

Asia China

Resources Metals &amp; Mining

Deutsche Bank



6 February 2012

# China VTM Mining

Reuters: **0893.HK** Bloomberg: **893 HK** Exchange: **HSI** Ticker: **0893**

## Position at cyclical trough; reinstating coverage with Buy

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### Cost-competitive local player with good potential growth

China VTM is a cost-competitive iron ore concentrate producer serving the Sichuan market. It has been benefiting from solid iron ore prices and achieving ~50% gross margins from its iron ore production. The company has executed well in acquiring resources; it increased its resources from 133mt at its IPO in late 2009 to 422mt currently, with potential to hit 600mt soon. With solid profitability and future volume growth, we think its current 2012 PE at 5.2x is unfairly low. We reinstate coverage with a Buy and PT of HKD2.5, implying 46% upside potential.

### Solid acquisition execution to achieve future volume growth

China VTM's iron ore resources have successfully grown by more than a factor of three, from 133mt at IPO to 422mt. Management guides 600mt resources and 5mtpa concentrate output by 2015. We expect it will soon achieve its 600mt resources target with the completion of the Yixingda acquisition (potentially over 100mt resources) in 2012. The bump-up in resources will increase the company's intrinsic value and support future production volume increases.

### Cost competitiveness resulting in good profitability

China VTM is a Sichuan-based iron ore concentrate producer currently possessing the largest concentrate output (over 2mtpa) among all HK-listed iron ore producers. The company produces iron ore concentrate with 54-55% Fe content at a cost about RMB300/t. We believe its costs are much lower than the average level in China (over RMB500/t) and lower than some global suppliers on a market landed basis. We believe the company will be able to deliver a gross margin over 40% in at least the coming three years.

### Reinstate coverage at Buy; HKD2.5 target price; major risk is weak demand

Our PT of HKD2.5 is based on life-of-mine DCF, implies 46% upside potential from current levels, 1.2x 2012 P/B, and 7.5x 2012 P/E. Currently, the stock trades at 0.8x P/B and 5.2x P/E. As China VTM is projected to deliver over 15% ROAE and almost 4% cash dividend yield in coming two years, we think the stock is significantly undervalued. We believe China VTM is a better pick than steel stocks for riding a cyclical recovery in steel demand as we mentioned in our China Iron Ore Sector report – "Cyclical headwinds; secular tailwinds". We reinstate coverage with a Buy. The major downside risk is weaker-than-expected steel demand.

#### Forecasts and ratios

Year End Dec 31	2009A	2010A	2011E	2012E	2013E
Sales (CNYm)	1,083.9	1,554.1	<b>1,691.0</b>	1,884.9	2,003.6
EBITDA (CNYm)	481.2	799.6	<b>831.9</b>	947.4	1,041.2
Reported EPS FD(CNY)	0.20	0.26	<b>0.24</b>	0.27	0.29
Reported NPAT (CNYm)	327.9	533.5	<b>505.6</b>	559.1	605.3
DB EPS growth (%)	–	27.8	<b>-5.2</b>	10.6	8.3
PER (x)	19.8	12.7	<b>5.7</b>	5.2	4.8
Yield (net) (%)	0.0	1.6	<b>3.5</b>	3.9	4.2

Source: Deutsche Bank estimates, company data

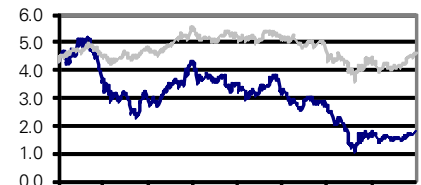
<sup>1</sup> DB EPS is fully diluted and excludes non-recurring items<sup>2</sup> Multiples calculations use average historical prices for past years and spot prices for current and future years, except P/B which uses the year end close

### Coverage Change

#### Buy

Price at 3 Feb 2012 (HKD)	1.71
Price target - 12mth (HKD)	2.50
52-week range (HKD)	3.83 - 1.03
HANG SENG INDEX	20,757

#### Price/price relative



2/10 5/10 8/10 11/10 2/11 5/11 8/11 11/11

— China VTM Mining

— HANG SENG INDEX (Rebased)

Performance (%)	1m	3m	12m
Absolute	19.2	3.0	-49.9
HANG SENG INDEX	11.6	4.6	-13.2

#### Stock data

Market cap (HKDm)	3,548
Market cap (USDm)	458
Shares outstanding (m)	2,075.0
Major shareholders	<b>Trisonic International (57.5%)</b>
Avg daily value traded (USDm)	1.0
Free float(%)	42

#### Key indicators (FY1)

ROE (%)	17.0
Net debt/equity (%)	-8.1
Price/book (x)	0.9
Net interest cover (x)	33.0
Operating profit margin (%)	41.4

#### Related recent research

Date

China Iron Ore Sector - Cyclical headwinds; secular tailwinds

James Kan

06 Feb 2012

Deutsche Bank AG/Hong Kong

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Model updated:04 February 2012

**Running the numbers****Asia****China****Metals & Mining****China VTM Mining**

Reuters: 0893.HK

Bloomberg: 893 HK

**Buy**

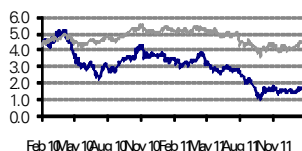
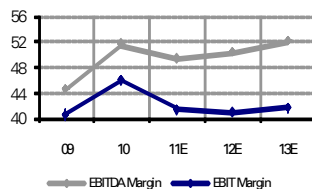
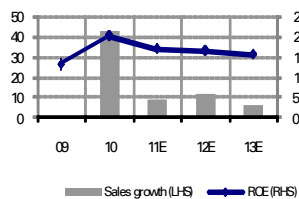
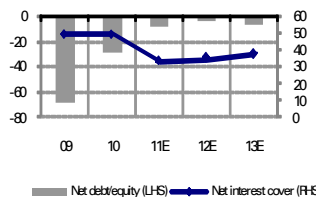
Price (3 Feb 12) HKD 1.71

Target price HKD 2.50

52-week Range HKD 1.03 - 3.83

Market Cap (m) HKDm 3,548  
USDm 458**Company Profile**

China VTM Mining (the Company) is primarily engaged in mining, ore processing and iron palletizing and sells its iron concentrates, iron pellets and titanium concentrates to steel producers and downstream users of titanium-related products.

**Price Performance****Margin Trends****Growth & Profitability****Solvency**

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Fiscal year end 31-Dec

**Financial Summary**

	2009	2010	2011E	2012E	2013E
DB EPS (CNY)	0.20	0.26	0.24	0.27	0.29
Reported EPS (CNY)	0.20	0.26	0.24	0.27	0.29
DPS (CNY)	0.00	0.05	0.05	0.05	0.06
BVPS (CNY)	1.2	1.3	1.5	1.7	2.0

Weighted average shares (m)	1,630	2,075	2,075	2,075	2,075
Average market cap (CNYm)	6,487	6,795	2,884	2,884	2,884
Enterprise value (CNYm)	4,796	6,013	2,593	2,743	2,564

**Valuation Metrics**

P/E (DB) (x)	19.8	12.7	5.7	5.2	4.8
P/E (Reported) (x)	19.8	12.7	5.7	5.2	4.8
P/BV (x)	3.69	2.41	0.91	0.79	0.70
FCF Yield (%)	0.8	nm	nm	nm	10.3
Dividend Yield (%)	0.0	1.6	3.5	3.9	4.2
EV/Sales (x)	4.4	3.9	1.5	1.5	1.3
EV/EBITDA (x)	10.0	7.5	3.1	2.9	2.5
EV/EBIT (x)	10.9	8.4	3.7	3.5	3.1

