CIMB

# China VTM

*Treasure unearthed*

**OUTPERFORM**

**HK$3.66** @20/04/11

Target: HK$4.35

Mining

893 HK / 0893.HK    **Gary Cheng** +852 2532 1116 – Gary.cheng@cimb.com

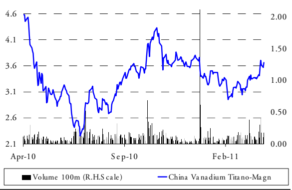
- **Promising but undervalued iron ore miner.** We initiate coverage on China VTM with an OUTPERFORM call and target price of HK$4.35. We like the company for its attractive valuation and potential gains from higher imported iron ore prices. As the second largest iron ore mining company in Sichuan, China VTM is riding the increasing demand from downstream steelmakers in the region. The company is currently trading at 6.4x FY12 P/E and we believe it could trade up to HK$4.35 or 7.7x FY12 P/E, which is the sector average for global mining companies with similar business models and industry outlook. Potential catalysts include the acquisition of Aba Mining and other targets, a further increase in the price of imported iron ore and the coming onstream of the upgraded portion of the Xiushuihe Mine and its Pelletising Plant.
- **Profit CAGR of 30%.** We expect the core net profit to achieve a 3-year CAGR of 30% yoy, driven by 1) the full-year consolidation of mines acquired in FY10, 2) further increase in production output, 3) a 9% yoy rise in ASP over the next three years, 4) product mix upgrades, and 5) higher reserves and resources.
- **Acquisition of Aba Mining to be completed by Apr and more to come.** The acquisition of Aba Mining will be completed before 1H11. Four other iron ore mines with option agreements are expected to be merged. Together, these four mines own total iron ore resources of 82m tonnes.

**Financial summary**

| FYE Dec | 2009 | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|---|
| Revenue (Rmb m) | 1,083.9 | 1,554.1 | 1,851.4 | 2,449.7 | 2,745.8 |
| EBITDA (Rmb m) | 368.4 | 674.2 | 975.7 | 1,330.5 | 1,558.0 |
| EBITDA margins (%) | 34.0% | 43.4% | 52.7% | 54.3% | 56.7% |
| Pretax profit (Rmb m) | 358.5 | 600.2 | 881.1 | 1,192.4 | 1,387.1 |
| Net profit (Rmb m) | 327.9 | 533.4 | 739.7 | 999.1 | 1,161.4 |
| EPS (Rmb cts) | 15.8 | 25.7 | 35.6 | 48.1 | 56.0 |
| EPS growth (%) | 31.8% | 62.7% | 38.7% | 35.1% | 16.2% |
| P/E (x) | 19.5 | 12.0 | 8.6 | 6.4 | 5.5 |
| Core EPS (Rmb cts) | 15.8 | 25.7 | 35.6 | 48.1 | 56.0 |
| Core EPS growth (%) | 31.8% | 62.7% | 38.7% | 35.1% | 16.2% |
| Core P/E (x) | 19.5 | 12.0 | 8.6 | 6.4 | 5.5 |
| FD core EPS (Rmb cts) | 15.8 | 25.3 | 35.1 | 47.5 | 55.2 |
| FD core P/E (x) | 19.5 | 12.1 | 8.7 | 6.5 | 5.6 |
| Gross DPS (Rmb cts) | 0.0 | 5.2 | 7.1 | 9.6 | 11.2 |
| Dividend yield (%) | 0.0% | 1.7% | 2.3% | 3.1% | 3.6% |
| P/BV (x) | 2.5 | 2.3 | 1.8 | 1.2 | 1.0 |
| ROE (%) | 21.5% | 20.2% | 23.5% | 23.2% | 19.7% |
| Net cash per share (Rmb) | 0.86 | 0.38 | 0.50 | 1.05 | 1.68 |
| P/FCFE (x) | 55.8 | (8.1) | 12.9 | 5.7 | 4.9 |
| EV/EBITDA (x) | 12.7 | 8.3 | 5.5 | 3.2 | 1.9 |
| CIMB/Consensus (x) | | | 1.11 | 1.32 | 1.41 |

*Source: Company, CIMB Research , Bloomberg*

**Price chart**




*Source: Bloomberg*

**Market capitalisation & share price info**

| | |
|---|---|
| Market cap | HK$7,406m/US$952m |
| 12-mth price range | HK$4.58/HK$2.25 |
| 3-mth avg daily volume | 11.0m |
| # of shares (m) | 2,075 |
| Est. free float (%) | 51.5 |
| Conv. secs (m) | None |
| Conv. price ( ) | None |

| Share price perf. (%) | 1M | 3M | 12M |
|---|---|---|---|
| Relative | 9.8 | 10.1 | (27.0) |
| Absolute | 15.8 | 6.1 | (19.7) |
| **Major shareholders** | | | **% held** |
| Trisonic International | | | 48.5 |

*Source: Company, CIMB Research, Bloomberg*

## Background

China Vanadium Titano-Magnetite Mining Company (China VTM) is the second largest iron ore mining company in Sichuan, China, and accounts for 9% of domestic market share. The company is primarily engaged in the mining and processing of iron concentrates, iron pellets and high-grade titanium concentrates. It owns and operates four vanadium-bearing titano-magnetite mines and five processing facilities, all located in Sichuan's Panxi region, which is well-known in China for its abundant vanadium-bearing titano-magnetite resources. The company now owns 332.5m tonnes of total reserves and resources with an annual production capacity of 2.3m tonnes of iron concentrates and 0.18m tonnes of titanium concentrates. The company's principal customers are steelmakers and downstream titanium processors.

