Inspection teams are ensuring this is undertaken.
- The central government imposed a steel export tax in June 2007 right after the second reduction of the export VAT rebate (the first in September 2006 and the second in April 2007), instead of taking a gradual wait-and-see approach.
- The government, starting on July 1, is canceling the export VAT rebate on low-end semi-finished aluminum products and cement, further showing determination in cracking down on energy-intensive sectors.

Exhibit 15: Aluminum production in China has been accelerating
Aluminum production volume in China



Source: China Nonferrous Metals Association.

Exhibit 16: Ytd cement production is still growing at double-digit rate
Cement production volume in China



Source: CEIC.

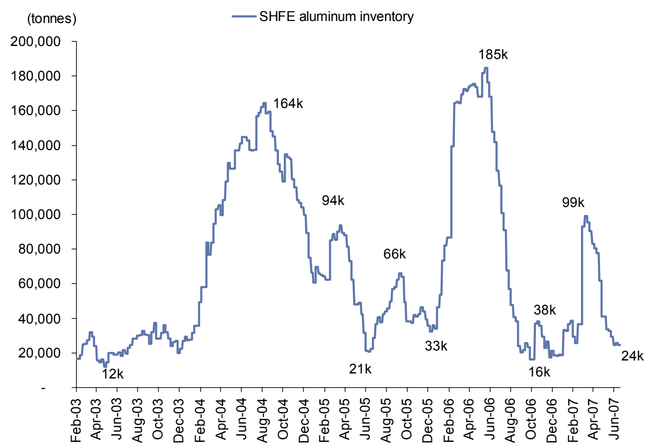
Catalyst #3: Acceleration of real estate capex and power grid de-bottlenecking

We are positively surprised by how strong demand is tracking (up 40% ytd vs. 2006's full-year's 21%).

Signs of demand growth picking up

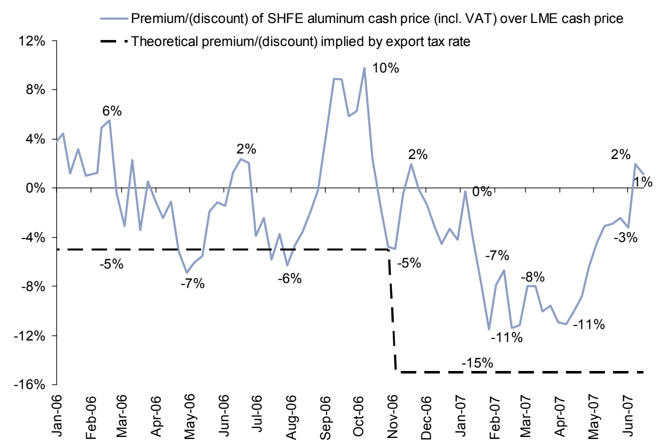
- Shanghai Futures Exchange (SHFE) inventory at 24,352 tonnes is down 83% yoy.
- The domestic price of aluminum, for the first time since the implementation of the 15% export tax at beginning of the year, is at a 1-2% premium to LME vs. the theoretical 15% discount.
- Our channel checks with smelters and traders suggest unreported inventory is at minimum levels.
- We have factored in strong exports in semi-finished products (semis) to calculate apparent consumption.

Exhibit 17: Domestic exchange inventory is down 83% yoy
Domestic (SHFE) aluminum cash price vs. inventory



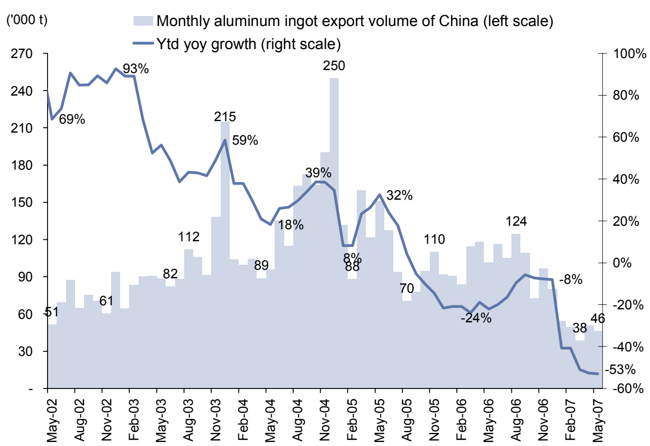
Source: Shanghai Futures Exchange (SHFE), Bloomberg.