**Income Statement (CNYm)**

<b>Sales revenue</b>	<b>1,084</b>	<b>1,554</b>	<b>1,691</b>	<b>1,885</b>	<b>2,004</b>
<b>Gross profit</b>	<b>543</b>	<b>917</b>	<b>967</b>	<b>1,074</b>	<b>1,137</b>
<b>EBITDA</b>	<b>481</b>	<b>800</b>	<b>832</b>	<b>947</b>	<b>1,041</b>
Depreciation	30	72	104	138	164
Amortisation	11	14	28	36	42
<b>EBIT</b>	<b>440</b>	<b>713</b>	<b>700</b>	<b>773</b>	<b>835</b>
Net interest income/(expense)	-9	-15	-21	-22	-22
Associates/affiliates	0	0	0	0	0
Exceptionals/extraordinaries	0	0	0	0	0
Other pre-tax income/(expense)	6	3	3	3	3
<b>Profit before tax</b>	<b>437</b>	<b>701</b>	<b>681</b>	<b>753</b>	<b>815</b>
Income tax expense	70	117	170	188	204
Minorities	39	51	5	6	6
Other post-tax income/(expense)	0	0	0	0	0
<b>Net profit</b>	<b>328</b>	<b>533</b>	<b>506</b>	<b>559</b>	<b>605</b>
DB adjustments (including dilution)	0	0	0	0	0
<b>DB Net profit</b>	<b>328</b>	<b>533</b>	<b>506</b>	<b>559</b>	<b>605</b>

**Cash Flow (CNYm)**

<b>Cash flow from operations</b>	<b>342</b>	<b>764</b>	<b>485</b>	<b>880</b>	<b>668</b>
Net Capex	-290	-1,316	-674	-923	-372
<b>Free cash flow</b>	<b>52</b>	<b>-551</b>	<b>-188</b>	<b>-43</b>	<b>297</b>
Equity raised/(bought back)	1,662	0	0	0	0
Dividends paid	-20	0	-108	-101	-112
Net inc/(dec) in borrowings	100	200	0	0	0
Other investing/financing cash flows	-42	-434	-189	0	0
<b>Net cash flow</b>	<b>1,752</b>	<b>-786</b>	<b>-485</b>	<b>-145</b>	<b>185</b>
Change in working capital	37	-120	158	-140	150

**Balance Sheet (CNYm)**

Cash and other liquid assets	1,884	1,096	560	415	600
Tangible fixed assets	496	1,476	1,895	2,580	2,737
Goodwill/intangible assets	157	496	618	682	690
Associates/investments	0	0	51	51	51
Other assets	536	665	847	924	891
<b>Total assets</b>	<b>3,073</b>	<b>3,733</b>	<b>3,971</b>	<b>4,652</b>	<b>4,970</b>
Interest bearing debt	100	300	300	300	300
Other liabilities	367	644	479	696	514
<b>Total liabilities</b>	<b>467</b>	<b>944</b>	<b>779</b>	<b>996</b>	<b>814</b>
Shareholders' equity	2,514	2,775	3,173	3,631	4,124
Minorities	93	14	20	25	31
<b>Total shareholders' equity</b>	<b>2,607</b>	<b>2,789</b>	<b>3,192</b>	<b>3,656</b>	<b>4,156</b>
Net debt	-1,784	-796	-260	-115	-300

**Key Company Metrics**

Sales growth (%)	nm	43.4	8.8	11.5	6.3
DB EPS growth (%)	na	27.8	-5.2	10.6	8.3
EBITDA Margin (%)	44.4	51.4	49.2	50.3	52.0
EBIT Margin (%)	40.6	45.9	41.4	41.0	41.7
Payout ratio (%)	0.0	20.2	20.0	20.0	20.0
ROE (%)	13.0	20.2	17.0	16.4	15.6
Capex/sales (%)	26.8	84.7	39.8	49.0	18.5
Capex/depreciation (x)	7.0	15.3	5.1	5.3	1.8
Net debt/equity (%)	-68.4	-28.5	-8.1	-3.1	-7.2
Net interest cover (x)	49.3	49.2	33.0	34.6	37.4

Source: Company data, Deutsche Bank estimates

# Investment thesis

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## Outlook

China VTM Mining is the largest private and the second-largest overall iron ore producer in Sichuan province, China. Currently, it has the largest concentrate output (over 2mtpa) among all HK-listed iron ore producers. It is a cost-competitive iron ore concentrate producer serving the Sichuan local market. It has benefitted from solid iron ore price and is achieving ~50% gross margins from its iron ore production. We believe its costs are much lower than the average level in China (over RMB500/t) and lower than some global suppliers on a market landed basis. We believe the company will be able to deliver a gross margin over 40% in at least the coming three years. The company has executed well in acquiring resources; it increased its resources from 133mt when it listed in late 2009 to its current 422mt, with the potential to hit 600mt soon. With solid profitability and future volume growth, we re-instate coverage with a Buy.

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## Valuation

Our target price of HKD2.5 is based on a life-of-mine DCF. The discount rate is a WACC of 10.5%, with a cost of equity of 12.4% and an after-tax cost of debt of 6%. Our cost of equity uses a risk-free rate of 3.1%, market risk premium of 5.8% and beta of 1.6x. Our target price implies 46% upside potential from the current levels, 1.2x 2012 P/B, and 7.5x 2012 P/E, between its historical average and one standard deviation below its historical average. We believe such target multiples are reasonable, if not conservative. Currently, the stock trades at only 0.8x P/B and 5.2 P/E. As China VTM is projected to deliver over 15% ROAE and almost 4% cash dividend yield in the coming two years, we think the current valuation is undemanding and unsustainably low. We believe China VTM is a better pick than steel stocks for riding the wave of a cyclical recovery in steel demand.

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## Risks

As iron ore concentrates and pellets feed to steel plants, a significant slowdown in steel demand in China would lower the iron ore ASPs, and therefore, the company's bottom line. Stronger-than-expected iron ore output of major global iron ore players could result in iron ore oversupply and hurt the company's profitability. Also, the company faces the possibility of taxation and regulation changes for iron ore mining industry.

Company-specific risks include slower-than-expected volume growth caused by a delay in the ramp-up of the Pingchuan and Yixingda projects. Shorter-than-expected mine life and lower-than-estimated resources would lower the company's value as well. In the meantime, the company faces uncertainty in obtaining and renewing land use rights, exploration and mining licenses. As a Sichuan-based iron ore producer, China VTM is vulnerable to steel capacity expansion delay in Southwest China.

# Position at cyclical trough

## Solid acquisition execution to achieve future volume growth

China VTM Mining is the largest private and the second-largest overall iron ore producer in Sichuan, the province with China's third-largest iron ore base reserve (2.87bn tonnes, 13% of China's total) and the richest resources of vanadium-bearing titanomagnetite, approximately 83.2% of the total vanadium-bearing titanomagnetite resources in China.

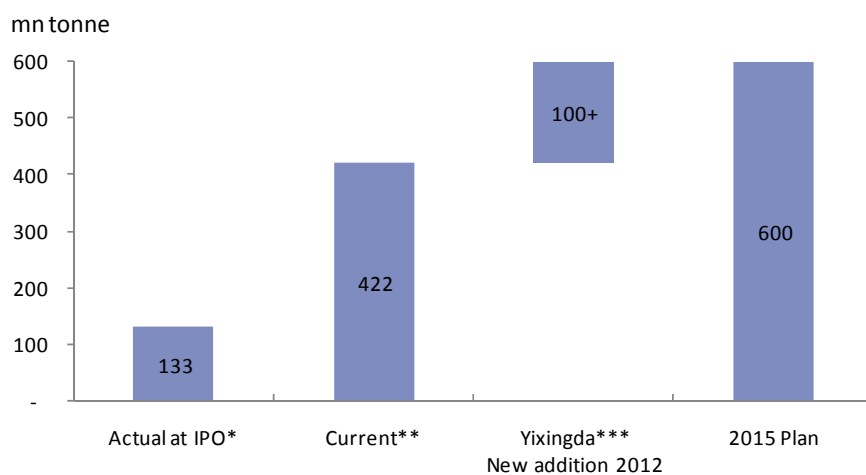
The company's iron ore resources have grown rapidly to 422mt (including 51% interest at Pingchuan) increasing more than three times from 133mt at its IPO. Management guided 600mt resources and 5mt concentrates output by 2015. We expect the company would soon achieve its resources target with the completion of the Yixingda acquisition in 2012. The Yixingda mine has a minimum of 100mt of mineral resources and reserves. We believe all these acquisitions demonstrated management's solid execution in replenishing its resource base. Also, the bump-up in resources will increase the company's intrinsic value and support future production volume increase.