**Figure 1: Views at one of China VTM's mines**

**Iron mine**

**Grinding mill**

**Processing plant**

**Iron concentrates**

*Source: Company, CIMB Research, Bloomberg*

## Experienced management

The company has a strong management team comprising individuals with considerable commercial experience and knowledge, enabling them to provide valuable insight into corporate governance issues and business and financial strategies.

**Wang Jin, controlling shareholder.** Wang Jin is also the major shareholder of Chuanwei Group, the largest non-state-owned steelmaker in the Sichuan province. Formerly a local state-owned steelmaker known as Weiyuan Iron & Steel, Chuanwei Group was formed in 1998 following a management buy-out.

**Jiang Zhongping, Executive Director and Chairman.** Mr. Jiang has over 19 years of experience in the steel industry and was previously head of the quality control department at Chuanwei Group as well as its audit department's chief manager.

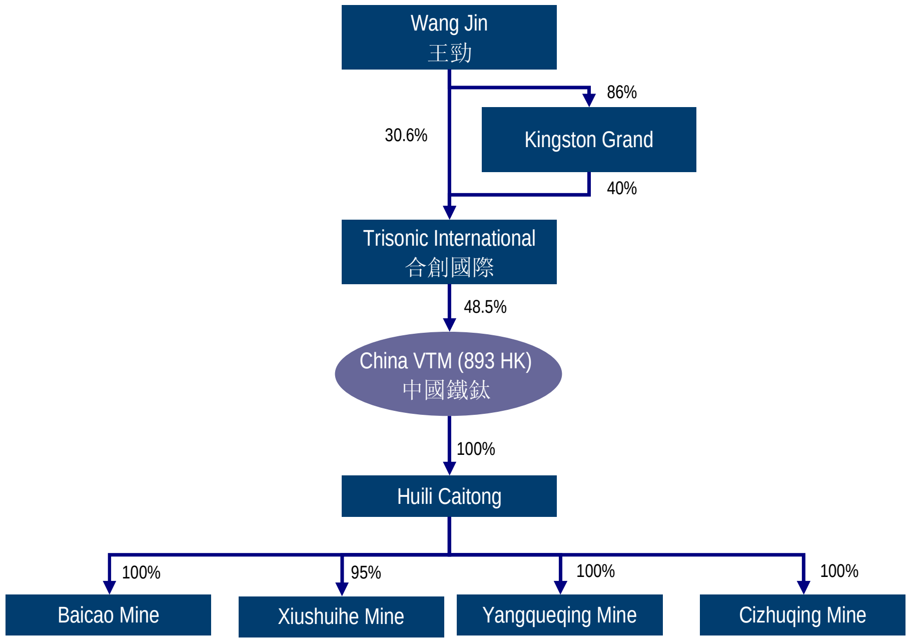
**Liu Feng, Executive Director and CEO.** Mr. Liu is a veteran in the steel industry, having worked in the industry for twenty years, and was a deputy general manager in

Chuanwei Group.

**Yu Xingyuan, Executive Director and CIO**. In his 15 years in the steel industry, Mr. Yu served in technical development at Chuanwei for more than 10 years prior to joining China VTM.

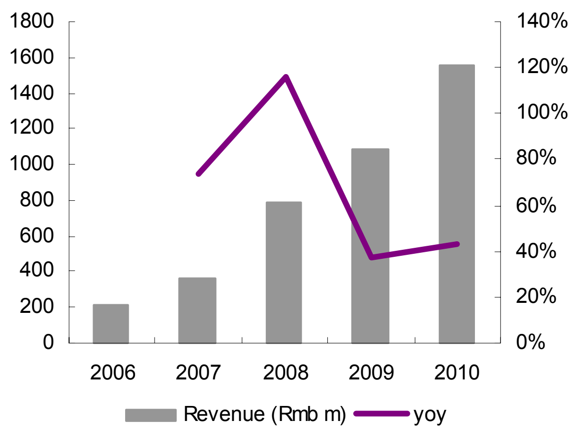
**Kong Chi Mo, CFO and Company Secretary.** Previously a senior audit manager at KPMG, Mr. Kong has many years of experience in managing audits.