Exhibit 18: Domestic price at premium to LME vs. theoretical discount of 15% implied from export tax rate
Domestic premium/(discount) to LME aluminum price



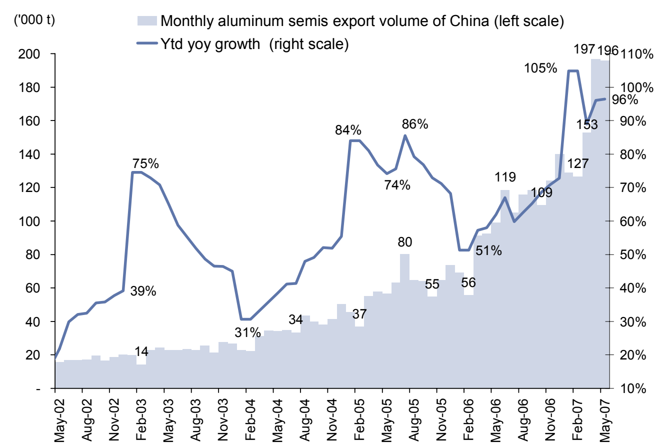
Source: Great Wall Futures, Datastream.

Exhibit 19: Aluminum ingot exports continues to decline
China aluminum ingot export trend



Source: CEIC.

Exhibit 20: Aluminum semis export growth accelerating
China aluminum semis export trend

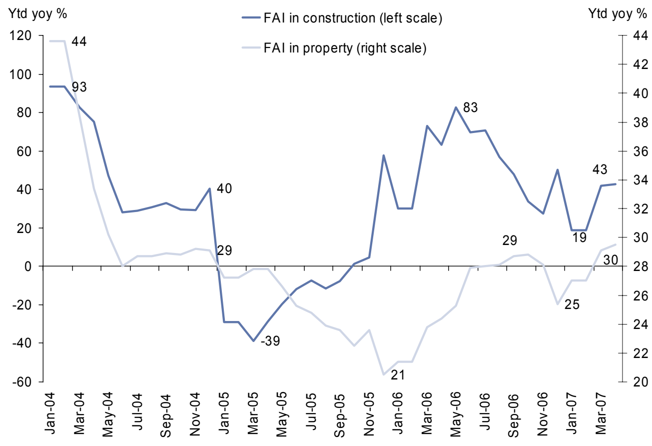


Source: CEIC.

Driven by de-bottlenecking infrastructure spending and real estate investment

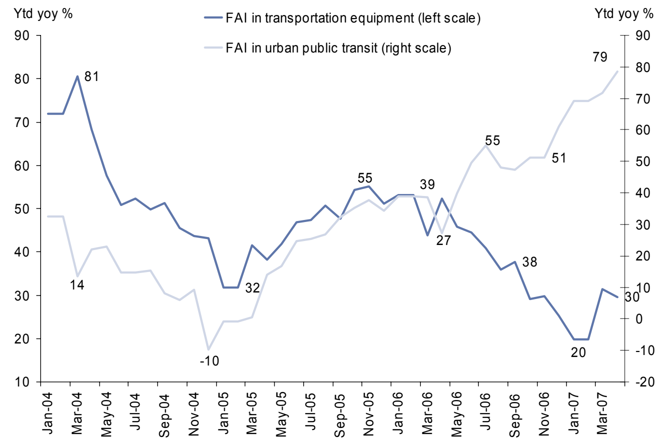
- Channel checks with aluminum cable (used in power line transmission) producers show shipments are up 30-40%, consistent with 86% capex growth in the 11th Five Year plan.
- Urban public transport (MTR and light rail) spending is up 79% ytd, compared to 61% growth in 2006.
- Property investment growth is tracking at 30% ytd (compared to 2006 average of 25%), indicating delayed projects during the 3Q2006 government crackdown are coming back onstream.

Exhibit 21: Property investment growth is picking up
FAI in construction and property, ytd yoy %



Source: CEIC.