**Figure 1: China VTM's acquisition activities in the past two years**

Date	Target
Dec-11	Acquisition of Panzhihua Yixingda Industrial Trading Company, estimated 100mt at least with minimum iron content of 15% or above
Aug-11	Established JV (51% holding) with Pingchuan Iron Mining and Nanyu, Dashanshu section has an estimated resources of approximately 50mt
Aug-11	Obtained JORC Resources of 60.8mt at 23.3% TFe from Yangqueqing Mine Extension
May-11	Acquisition of Aba Mining (Maoling Mine, 44.6mt resources at 25.7% TFe and Yanglongshan Mine, 33.6mt at 23% TFe) at RMB150 mn
Mar-11	Obtained JORC Resources of 78.2mt at 25% TFe from Xiushuihe Mine Extension
Mar-10	Acquisition of Heigutian Processing Plant (800ktpa iron ore concentrate and 120ktpa titanium concentrate) at RMB550 mn
Feb-10	Acquisition of Cizhuqing Mine (25.57mt resources at 21.4% TFe) and Hailong Processing Plant (300ktpa iron ore concentrate) at RMB120 mn and RMB190 mn, respectively
Jan-10	Acquisition of Yangqueqing Mine at RMB200 mn of 21.18mt resources at 25.1% TFe

Source: Deutsche Bank, Company data

**Figure 2: Resources expansion for China VTM**



Source: Deutsche Bank, Company data, \*excluding used resources as of Dec 31, 2010, \*\*including 51% interest of Pingchuan. \*\*\*Yixingda has a minimum of 100mn tonnes of mineral resources and reserves estimate by an independent geological agent

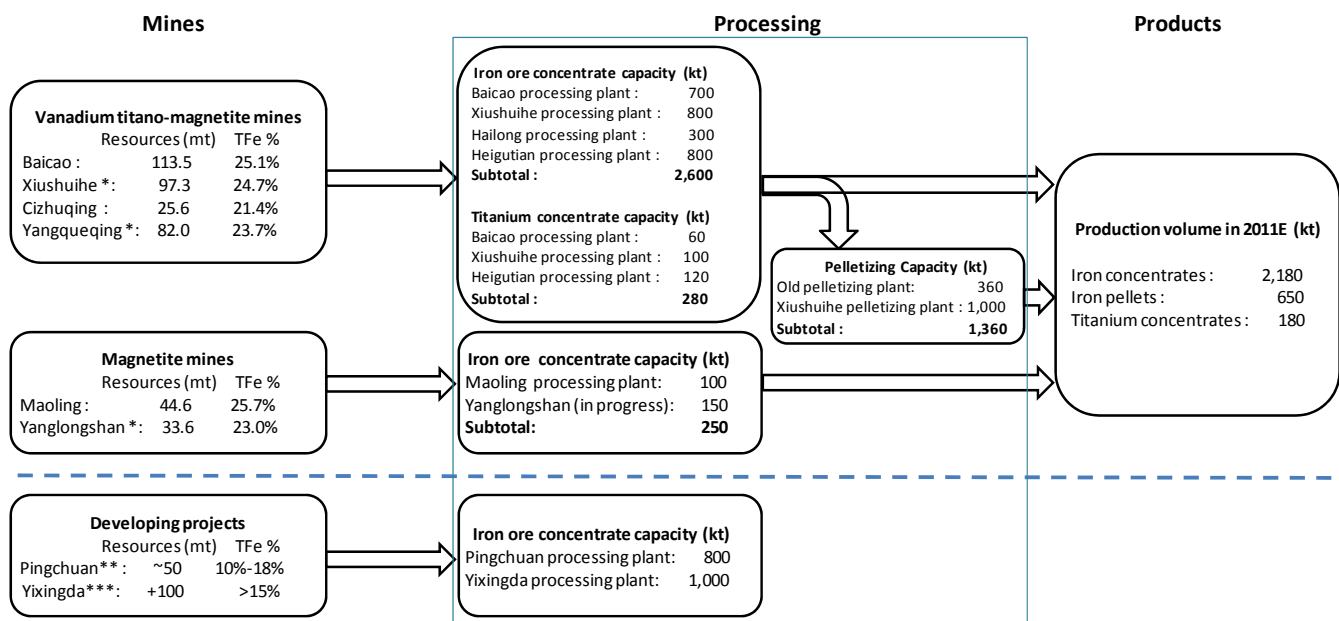
Meanwhile, it seems to us that China VTM is buying resources at reasonable pricing levels. In China, the rule of thumb for iron ore producers buying resources is about RMB40 per tonne for 100% Fe content (without considering the recovery ratio). Based on our calculation, China VTM's acquisitions are all being undertaken at per tonne Fe content at about averagely RMB20. In terms of assessing returns, we take Panzhihua Yixinda as an example of assessing IRR. Through a very preliminary and conservative IRR calculation, we believe the project IRR for the Panzhihua Yixinda acquisition should be about 10% or above. As such, we are comfortable with the company's acquisitions in general.

**Figure 3: Yixingda project IRR analysis**

Mine resources (mt)*	100	150	200	250
Capacity (mtpa)	1.0	1.5	2.0	2.5
Capex (RMB mn)	1,000	1,500	1,875	2,275
Long term ASP (RMB/t)**	420	420	420	420
Long term cash cost (RMB/t)***	280	280	280	280
Mine life (y)	20	20	20	20
<b>IRR</b>	<b>10.8%</b>	<b>11.0%</b>	<b>11.9%</b>	<b>13.9%</b>

\* Yixingda has a minimum of 100mn tonnes of mineral resources and reserves estimate by an independent geological agent;  
 \*\*ASP assumption based on Global commodity's long term forecast of US\$80/t (CIF China, 62%Fe) and inflate 2% thereafter;  
 \*\*\*Long term cash cost inflates 2% per year  
 Source: Deutsche Bank, Company data

Figure 4 provides a snapshot of China VTM's integrated assets, production process, and products. The company operates four major vanadium titanomagnetite mines and two magnetite mines. For those mines, they have corresponding processing and pelletizing plants for China VTM to produce its end products, including iron concentrates, iron pellets, and titanium concentrates. The company is developing two new projects including Pingchuan and Panzhihua Yixinda.

**Figure 4: China VTM's assets, production, and products**

Source: Deutsche Bank, Company data \* including extension region resources, \*\* China VTM owns 51% interest, \*\*\*Yixingda has a minimum of 100mn tonnes of mineral resources and reserves with minimum with minimum average iron content (Type 333 or above) of 15% or above

For upstream resources, currently, the company owns six mines, of which Baicao Mine, Xiushuihe Mine, Yangquejin Mine (extension) and Cizhuqing Mine are all open-pit and vanadium-bearing titanomagnetite mines, while Maoling Mine (extension) and Yanglongshan

Mine are underground iron ore mines. Other than the existing operations, Pingchuan and Yixinda are newly acquired assets and will be ramped up in 2014/2015.