**Figure 2: Major shareholders and company structure**



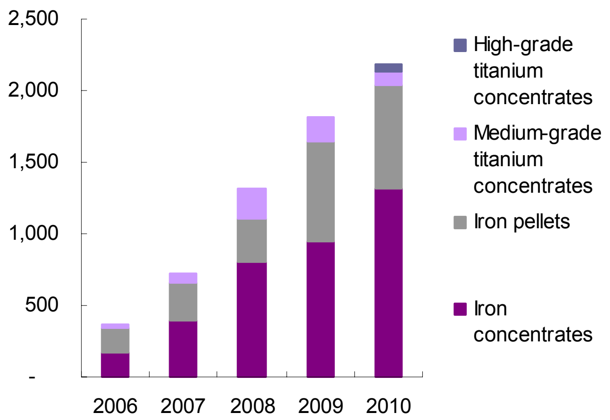

*Source: Company, CIMB Research, Bloomberg*

**Figure 3: Revenue growth (2006-2010, Rmb m)**



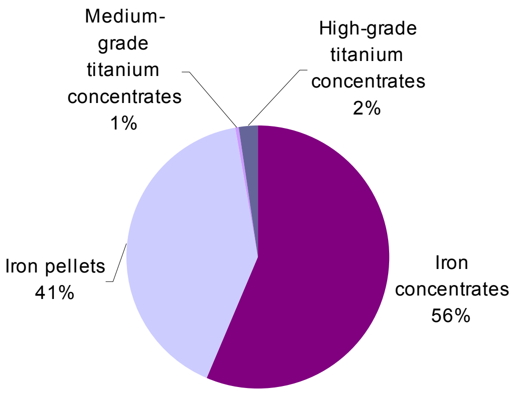

*Source: Company, CIMB Research, Bloomberg*

**Figure 4: Production breakdown ('000 tonnes)**



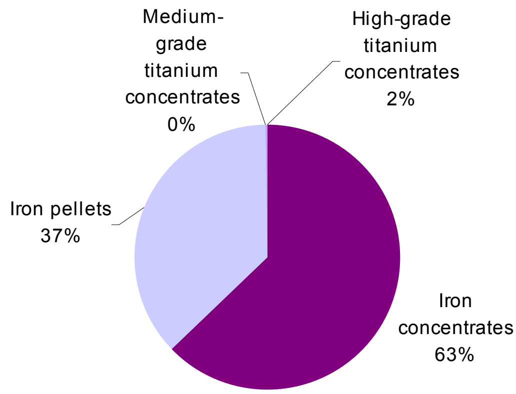

*Source: Company, CIMB Research, Bloomberg*

Figure 5: Revenue breakdown (FY10)




Source: Company, CIMB Research, Bloomberg

Figure 6: Gross profit breakdown (FY10)



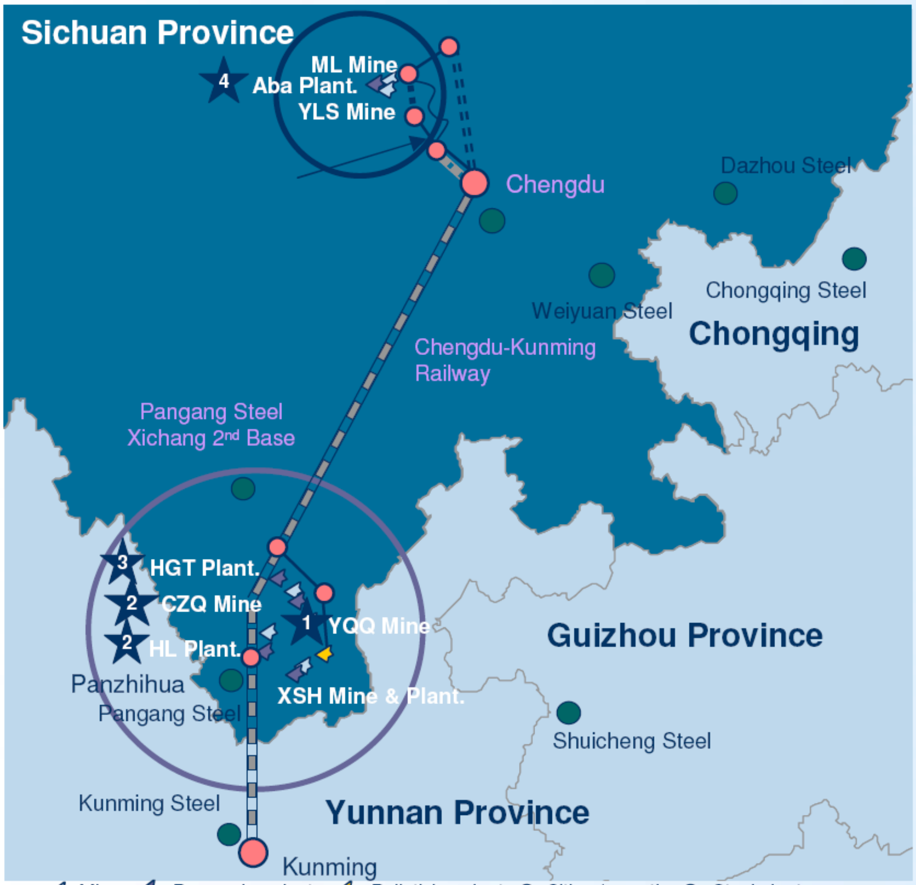

Source: Company, CIMB Research, Bloomberg

## Acquisitions and growth trajectory

The company currently owns and operates four vanadium-bearing titano-magnetite mines, namely, the Baicao Mine, the Xiushuihe Mine, the Yangqueqing Mine and the Cizhuqing Mine, and five production facilities, i.e. the Baicao Processing Plant, the Xiushuihe Processing Plant, the Hailong Processing Plant, the Heigutian Processing Plant and Xiushuihe Pelletising Plant. The company grew rapidly over the past five years on the back of a series of acquisitions and capacity expansions, driving revenue from Rmb791m in FY08 to Rmb1,554m in FY10.