Exhibit 22: Urban public transport (MTR and light rail) spending is growing strongly
FAI in transportation equipment and urban public transit, ytd yoy %



Source: CEIC.

Demand growth sustainable – from Japan and Korea experiences

- During Japan's post-war recovery phase and Korea's industrialization period, aluminum demand growth reached 20% for Japan (during 1960-70) and 18% for Korea (during 1980-90), a GDP multiplier of 2.0 and 2.1, respectively.
- Recent channel checks with downstream extruders show strong order growth from 2nd and 3rd-tier cities, consistent with low urbanization rates in those areas compared to 1st-tier cities, as shown in Exhibit 24. **We believe the urbanization process for the West region is still in the early stages.**
- We believe demand strength in the West region has a lot of staying power. Provinces, like Shanxi and Henan, are rich in resources (such as coal) and are cashing in on the strong cycle.

Exhibit 23: China in the high demand growth phase, similar to Japan's and Korea's industrialization period
Aluminum actual consumption CAGR vs. real GDP growth, Japan and South Korea

	Japan			South Korea		
	Aluminum actual consumption CAGR	Real GDP growth	Multiplier	Aluminum actual consumption CAGR	Real GDP growth	Multiplier
1997-2002	-2.8%			6.7%		
1990-2002	-0.9%			8.5%		
1980-1990	4.0%			**17.7%**	**8.5%**	**2.1**
1970-1980	6.0%			N.A.		
1960-1970	**19.8%**	**9.9%**	**2.0**	N.A.		

Source: CEIC, Antaike, Cabinet Office of Japan.

Exhibit 24: 2nd-tier cities' urbanization rates way below that of 1st-tier cities
Urbanization rate (rural vs. total registered population) in selected areas in China, 2005

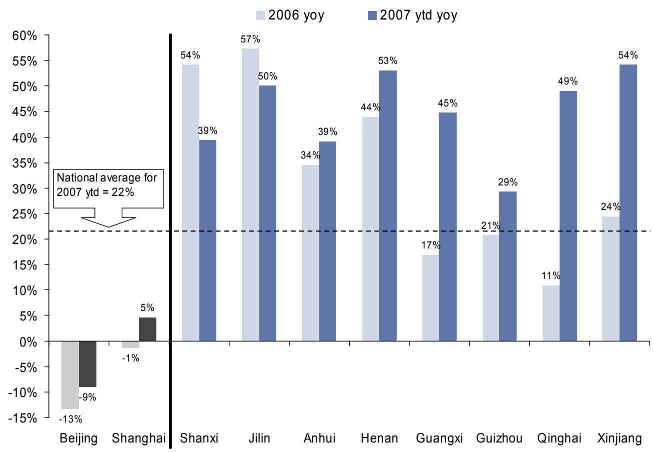
China Overall	2nd-tier areas			1st-tier areas		
	Sichuan	Henan	Shaanxi	Beijing	Shanghai	Guangdong
32%	**23%**	**21%**	**25%**	**75%**	**84%**	**52%**

Source: CEIC.

- Demand strength could be further maintained, as 1st-tier cities' construction activities play catch-up.
  – 1st-tier cities' construction activities have been flat or have declined yoy in 2006 and 2007 ytd.

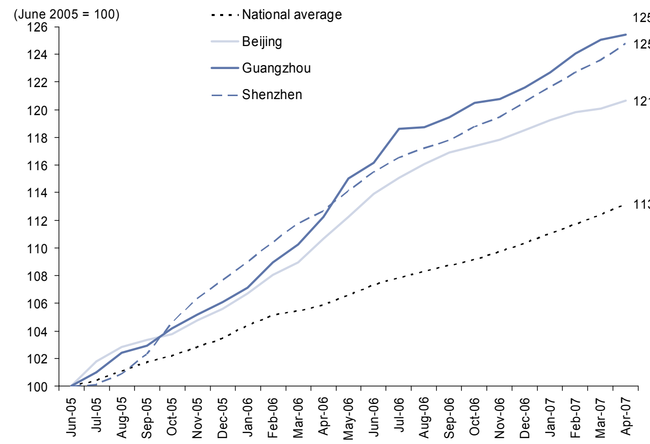
– Local property prices, as shown in Exhibit 26, are on the rise again.
– We think it is logical for 1st-tier cities to accelerate property supply to alleviate property price pressure. This would be positive for construction demand.