In August 2011, China VTM together with Pingchuan Iron Mining and Nanyu established a joint venture to develop the Dashanshu section, which is part of the Pingchuan Iron ore Mine and has an area of approximately 5 square km with estimated resources of ~50mt. In December 2011, Lingyu, an indirect wholly owned subsidiary of the company entered into an acquisition agreement with Panzhuhua Yixingda Industrial Trading Co., Ltd with a minimum consideration of Rmb600mn, conditional upon the mine having a minimum of 100mt mineral resources and reserves with minimum average iron content of 15% or above.

Figure 5 shows the details of reserves and resources as disclosed by the company.

**Figure 5: Reserve and resources details**

Mines	Reserve (mt)	TFe%	TiO2%	V2O5%	Resource (mt)	TFe%	TiO2%	V2O5%	Mining method	Mine type
Baicao	51.6	25.6%	10.3%	0.22%	113.5	25.1%	10.5%	0.2%	Open pit	titano-magnetite ore
Xiushuihe	67.0	24.3%	8.9%	0.21%	97.3	24.7%	9.1%	0.2%	Open pit	titano-magnetite ore
Cizhuqing	na	na	na	na	25.6	21.4%	9.0%	0.2%	Open pit	titano-magnetite ore
Yangqueqing	na	na	na	na	21.2	25.1%	12.1%	0.2%	Open pit	titano-magnetite ore
Yangqueqing extension	na	na	na	na	60.8	23.2%	10.0%	0.2%	Open pit	titano-magnetite ore
Maoling (incl. extension)	na	na	na	na	44.6	25.7%	na	na	Underground	Iron ore
Yanglongshan	na	na	na	na	33.6	23.0%	na	na	Underground	Iron ore
Pingchuan (51% holding)	na	na	na	na	25.5	10%-18%	na	na	Open pit	titano-magnetite ore
Yixingda	na	na	na	na	na	na	na	na	Open pit	titano-magnetite ore
<b>Total</b>	<b>118.6</b>	<b>24.8%</b>	<b>9.5%</b>	<b>0.21%</b>	<b>422.0</b>	<b>24.3%*</b>	<b>8.0%*</b>	<b>0.17%*</b>		

Source: Deutsche Bank, Company data, \*average content of Baicao, Xiushuihe, Cizhuqing, Yangqueqing and Yangqueqing extension, Maoling and Yanglongshan

As for processing facilities, China VTM currently has 2,700kt of iron ore concentrate capacity, 1,360kt of pellet capacity, and high-grade titanium concentrate capacity of about 280kt. The company plans to phase out or sell the old pelletizing plant in 2012, as the new one with 1,000kt came into operation in May 2011. We forecast a concentrate capacity addition of about 1.8mt by 2014/2015. According to management, the capacity addition can increase to 2.8mt if reserves/resources found in Yixingda ends up achieving 200mt.

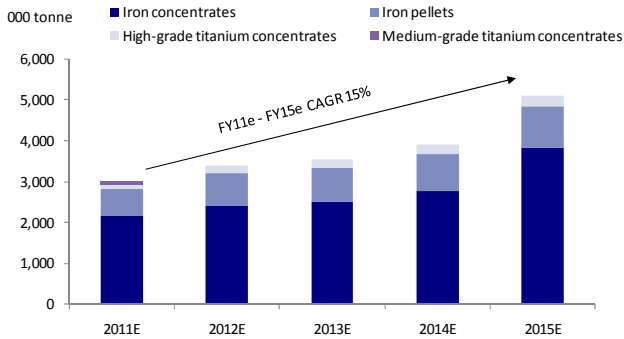
**Figure 6: Processing capacity addition for coming years**

000 tonne	2011	2012	New addition	2013 Total	New addition	2014 Total
<b>Iron ore concentrate capacity</b>						
Baicao processing plant	700	700	-	700		700
Xiushuihe processing plant	800	800	-	800		800
Hailong processing plant	300	300	-	300		300
Heigutian processing plant	800	800	-	800		800
Maoling processing plant	100	100	-	100		100
Yanglongshan processing plant	-	-	150	150		150
Pingchuan*				-	800	800
Yixingda**				-	1000	1,000
<b>Subtotal</b>	<b>2,700</b>	<b>2,700</b>	<b>150</b>	<b>2,850</b>	<b>1,800</b>	<b>4,650</b>
<b>Pellet capacity</b>						
Old pelletizing plant	360	360		360		360
Xiushuihe pelletizing plant	1,000	1,000		1,000		1,000
<b>Subtotal</b>	<b>1,360</b>	<b>1,360</b>	<b>-</b>	<b>1,360</b>	<b>-</b>	<b>1,360</b>
<b>Titanium concentrate</b>						
Baicao processing plant	60	60		60		60
Xiushuihe processing plant	100	100		100		100
Heigutian processing plant	120	120		120		120
<b>Subtotal</b>	<b>280</b>	<b>280</b>	<b>-</b>	<b>280</b>	<b>-</b>	<b>280</b>

Source: Deutsche Bank, Company data \*China VTM holds 51% of Pingchuan, \*\*Yidangda capacity depends on the resources and reserves explored, the Company forecast 1000-2000ktpa capacity.

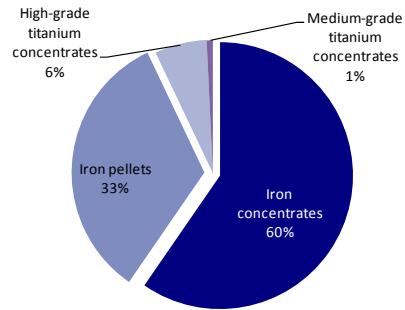
China VTM mainly produces and sells three products: iron ore concentrates, iron pellets and titanium concentrates. Currently, the titanium concentrate products include high-grade and medium-grade concentrates, although it will focus on high-grade titanium concentrate.

**Figure 7: Production forecast**



Source: Deutsche Bank estimates, Note. Iron ore concentrates include pellets

**Figure 8: Revenue mix in 2011E**



Source: Deutsche Bank estimates

Iron ore concentrates and pellets remain the key products of China VTM. According to management, in 2011, China VTM produced around 2.1-2.2mt of iron ore concentrate, including 0.6-0.7mt pellets and about 0.2mt titanium concentrates. We expect the production to stay relatively stable in 2012 and 2013, with rapid growth resuming in 2014 when Pingchuan’s and Yixingda’s capacities are ramped up. Figure 7 and Figure 8 show the company’s production plan and its current revenue mix.

Figure 9 shows the locations of mines owned by China VTM and neighbouring major steel mills in the area.

**Figure 9: Locations of China VTM’s mines and major steel mills**



Source: Deutsche Bank, Company data



## South-western China local market has an iron ore deficit

Sichuan, the third-largest iron ore producing province in China, is located in Southwest China, isolated from the coastal area. Due to geographical and transportation issues, the iron ore market in Sichuan, together with neighbouring provinces in Southwest China (Yunnan, Guizhou, and Chongqing) is considered an independent market. In such a closed market, the supply/demand dynamics are relatively simple: local supply to feed local demand. As such, we believe capacity expansion for local steel mills is crucial to guarantee good digestion of China VTM's products.