- In 2004, Chuanwei Group acquired 100% equity interest in Huili Caitong and became the owner and operator of the Baicao Mine. In the meantime, Huili Caitong acquired a 95% interest in Xiushuihe Iron and became the owner and operator of the Xiushuihe Mine.
- In 2005, the Xiushuihe Iron Pelletising Plant commenced operations.
- In 2008, a new production line with annual capacity of 300kt at Baicao Processing Plant was launched. The new plant increased the company's total production capacity to 500,000 tonnes of iron concentrates and 80,000 tonnes of medium-grade titanium concentrates.
- In 2009, China VTM was established and a 92.77% interest in Huili Caitong was transferred to the group. Huili Caitong is the major operating subsidiary of the group, accounting for over 94% of the group's total revenue and net profit. Meanwhile, exploration activities adjacent to the Xiushuihe mining rights area increased the group's total resources by 78.2m tonnes.
- In 2010, the company acquired two mines, the Yangqueqing Mine and the Cizhuqing Mine, and two production facilities, the Hailong and the Heigutian plants. The acquisitions increased the group's total reserves and resources to 332.5m tonnes and lifted production capacity to 2.3m tonnes.
- In 2010, the company took over the remaining 7.23% interest in Huili Caitong. Upon the completion of the acquisition, Huili Caitong became an exclusive subsidiary of the group.
- The company plans to conclude the acquisition of Aba Mining by Apr 2011. According to agreements signed earlier, Aba Mining's assets include the Maoling Mine, the Yanglongshan Mine and a processing plant with capacity of 150,000 tonnes. The company has also entered into four other option agreements for future acquisitions.

**Figure 7: Location of the mines**




Mines, Processing plants, Pelletizing plants, Cities / counties, Steel plants, railways, Railways (under construction), expressways / Highways, expressways (under construction).

BC: Baicao, XHS: Xiushuihe, YQQ: Yangqueqing, CZQ: Cizhuqing, ML: Maoling, YLS: Yanglongshan, HL: Hailong HGT: Heigutian.

*Source: Company, CIMB Research, Bloomberg*

# Company outlook

We think the company's production will achieve a CAGR of 8.7% over the next few years, driven by 1) the full-year consolidation of mines acquired in FY10, 2) a further increase in production capacity and utilisation rate, and 3) higher reserves and resources.

**Full-year consolidation in accounting statement of mines acquired in FY10.** The company will see the full-year consolidation of the mines it acquired in FY10, including Yangqueqing Mine (acquired in Jan), Cizhuqing Mine and Hailong Plant (Feb), Heigutian Plant (Mar) and the 7.23% interest in Huili Caitong (Dec).

- Together with a planned upgrade for the Xiushuihe Plant, which will come onstream in mid-FY11, the Yangqueqing Mine will enhance the output of the Xiushuihe Plant by 300,000 tonnes p.a.
- The Cizhuqing Mine and Hailong Plant own 300,000 tonnes of concentrates capacity but output in FY10 was only 136,000 tonnes. A gradual increase in the capacity utilisation rate at Hailong Plant is scheduled.
- With 800,000 tonnes of capacity and an FY10 production of 679,000 tonnes, Heigutian is the company's largest plant. We project Heigutian's output to remain at this level.
- As the major subsidiary of the company, Huili Caitong contributed 94% of total revenue and profit in FY10. We project the full consolidation of Huili Caitong beginning Jan 2011 to raise revenue and profit by 5% yoy each in FY11.

**Further increase in production capacity and utilisation rate.** Upgrade and expansion plans include additional capacity of 1) 300,000 tonnes of iron concentrates and 100,000 tonnes of titanium concentrates at the Xiushuihe Plant, 2) 100,000 tonnes from Aba Mining, and 3) 1m tonnes of pellets from the upgraded Xiushuihe Pelletising Plant. The completion of the upgrade to the Xiushuihe Plant will change China VTM's product mix significantly and increase the proportion of pellets from 36% currently to 68% in FY13. The higher proportion of pellet production will also contribute to the gross margin as pellets enjoy a unit net profit per tonne Rmb40 higher than concentrates.

We also project a 3% yoy rise in the capacity utilisation rate within existing production facilities, thanks to technical upgrades and synergy from consolidations.

**Further increase in reserves and resources.** Expansion of mineral reserves helps to achieve sustainable long-term growth. The company targets to increase its reserves and resources from 332.5m tonnes currently to 600m tonnes by 2015 in two ways: 1) exploration in existing mines and 2) the acquisition of iron ore mines. Currently, the potential increase in existing mines includes 78.2m tonnes around the Xiushuihe mining area and 81.6m tonnes around the Yangqueqing mining area.