Exhibit 25: Construction activity growth is much stronger in 2nd-tier cities than 1st-tier cities
Growth of floor space under construction of residential commodity buildings in selected areas of China



Source: CEIC.

Exhibit 26: Property price pressure in 1st-tier cities has prompted the need for accelerating property supply
Property price indexed to June 2005 of 1st-tier cities vs. national average



Source: CEIC.

Catalyst #4: Acceleration of parent smelter injections

Exhibit 27: Smelter injections could boost Chalco's capacity further by 44% (on top of 20% expected organic growth)
Chalco's aluminum smelter capacity and volume (existing and potential smelter injections), 2006-2008E

		Year-end capacity ('000 t)										Production volume contribution to Chalco ('000 t)										Comment
		2006		2007E				2008E				2006		2007E				2008E				
	Equity stake	Aggregate	Equitable	Aggregate		Equitable		Aggregate		Equitable		Aggregate	Equitable	Aggregate		Equitable		Aggregate		Equitable		
				Addition	Total	Addition	Total	Addition	Total	Addition	Total			Addition	Total	Addition	Total	Addition	Total	Addition	Total	
Existing																						
Guizhou plant	100%	404	404	-	404	-	404	-	404	-	404	363	363	21	384	21	384	-	384	-	384	
Qinghai plant	100%	367	367	-	367	-	367	-	367	-	367	382	382	(20)	362	(20)	362	-	362	-	362	
Pingguo plant - Guangxi	100%	140	140	-	140	-	140	-	140	-	140	136	136	4	140	4	140	-	140	-	140	
Shandong plant	100%	75	75	-	75	-	75	-	75	-	75	126	126	(26)	100	(26)	100	-	100	-	100	
Zhengzhou plant - Henan	100%	56	56	-	56	-	56	-	56	-	56	41	41	15	56	15	56	-	56	-	56	
Shanxi plant	100%	280	280	-	280	-	280	-	280	-	280	282	282	(2)	280	(2)	280	-	280	-	280	
Lanzhou plant	100%	160	160	268	428	268	428	-	428	-	428	170	48	(10)	160	112	160	268	428	268	428	28% stake before 2007 privatization
Research institute	100%	18	18	-	18	-	18	-	18	-	18	17	17	1	18	1	18	-	18	-	18	
Shanxi Guanlv	51%	220	112	-	220	-	112	-	220	-	112	115	59	105	220	54	112	-	220	-	112	Acquired in December 2005
Shandong Huayu	55%	100	55	-	100	-	55	-	100	-	55	45	25	55	100	30	55	-	100	-	55	Acquired in July 2006
Fushun	100%	140	140	100	240	100	240	-	240	-	240	100	100	90	190	90	190	50	240	50	240	Acquired in March 2006
Zunyi	61%	110	67	-	110	-	67	-	110	-	67	43	26	67	110	41	67	-	110	-	67	Acquired in June 2006
Baiyin - Gansu Hualu	51%	140	71	-	140	-	71	-	140	-	71	46	23	94	140	48	71	-	140	-	71	Acquired in August 2006
Jiaozuo Wanfang	29%	272	79	140	412	41	119	-	412	-	119	70	20	202	272	59	79	140	412	41	119	Acquired in September 2006
Total		2,481	2,024	508	2,989	409	2,433	-	2,989	-	2,433	1,936	1,648	595	2,531	426	2,074	458	2,989	359	2,433	
Smelter injections																						
Baotou	80%			300	300	240	240	-	300	-	240	-	-	150	150	120	120	150	300	120	240	Announced in June 2007
Liancheng	100%			270	270	270	270	-	270	-	270	-	-	135	135	135	135	135	270	135	270	
Tongchuan Xinguang	*100%*			-	-	-	-	155	155	155	155	-	-	-	-	-	-	155	155	155	155	Equity stake tbc - assume 100% here
Henan Zhongmai	*100%*			-	-	-	-	100	100	100	100	-	-	-	-	-	-	100	100	100	100	Equity stake tbc - assume 100% here
Guangyuan Qimingxing	*100%*			-	-	-	-	120	120	120	120	-	-	-	-	-	-	120	120	120	120	Equity stake tbc - assume 100% here
Subtotal		-	-	570	570	510	510	375	945	375	885	-	-	285	285	255	255	660	945	630	885	
Total		2,481	2,024	1,078	3,559	919	2,943	375	3,934	375	3,318	1,936	1,648	880	2,816	681	2,329	1,118	3,934	989	3,318	