**Figure 10: Steel capacity expansion in 2012 and 2013**

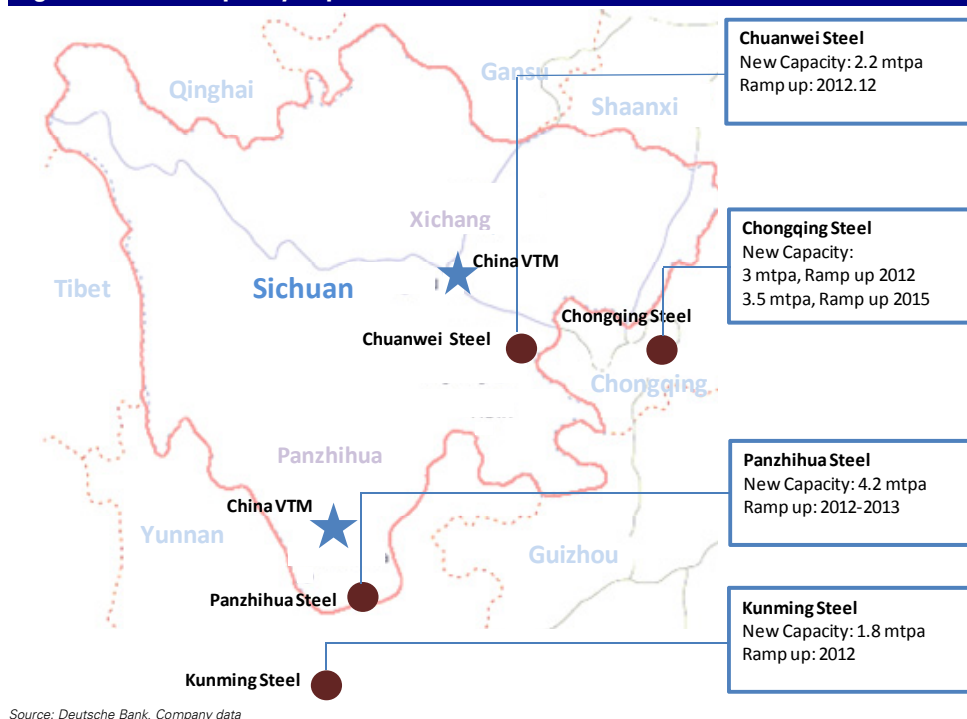


Figure 11 shows that the Southwest China market had an iron ore deficit of around 18mt in 2011. Meanwhile, as shown in Figure 10, there will be about 11mt steel capacity expansion in the coming two years including 4.2mt by Pangang, 2.2mt by Chuanwei Steel, 1.8mt by Kunming Steel, and 3mt by Chongqing Steel. These capacity additions will create an incremental iron ore demand about 18mt. We believe this will be favourable to China VTM, which is a key local iron ore supplier in Southwest region. According to our research, we believe there will be about 4mtpa iron ore concentrate capacity to be added by local steel mills. As such, there will still be about 14mt (18mt minus 4mt) of incremental deficit to be fulfilled by the private concentrate producers or via more iron ore from other provinces and from seaborne market.

**Figure 11: Iron ore supply/demand in Southwest China in 2011**

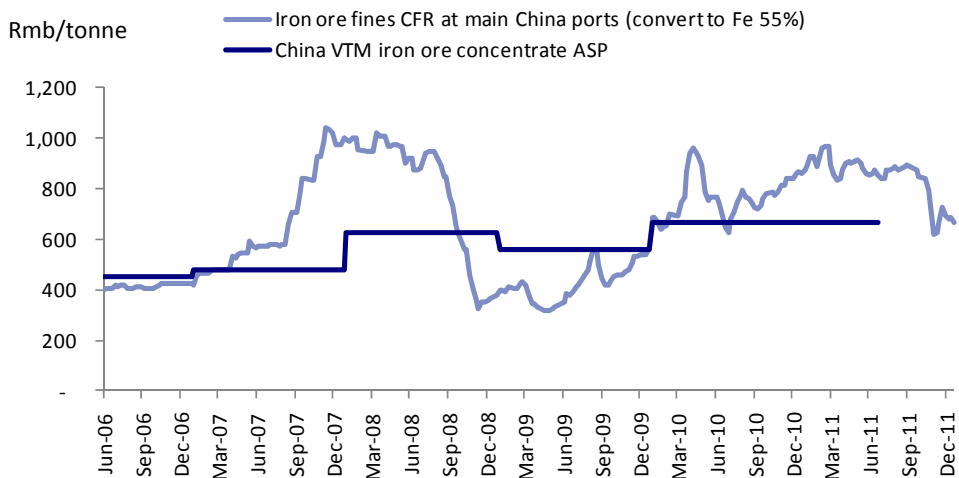
Southwest demand/supply (mt)	Sichuan	Chongqing	Yunnan	Guizhou	Total
Pig iron output	17.2	5.6	13.4	4.8	41.0
Theoretical ore consumption - (a)	27.4	9.0	21.5	7.7	65.6
Crude ore output	135.1	0.0	22.0	0.7	157.8
Concentrate output - (b)	40.4	0.0	6.6	0.2	47.2
<b>Deficit - (a-b)</b>	<b>-12.9</b>	<b>8.9</b>	<b>14.9</b>	<b>7.5</b>	<b>18.4</b>

Source: Deutsche Bank, CEIC



As the Southwest China local market is quite isolated from the seaborne market, China VTM's iron ore concentrate price has a relatively mild fluctuation compared with the seaborne market. In our view, this is a double-edge sword. On the one hand, it would be more defensive in a downturn, as in the 2008/2009 crisis as well as through the price drop in the past few months. During the past few months, iron ore seaborne price dropped around 20%, while iron ore price in Sichuan dropped only 10%. On the other hand, China VTM indeed enjoys less price upside due to its limited market reach. Our ASP assumptions for China VTM can be found in Appendix A.

**Figure 12: Mild fluctuation in Sichuan province**

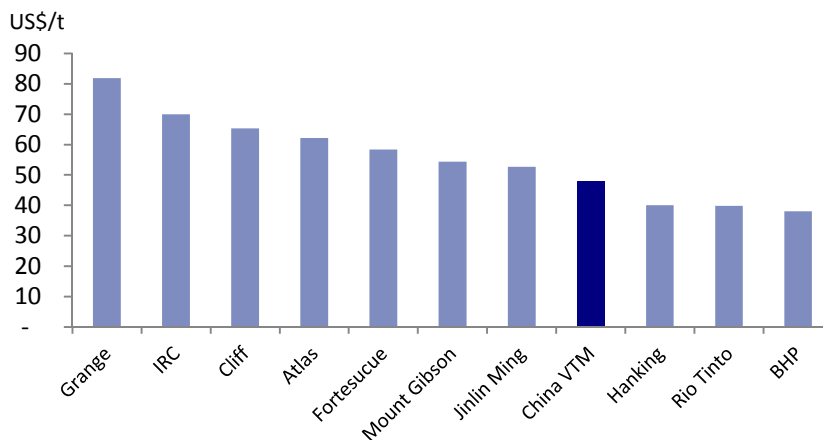


Source: Deutsche Bank, CEIC, Bloomberg Finance LP

### Cost competitiveness resulting in good profitability

China VTM is a Sichuan-based iron ore concentrate producer currently possessing the largest concentrate output (over 2mtpa) among all HK-listed iron ore producers. The company produces iron ore concentrate with 54-55% Fe content at a production cost of about RMB300/t. We believe its costs are much lower than the average level in China (over RMB500/t) and lower than some global suppliers on a market landed basis, as shown as Figure 13.

**Figure 13: Cash cost\* comparison for iron ore makers**

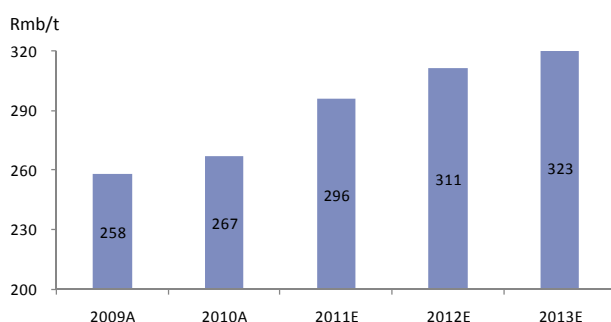


Source: Deutsche Bank, Company annual report, \*Cash cost represents (COGS – depreciation and amortization) divide by sales volume

We believe the low cost is due to its relatively large-scale operations (versus other local players) as well as extensive experience in efficiently mining and beneficiating (so that the company can lower the stripping ratio for its mining operations and/or increase its recovery ratio for beneficiation process).