**Figure 8: Overview of reserves and resources**

| Projects | Acquisition cost (Rmb m) | Reserves (m tonnes) | Reserves and resources (m tonnes) | Grade (Iron) | Grade (Ti) | Acquisition date | Expansion prospects |
|---|---|---|---|---|---|---|---|
| Baicao Mine 白草鐵礦 | | 51.6 | 113.5 | 25.6% | 10.3% | 2005 | |
| Xiushuihe Mine 秀水河鐵礦 | | 67 | 97.3 | 24.3% | 11.1% | 2005 | Potential resources are 78.2m tonnes. |
| Yangqueqing Mine 陽雀箐鐵礦 | 200 | | 17.9 | 23% | | 2010-1-16 | Potential resources are 81.6m tonnes. Expected to merge with Baicao Mine |
| Cizhuqing Mine 茨竹箐鐵礦 | 310 (with Hilong Plant) | | 25.6 | 21.4% | 9.0% | 2010-2-3 | Not operating |
| Maoling mine 毛岭鐵礦 | 150 | 10.4 | 44.6 | 34.5% | | Aba Mining to be acquired by 2011-4-30 | Potential additional resources are 34.2m tonnes. |
| Yanglongshan mine 羊龙山鐵礦 | | | 33.6 | | | Aba Mining to be acquired by 2011-4-30 | |
| Total | | | 332.5 | | | | |

*Source: Bloomberg, Wind, Mysteel, CIMB Research*

**Figure 9: Overview of processing capacity**

| Projects | Production capacity (Iron concentrates, '000 tonnes) | Production in FY10 (Iron concentrates, '000 tonnes) | Production capacity (Titanium concentrates, '000 tonnes) | Acquisition date | Expansion plan ('000 tonnes) | Remarks |
|---|---|---|---|---|---|---|
| Baicao Plant 白草選廠 | 700 | 503 | 60 | 2005 | | |
| Xiushuihe Plant 秀水河選廠 | 500 | 573 | | 2005 | 300 of iron concentrates 100 of titanium concentrates To start in 2011-6 | |
| Hilong Processing Plant 海龍選廠 | 300 | 136 | | 2010-2-3 | | Acqusition cost of Rmb 189.5m |
| Heigutian Processing Plant 黑谷田選廠 | 800 | 679 | 120 | 2010-3-11 | | Acqusition cost of Rmb 547.6m |
| **Concentrates Total** | **2300** | **1892** | **180** | | | |
| Xiushuihe pelletising Plant 秀水河球团厂 | 360 of pellets | | | 2005 | Total: 1,500 of pellets. The first phase: 1000 to start from 2Q2011. The second phase: 500 | Iron ore supplied by Xiushuhe Mine |
| Aba Mining 阿坝矿业 | 150 | | | To be acquired by 2011-4-30 | To be upgraded by 100 in 2013 | |

*Source: Bloomberg, Wind, Mysteel, CIMB Research*

**Acquisition of Aba Mining to be completed by Apr.** The company will conclude the acquisition of Aba Mining before the end of Apr 2011. Aba Mining holds mining permits in the Maoling and Yanglongshan mines, which cover an area sized 1.9 sq km. Aba Mining's major assets include 1) the Maoling Mine and the extended exploration areas, 2) the Yanglongshan Mine, and 3) a production line of 150,000 tonnes of iron concentrates per annum. The Maoling Mine enjoys higher ASPs and profit margins as its concentrate has a higher iron content of 65%. The average iron content for the company's concentrate is 54%.

On top of the Maoling Mine's current iron concentrate capacity of 150,000 tonnes p.a., Aba Mining is constructing a new processing line of 100,000 tonnes p.a. at Yanglongshan Mine. Given existing infrastructure around the mines and an experienced management, the Maoling Mine should see a quick ramp-up. The annual production volume of iron concentrates is expected to reach 150,000 tonnes by 2012 and 250,000 tonnes in 2013 once the Yanglongshan Mine commences production.

For future acquisitions, the company prefers to buy mining rights directly instead of taking up equity interests in other companies. Decisions are made upon strict criteria, including location, mining life, proven and probable reserves, average grade and content of reserves and estimated returns on investment.

**Four more to go.** Option agreements for five iron ore mines in Sichuan and Yunnan were reached in FY09 (including Maoling Mine). These agreements allow the company to purchase mining rights and related assets of the mine within a specified time and on terms which will be negotiated. Together, these four mines (excluding Maoling Mine) are estimated to own total iron ore resources of approximately 82m tonnes.