Source: Company data, Goldman Sachs Research estimates.

- Although it is a well-known story, we think the parent's commitment to inject 0.9mt of aluminum smelters is very positive in a potential rising aluminum price environment.
- Even if the aluminum price remains flat, we estimate 2008 earnings could be enhanced by 18% on the back of asset injections.

- We believe the risk of overpayment is low, from the past injection track record.
  - Chalco has been paying an average of EV/t Rmb9,499/t for past injections, as shown in Exhibit 28, compared to Greenfield costs of Rmb10,000/t.
  - We believe Greenfield capex for smelters that are approved could be on the rise if government strictly enforces the crackdown measures.

Exhibit 28: Chalco has kept a good track record of smelter injections at reasonable prices
Chalco's historical smelter injection highlights

	Acquisition date	Equity interest acquired	Total capacity of target ('000 t)	Target capacity acquired ('000 t)	Injection price (Rmb mn)	Investment per tonne (Rmb/t)	EV/tonne (Rmb/t)
Shanxi Guanlv	Dec-05	51%	220	112	510	4,545	12,802
Fushun	Mar-06	100%	140	140	500	3,571	9,050
Zunyi	Jun-06	61%	113	69	202	2,920	9,257
Shandong Huayu	Jul-06	55%	100	55	412	N.A.	N.A.
Baiyin - Gansu Hualu	Aug-06	51%	127	65	270	4,173	N.A.
Jiaozuo Wanfang	Sep-06	29%	272	79	247	3,131	6,888
Average						**3,668**	**9,499**

Note: Smelting capacities of targets are based on disclosures on the respective dates of announcements.

Source: Company data, Goldman Sachs Research estimates.

We believe capacity additions from asset injections would provide key downside protection as well. This means even if the aluminum price drops by 8% yoy to US$1.04/lb, the 2008 earnings could still be stable versus 2007 levels. At US$1.04/lb, we estimate at least 0.8mt, or a total of 3% of global capacity would be operating below cost.

Catalyst #5: Potential injection of downstream extrusion assets, capturing extra margins

Chalco management has also indicated a potential injection of extrusion and panel businesses from the parent. We believe it makes strategic sense for Chalco.

- The downstream extrusion business operates on a processing fee basis. Extruders charge different fees, based on the technical complexity of the products, mitigating the highly cyclical nature of Chalco's existing alumina and alumina businesses.
- After Chalco's major push on the smelter side, Chalco's upstream (alumina) and midstream (aluminum smelting) businesses are becoming more balanced. The spread between aluminum prices and alumina production costs would become the key earnings driver. We think any further extension in the value chain could boost margins.

Risks

Unexpected sharp demand slowdown

Our positive stance on aluminum is largely based on potential demand strength to absorb still strong aluminum production growth.

Any major slowdown in demand could create an oversupply situation and downside pressure on aluminum prices.

We believe this risk is mitigated by infrastructure de-bottlenecking spending, the key reason for demand resilience during the past three years.

Smelter capacity additions accelerating

If the government's crackdown on smelter capacity additions fails due to high smelter margins, aluminum prices could continue to remain range-bound and underperform other base metals.

We believe this risk is mitigated by rising energy prices. We believe China's coal cycle is clearly breaking into 2-3 years of an upcycle due to emerging railway de-bottlenecking. For details on the coal cycle outlook, please refer to our December 19, 2006 report titled, "*Re-emerging rail bottlenecks support two-year fundamental upturn*".

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Reg AC

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The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

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Goldman Sachs Investment Research global coverage universe

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Price target and rating history chart(s)

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