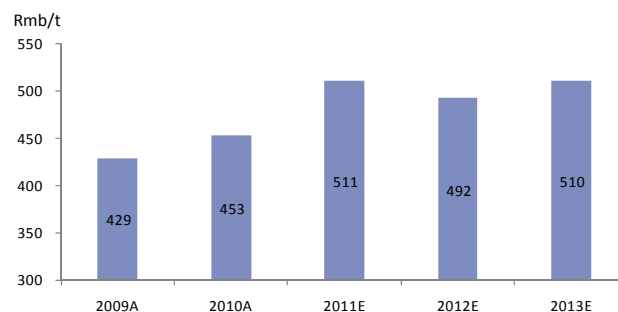
We expect China VTM's unit production cost for concentrate production to remain relatively low in the coming years. We forecast it would reach RMB300 and RMB310 per tonne in 2011 and 2012, respectively. Stripping out depreciation and amortisation expense of about RMB50-60/t, the cash cost should be around RMB250/t, lower than most domestic players and competitive against seaborne players. For pellets, we believe the unit cost has increased by about 13% YoY in 2011 because the outsourcing fee has increased significantly for China VTM in 2011. However, we expect the cost will likely come down in 2012 due to the newly completed 1.0mt self-owned pelletizing plant. As such, we believe the company will be able to maintain (or slow down increases in) its per tonne costs (as shown in Figure 14 and Figure 15) and a gross margin over 40% in at least the coming three years.

**Figure 14: Unit production cost – iron ore concentrate**



Source: Deutsche Bank estimates, Company data

**Figure 15: Unit production cost – iron pellet**



Source: Deutsche Bank estimates, Company data

## DCF based valuation suggests HKD2.5, re-instate with Buy

Our target price of HKD2.5 is based on a life-of-mine DCF (Figure 17), which implies 46% upside potential from current levels, 1.2x 2012 P/B, and 7.5x 2012 P/E. The discount rate is a WACC of 10.5%, with a cost of equity of 12.4% and an after-tax cost of debt of 6%. Our cost of equity uses a risk-free rate of 3.1%, market risk premium of 5.8% and beta of 1.6x. Details of our WACC are shown in Figure 16.

Currently, the stock is trading at 0.8x P/B and 5.2x P/E. As China VTM is projected to deliver over 15% ROAE and 4% cash dividend yield in the coming two years, we think the current valuation multiples are undemanding and unlikely to be sustained at such low levels. The stock does not have a long trading history (as shown in Figure 18), but nevertheless we believe there is a mismatch between the company's fundamentals (ROAE) and its valuation (P/B), which is hovering near historical trough levels.

Based on the peer valuation comparison in Figure 19, China VTM's P/E and P/B valuation is also lower than almost all of its peers despite its EPS growth and ROE being closer to the middle of the pack. Last but not the least, we believe China VTM is a better pick than steel stocks for riding a cyclical recovery in steel demand. We re-instate coverage with a Buy.

### Figure 16: China VTM – key assumptions of WACC

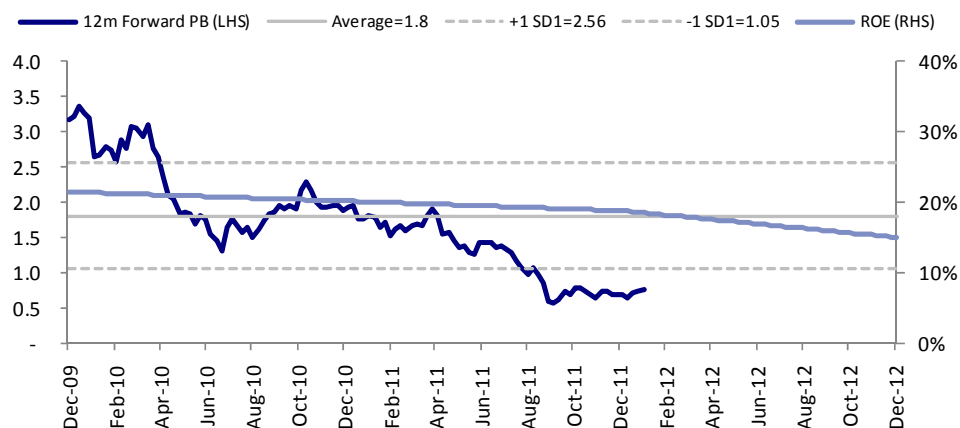
Key assumptions	
Rf	3.1%
MRP	5.8%
Beta	1.6
<b>Cost of equity</b>	<b>12.4%</b>
<b>Cost of debt</b>	<b>8.0%</b>
Tax rate	25.0%
Post tax cost of debt	6.0%
% capital in equity	70%
% capital in debt	30%
<b>WACC</b>	<b>10.5%</b>

Source: Deutsche Bank estimates, Bloomberg Finance LP, Company data

### Figure 17: Life-of-mine DCF valuation for China VTM

<b>Total life-of-mine NPV (Rmb mn)</b>	<b>4,219</b>
Net debt	-115
Equity value (Rmb mn)	4,334
Outstanding shares (mn)	2,075
CNY/HKD	1.23
<b>Target Price</b>	<b>2.50</b>
Current price	1.71
<b>Share price upside</b>	<b>46%</b>

Source: Deutsche Bank estimates

**Figure 18: 12-month forward P/B vs. ROE**

Source: Deutsche Bank estimates, Bloomberg Finance LP, Company data

**Figure 19: Iron ore peer valuation comparison**

Company Name	Ticker	Rating	Last price local curcy	Mkr cap USDm	Trading Curcy	P/E (x)			EPS growth (%)			Price/BV (x)			ROE (%)			EV/EBITDA		
						11E	12E	13E	11E	12E	13E	11E	12E	13E	11E	12E	13E	11E	12E	13E
<b>Asia</b>																				
CHINA VTM	893.HK	Buy	1.61	428	HKD	5.4	4.9	4.5	-5.2	10.6	8.3	0.9	0.8	0.7	17.0	16.4	15.6	2.9	2.7	2.3
CHINA HANKING	3788.HK	NR	2.61	616	HKD	10.6	6.4	4.4	NA	65.0	45.5	4.9	2.7	1.7	66.5	57.9	46.8	4.4	3.6	2.2
IRC LTD	1029.HK	NR	1.16	503	HKD	149.6	149.6	4.4	NA	16.7	2,412.5	0.7	0.7	0.5	0.3	1.2	12.8	27.5	22.8	4.3
<b>Australia pure player</b>																				
FORTESCUE METALS	FMG.AX	Buy	5.05	16,677	AUD	11.2	11.2	6.4	105.0	-9.3	74.4	8.0	4.8	2.8	83.5	50.2	55.1	7.2	7.4	4.3
GRANGE RESOURCES	GRR.AX	NR	0.615	754	AUD	7.2	6.7	9.3	84.7	6.6	-27.6	1.1	1.0	0.9	16.8	15.2	11.0	3.1	2.0	2.6
ATLAS IRON	AGO.AX	Hold	3.06	2,909	AUD	14.6	19.2	6.1	NA	-20.8	212.9	1.8	1.5	1.3	16.1	8.2	22.7	10.8	10.8	3.5
MOUNT GIBSON	MGX.AX	Buy	1.415	1,628	AUD	9.3	4.5	3.1	123.0	53.9	43.2	1.7	1.0	0.8	21.3	25.5	27.9	5.2	1.8	0.6
<b>Global diversified player</b>																				
BHP BILLITON	BHP.AX	Buy	37.18	197,856	AUD	10.5	11.1	9.6	82.0	-10.7	14.8	4.1	3.3	2.8	41.2	31.9	31.7	6.8	6.4	5.6
VALE	VALE.N	Buy	25.3	133,444	USD	5.8	6.8	5.5	31.5	-14.1	23.1	1.6	1.4	1.2	30.4	22.4	23.3	4.4	5.0	3.9
RIO TINTO	RIO.AX	Buy	69.57	117,732	AUD	9.1	10.6	7.5	13.6	-14.4	41.8	2.0	1.7	1.5	24.1	17.5	21.4	6.0	6.6	4.7
ANGLO AMER	AAL.L	Buy	2624	54,732	GBP	9.2	8.7	6.9	15.3	4.7	26.8	1.3	1.1	1.0	18.2	14.4	15.9	5.1	5.3	4.2
CLIFFS	CLF.N	Buy	72.25	10,333	USD	6.3	6.4	5.9	53.6	-2.6	9.4	1.7	1.4	1.2	33.8	24.6	21.8	5.1	4.4	3.8
<b>Average</b>						<b>8.9</b>	<b>9.7</b>	<b>7.6</b>	<b>47.3</b>	<b>-10.3</b>	<b>29.1</b>	<b>2.8</b>	<b>2.3</b>	<b>1.9</b>	<b>33.3</b>	<b>24.8</b>	<b>26.2</b>	<b>5.9</b>	<b>6.0</b>	<b>4.7</b>