**Figure 10: Five potential targets with option agreements (including Maoling Mine)**

| Name of mine | Present owner | Mining Right area (sq. km) | Estimated resource (m tonne) | Grade | Option period | Estimated acquisition price |
|---|---|---|---|---|---|---|
| Maoling Mine | Aba Mining Co., Ltd | 1.9 | 10 | - | 2011-6-17 | Rmb15 per tonne plus or minus Rmb7.5 per tonne of iron ore reserve of a minimum grade. |
| Xiaoheiqing Jingzhi Mine | Panzhihua Jingzhi | 1.02 | 100 | 20% | 2011-5-11 | Rmb7 to Rmb20 per tonne of iron ore reserve of a minimum grade. |
| Huili County Luwan Mine | Sichuan Dayi Mining Co., Ltd | 1.26 | 7.9 | 14% | 2011-6-19 | Rmb5 to Rmb25 per tonne of iron ore reserve of a minimum grade. |
| Lagaluo Mine | Weixi Guangfa Iron Ore Development Co., Ltd | 12 | 8.1 | - | 2011-6-28 | Rmb15 per tonne plus or minus Rmb7.5 per tonne of iron ore reserve of a minimum grade. |
| Huangcaoping Mine | Yanyuan County Xiwei Mining Co., Ltd | 0.4 | 0.3 | - | 2011-6-17 | Rmb15 per tonne plus or minus Rmb7.5 per tonne of iron ore reserve of a minimum grade. |

*Source: Bloomberg, Wind, Mysteel, CIMB Research*

**Figure 11: SWOT analysis**

**Strengths**

- The company is the largest non-state-owned miner of iron ore in Sichuan, benefiting from economies of scale in mining and processing operations
- The utilisation of the open-pit mining method at Xiushuihe and Baicao mines allows the company to produce at lower costs
- The ore in the company's mines contains an average 0.23% vanadium pentoxide, which is necessary to improve the strength, hardness and malleability of steel
- The company is able to separate iron concentrates and titanium concentrates simultaneously through a single production process, hence lowering the cost of production of each concentrate

**Opportunities**

- With government policies encouraging the consumption and production of high-strength steel, there is increasing demand from steelmakers for vanadium-bearing iron ore for use directly in the production of high-strength steel
- The price of iron concentrates is riding the strong demand of China's urbanisation

**Weaknesses**

- With mines located in the western Sichuan province, the transportation of iron ore is inconvenient compared with imported ore
- The content of vanadium and the low grade of iron in the concentrate could pose problems for the metallurgic process of downstream clients

**Threats**

- Aggressive expansion plans by Vale, Rio Tinto and BHP Billiton could be a threat to the prices of imported concentrates after 2013

*Source: Company, CIMB Research*

## Competitive strength

**Economies of scale.** The company plays a leading role in China's iron ore mining industry. It is the second largest miner and the largest non-state-owned miner of iron ore in Sichuan, accounting for 9% of the domestic market share. The company also benefits from economies of scale in its mining and processing operations. The larger the production capacity, the more profitable and efficient the production of titanium and iron concentrates.

**Low-cost mining.** The company's mines are mined using low-cost methods and yield raw ore with a relatively high iron and titanium content. The utilisation of the open-pit mining method at Xiushuihe and Baicao mines allows the company to produce at a lower cost relative to the industry average due to a thick ore-bearing bed located at relatively shallow depths.

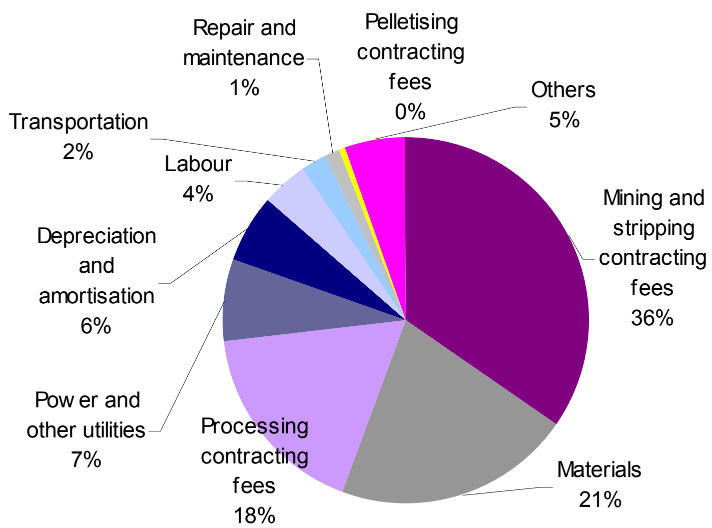
**Increasing demand for vanadium ore.** The company operates mines in the Panxi region, the largest vanadium-bearing titano-magnetite ore area in China and which accounts for 75.3% of the country's total reserves. Hence, China VTM is well-positioned to meet the increasing demand for vanadium ore. The ore from the company's mines contains 0.23% vanadium pentoxide on average, which is necessary to improve the strength, hardness and malleability of steel. The addition of just 0.1% of vanadium can improve the strength of steel by 10-20%.

With government policies encouraging the consumption and production of high-strength steel, there is increasing demand from steelmakers for vanadium-bearing iron ore for use directly in the production of high-strength steel. The "Adjustment and Revitalisation Plan for the PRC Steel Industry" promotes the use of reinforced steel of 400 MPa or above in construction and targets to increase the consumption of high-strength steel products of 400 MPa or above to over 60% of the hot rolled ribbed steel bars consumed in the PRC by 2011.