Source: Deutsche Bank estimates, Bloomberg Finance LP, Note: Non rated stocks (NR) based on Bloomberg consensus, current price as of 31 Jan 2012

## Risks

### Industry risks

- A significant slowdown in steel demand in China would lower iron ore ASPs and the company's profitability
- Major global iron ore suppliers increase production to the extent that it would result in iron ore oversupply
- Iron ore price fluctuation due to seasonality of steel demand would swing our forecasts as well
- Taxation and regulation changes for the iron ore mining industry may cause additional costs

### Company-specific risks

- Slower-than-expected volume growth caused by a delay in the ramp-up of the Pingchuan and Yixingda projects
- Steel capacity expansion delay in Southwest China
- Shorter-than-expected mine life and lower-than-estimated resources
- Uncertainty to obtain and renew land use rights/exploration/ mining licenses
- Cost escalation

# Appendix A: Financials

## Key assumptions

**Figure 20: Key assumptions for China VTM's P&L forecast**

	2009	2010	2011E	2012E	2013E
<b>Sales volume (kt)</b>					
Iron concentrates	950	1,317	1,530	1,600	1,648
Iron pellets	693	728	650	800	850
High-grade titanium concentrates	-	62	100	180	210
Medium-grade titanium concentrates	167	83	80	-	-
<b>Total</b>	<b>1,811</b>	<b>2,190</b>	<b>2,360</b>	<b>2,580</b>	<b>2,708</b>
Sales growth %	37%	21%	8%	9%	5%
<b>ASP (RMB/t)</b>					
Iron concentrates	558	665	658	640	645
Iron pellets	775	875	867	843	849
High-grade titanium concentrates	-	534	1,068	1,038	1,046
Medium-grade titanium concentrates	102	99	168	na	na
<b>Unit Cost (RMB/t)</b>					
Iron concentrate	258	267	296	311	323
Iron pellet	429	453	511	492	510
High-grade titanium concentrates	213	219	243	255	265
Medium-grade titanium concentrates	na	406	450	474	491

Source: Deutsche Bank estimates, Company data

## Sensitivity analysis

Our sensitivity analysis for China VTM's earnings against ASP, unit cash cost, and volume are as following tables.

**Figure 21: Sensitivity to ASP**

% change in ASP	-15%	-10%	-5%	-1%	Base	1%	5%	10%	15%
EBITDA 12E	680	769	858	930	947	965	1,037	1,126	1,215
% change from base case	-28%	-19%	-9%	-2%	0%	2%	9%	19%	28%
EPS 12E	0.17	0.21	0.24	0.26	0.27	0.28	0.30	0.33	0.37
% change from base case	-36%	-24%	-12%	-2%	0%	2%	12%	24%	36%
PE (x) 12E	7.54	6.37	5.51	4.98	4.86	4.75	4.34	3.93	3.58
PB (x) 12E	0.79	0.78	0.76	0.75	0.75	0.75	0.73	0.72	0.71

Source: Deutsche Bank estimates

**Figure 22: Sensitivity to unit cost**

% change in unit cost	-15%	-10%	-5%	-1%	Base	1%	5%	10%	15%
EBITDA 12E	1,095	1,046	997	957	947	938	898	849	800
% change from base case	16%	10%	5%	1%	0%	-1%	-5%	-10%	-16%
EPS 12E	0.32	0.30	0.29	0.27	0.27	0.27	0.25	0.23	0.22
% change from base case	20%	13%	7%	1%	0%	-1%	-7%	-13%	-20%
PE (x) 12E	4.06	4.30	4.56	4.80	4.86	4.92	5.20	5.59	6.05
PB (x) 12E	0.73	0.73	0.74	0.75	0.75	0.75	0.76	0.76	0.77

Source: Deutsche Bank estimates

**Figure 23: Sensitivity to sales volume**

% change in sales volume	-15%	-10%	-5%	-1%	Base	1%	5%	10%	15%
EBITDA 12E	803	851	899	938	947	957	995	1,043	1,091
% change from base case	-15%	-10%	-5%	-1%	0%	1%	5%	10%	15%
EPS 12E	0.22	0.24	0.25	0.27	0.27	0.27	0.29	0.30	0.32
% change from base case	-19%	-13%	-6%	-1%	0%	1%	6%	13%	19%
PE (x) 12E	6.01	5.57	5.19	4.92	4.86	4.80	4.57	4.31	4.08
PB (x) 12E	0.77	0.76	0.76	0.75	0.75	0.75	0.74	0.73	0.73

Source: Deutsche Bank estimates



**Financial summary****Figure 24: China VTM P&L summary**

<b>RMB mn</b>	<b>2009</b>	<b>2010</b>	<b>2011E</b>	<b>2012E</b>	<b>2013E</b>
Revenue	1,084	1,554	1,691	1,885	2,004
Gross profit	502	830	834	899	931
<i>Gross margin %</i>	46%	53%	49%	48%	46%
SG&A	-64	-124	-135	-150	-160
EBITDA	481	800	832	947	1,041
<i>EBITDA margin %</i>	44%	51%	49%	50%	52%
Operating profit	440	713	700	773	835
<i>OP margin %</i>	41%	46%	41%	41%	42%
PBT	437	701	681	753	815
Tax	-70	-117	-170	-188	-204
Minorities	-39	-51	-5	-6	-6
PAT	328	533	506	559	605
<i>Net margin %</i>	30%	34%	30%	30%	30%
EPS (RMB)	0.20	0.26	0.24	0.27	0.29

Source: Deutsche Bank estimates, Company data

**Figure 25: China VTM Balance Sheet summary**

<b>RMB mn</b>	<b>2009</b>	<b>2010</b>	<b>2011E</b>	<b>2012E</b>	<b>2013E</b>
Cash and cash equivalents	1,884	1,096	560	415	600
Inventories	71	70	114	97	133
Accounts receivable & NR	137	208	156	249	181
Other current assets	141	100	100	100	100
<b>Total Current assets</b>	<b>2,233</b>	<b>1,473</b>	<b>929</b>	<b>862</b>	<b>1,014</b>
Fixed assets	496	1,476	1,895	2,580	2,737
Intangible	142	481	603	667	675
Goodwill	15	15	15	15	15
Others	187	288	528	528	528
<b>Total non-current assets</b>	<b>840</b>	<b>2,261</b>	<b>3,042</b>	<b>3,790</b>	<b>3,956</b>
<b>Total Assets</b>	<b>3,073</b>	<b>3,733</b>	<b>3,971</b>	<b>4,652</b>	<b>4,970</b>
Short term loan	100	175	175	175	175
Account payable	86	255	90	307	125
Tax Payable	70	90	90	90	90
Other current liabilities	205	293	293	293	293
<b>Total Current liabilities</b>	<b>461</b>	<b>813</b>	<b>648</b>	<b>865</b>	<b>683</b>
Long term borrowings	0	125	125	125	125
Other non-current liabilities	5.71	6.09	6.09	6.09	6.09
<b>Total Non-current liabilities</b>	<b>5.71</b>	<b>131.09</b>	<b>131.09</b>	<b>131.09</b>	<b>131.09</b>
<b>Total Liabilities</b>	<b>467</b>	<b>944</b>	<b>779</b>	<b>996</b>	<b>814</b>
Issued share capital	183	183	183	183	183
Retained Earnings & other equity	2,331	2,592	2,990	3,448	3,941
<b>Owners' equity</b>	<b>2,514</b>	<b>2,775</b>	<b>3,173</b>	<b>3,631</b>	<b>4,124</b>
Minorities	93	14	20	25	31
<b>Total Shareholders' Equity</b>	<b>2,607</b>	<b>2,789</b>	<b>3,192</b>	<b>3,656</b>	<b>4,156</b>

Source: Deutsche Bank estimates, Company data

**Figure 26: China VTM Cash Flow summary**

<b>RMB mn</b>	<b>2009</b>	<b>2010</b>	<b>2011E</b>	<b>2012E</b>	<b>2013E</b>
PBT	437	701	681	753	815
Depreciation & Amortization	42	86	132	175	206
Tax Paid	-32	-100	-170	-188	-204
Change in inventories	-4	-0	-44	17	-35
Change in AR	-50	-70	52	-94	68
Change in AP	-22	169	-165	217	-182
Others	-28	-22	-	-	-
<b>Net Cash from operation</b>	<b>342</b>	<b>764</b>	<b>485</b>	<b>880</b>	<b>668</b>
Cashflow from investing	-	-	-	-	-
Acquisition of fixed assets	-239	-975	-524	-823	-322
Acquisition of intangibles	-51	-341	-150	-100	-50
Long term investment	-	-	-51	-	-
Others	-38	-5	-189	-	-
<b>Net cash from investing</b>	<b>-328</b>	<b>-1,320</b>	<b>-914</b>	<b>-923</b>	<b>-372</b>
Cashflow from financing	-	-	-	-	-
Increase of borrowings	100	300	150	150	150
Repayment of Borrowings	-	-100	-150	-150	-150
Issuance of new share capital	1,662	-	-	-	-
Purchase of Non Controlling Interest	-	-445	-	-	-
Dividend paid	-20	-	-108	-101	-112
Others	-4	15	-	-	-
<b>Net cash from financing</b>	<b>1,737</b>	<b>-230</b>	<b>-108</b>	<b>-101</b>	<b>-112</b>
Net change in cash and cash equivalents	1,752	-786	-536	-145	185
Foreign exchange & other adjustments	-1	-3	-	-	-
Cash at beginning of the year	133	1,884	1,096	560	415
Cash at end of the year	1,884	1,096	560	415	600

Source: Deutsche Bank estimates, Company data

# Appendix 1

## Important Disclosures

Additional information available upon request

### Disclosure checklist

Company	Ticker	Recent price*	Disclosure
China VTM Mining	0893.HK	1.73 (HKD) 6 Feb 12	NA

\*Prices are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is sourced from Deutsche Bank and subject companies.

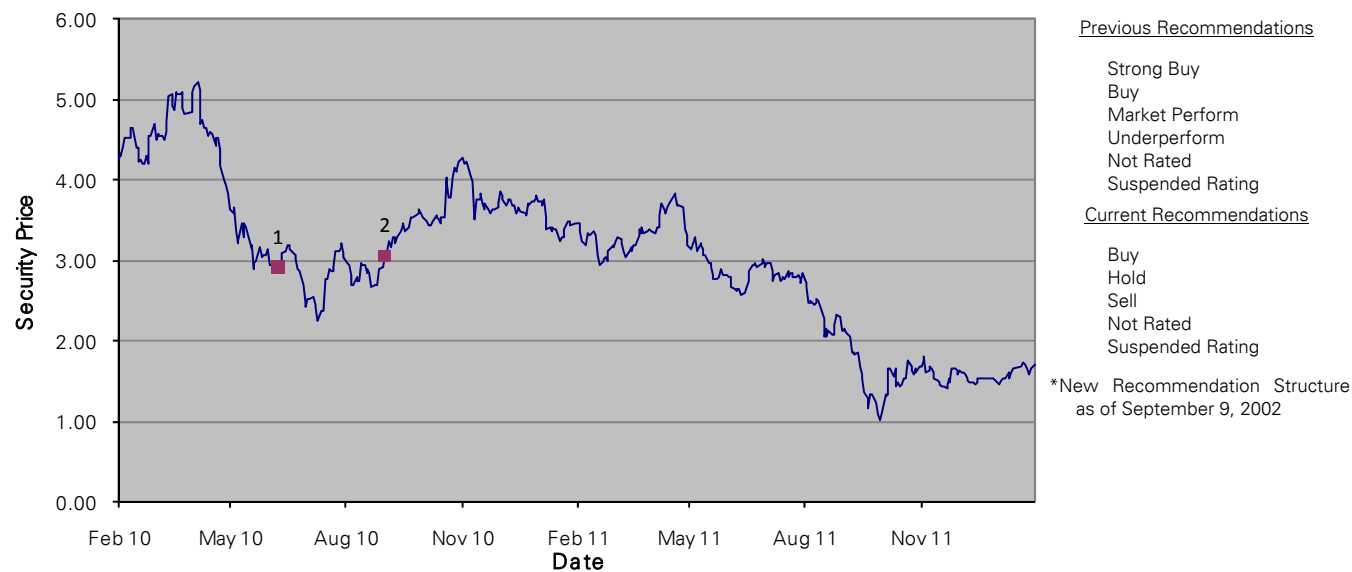
**For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at <http://gm.db.com/ger/disclosure/Disclosure.eqsrf?ricCode=0893.HK>.**

## Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. James Kan

### Historical recommendations and target price: China VTM Mining (0893.HK)

(as of 2/6/2012)



1. 14/6/2010: Buy, Target Price Change HKD4.10      2. 7/9/2010: No Recommendation, Target Price Change HKD0.00

Equity rating key Equity rating dispersion and banking relationships

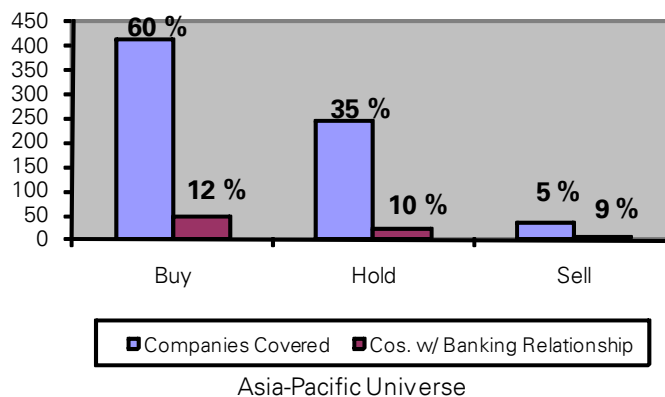
**Buy:** Based on a current 12-month view of total shareholder return (TSR = percentage change in share price from current price to projected target price plus projected dividend yield), we recommend that investors buy the stock.

**Sell:** Based on a current 12-month view of total shareholder 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



## Regulatory Disclosures

### 1. Important Additional Conflict Disclosures

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### 2. Short-Term Trade Ideas

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