**High grade titanium content.** The Baicao Mine has an average iron content of approximately 25.5% and an average titanium dioxide content of approximately 10.3% while the Xiushuihe Mine has an average iron content of approximately 24.3% and an average titanium dioxide content of approximately 11.1%. Due to the relatively high titanium content of the ore, the company is able to separate iron concentrates and titanium concentrates simultaneously through a single production process, hence lowering the cost of production for each concentrate.

The company also extends its business downstream into the production of titanium-related products, which are widely used in many industries such as shipping and aircraft construction. China VTM currently owns capacity of 180,000 tonnes of mid- and high-titanium concentrates, which will be expanded to 280,000 tonnes of high-titanium concentrates.

**Figure 12: Production cost analysis**




*Source: Company, CIMB Research, Bloomberg*

## Industry outlook

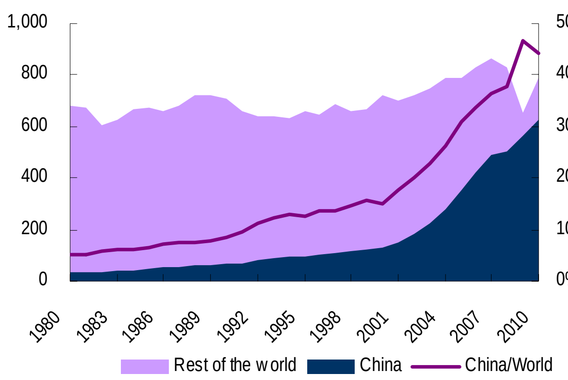
**Strong demand and low supply.** In 2010, global crude steel production reached 1,414mt, representing CAGR of 6% yoy from 2001. The growth was mainly propelled by strong demand in China, where production output achieved a CAGR of 17% yoy since 2001 to 627m tonnes in 2010, accounting for 84% of the increase in world production during the period.

In the meantime, global iron ore production increased from 932mt to 1,720mt from 2001 to 2010, representing CAGR of 7% yoy. The price of imported iron ore in China soared from US$18.5 per tonne in 2001 to US$170 per tonne in 2010, a CAGR of 28% yoy. The price hike was mainly due to unexpectedly strong demand growth in China and the lack of capacity expansion in iron ore production in recent years. Though output volume was in line with crude steel production growth, iron ore suppliers' demand forecasts were too conservative and lagged behind the market's needs. This caused the supply-demand dynamic for iron ore to favour iron ore miners at the expense of steelmakers.

Additionally, the lack of competition on the supply end, thanks to a highly concentrated market structure, caused steelmaker clients to steadily lose negotiating power. 66% of the total sea trade volume of iron ore in the world is controlled by the top three miners and 64% of China's import is dominated by Australia and Brazil.

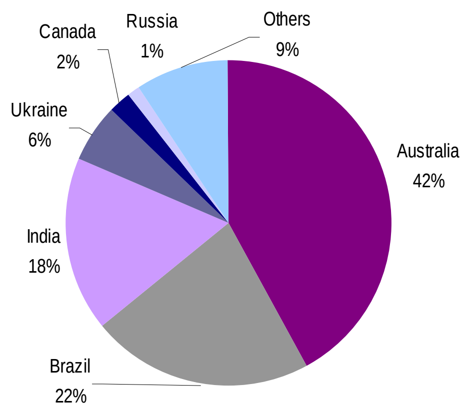
**Tighter supply up until 2013.** We expect the tight supply situation to persist until 2013, after which the supply-demand dynamic will be relieved with the commencement of new iron ore capacity. We estimate the import price of iron ore to stay at the current level of US$180/tonne in FY11 and rise 4% yoy each year thereafter, tracking the rate of inflation.

**Figure 13: The increase in crude steel production (m tonnes)**



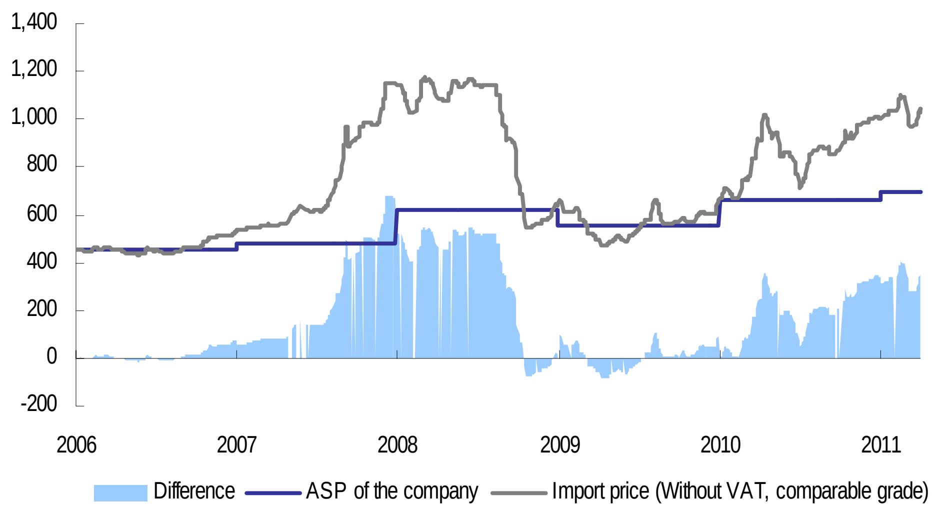

*Source: Company, CIMB Research, Bloomberg*

**Figure 14: Breakdown of China iron ore imports, by country**




*Source: Company, CIMB Research, Bloomberg*

**Figure 15: China VTM's ASP has lagged behind the rise in import spot prices (Rmb/tonne)**



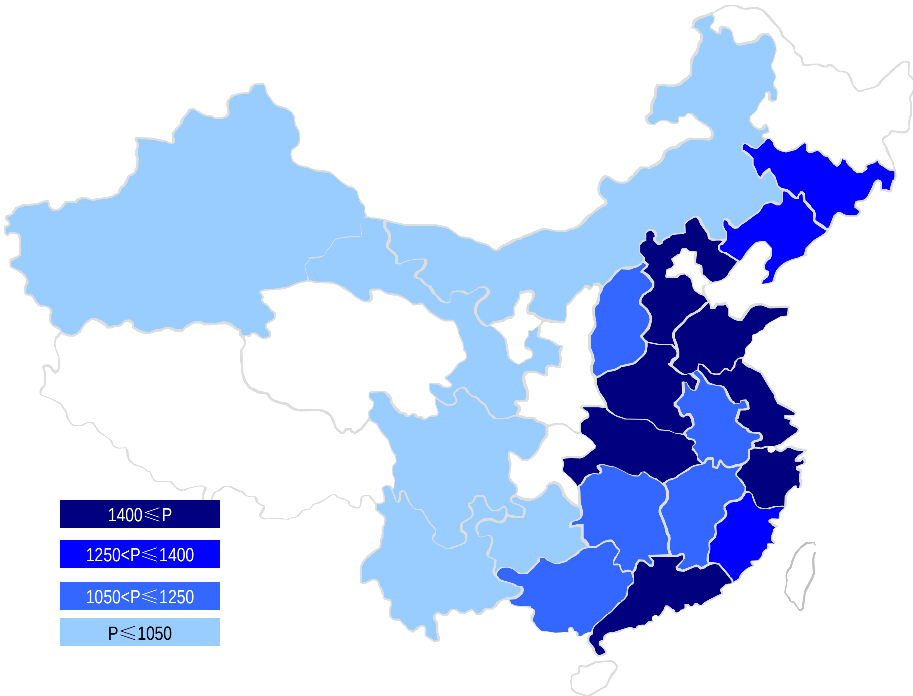

*Source: Company, CIMB Research, Bloomberg*

## Sichuan's closed market

**A more relaxed dynamic.** Sichuan is the third largest iron ore production base in China, producing 100m tonnes of iron ore in 2010 and accounting for 9% of total output in the country. On the other hand, only a few steelmakers are operating in the Sichuan province and there is relatively little iron ore demand. Abundant reserves and the relatively low demand have resulted in a more relaxed supply-demand dynamic relative to other provinces in China. According to our estimates, Sichuan's self-sufficiency ratio is 169% and southwest China's 87%, both much higher than the national average of 53%.

**Sichuan's closed market.** Geographically, Sichuan, together with the southwest region of China, is relatively isolated from the coastal areas. There are only three railroads connecting Sichuan with the rest of China, all of which are single lines. This has led to higher costs of transportation. As it is not feasible to transport iron ore between regions to seek higher selling prices, the iron ore market in Sichuan is somewhat closed. The selling price for iron ore in Sichuan and southwest China is approximately Rmb300 lower than in coastal areas.

**Figure 16: Difference between iron ore prices and distribution (Rmb/tonne)**




*Source: Company, CIMB Research, Bloomberg*

**Iron ore prices in Sichuan to outperform import prices.** We expect the selling price in Sichuan to increase 9% yoy in FY10-13, 5% higher than the increase in import prices, mainly due to 1) steelmaking capacity expansion in the Sichuan area, and 2) improvements in the transportation network. By 2013, the price gap will be narrowed.

**Steelmaking capacity expansion to raise regional iron ore demand.** There are five projects currently under construction in Sichuan: Weiyuan Steel's 2.2m-tonne capacity project, Dazhou Steels' 1.15m-tonne project, Chongqing Steel's 6.5m-tonne project, Desheng Steel's 2.2m-tonne project and a 4.2m-tonne project by Pangang. These expansion projects total 16.25m tonnes of crude steel, which means that Sichuan will be able to use up its entire iron ore surplus by 2012 and turn the supply-demand dynamic from a surplus to a shortage.

**Transportation improvements.** Thanks to the central government's west China development policy, Sichuan is catching up with the rest of the country in terms of infrastructure, especially in improving transportation networks. According to Sichuan's 10-year plan, 11 inter-province railways and seven highways will be built, facilitating the iron ore and steel trade between the province and coastal areas. By 2015, the number of railways connecting Sichuan and other provinces will have tripled and four new highways will be completed. With a better transport infrastructure, Sichuan iron ore is going to see more market exposure. In the meantime, infrastructure construction work will also increase the demand for steel in Sichuan.

Figure 17: Iron ore supply-demand dynamic in China and Sichuan (m tonnes)

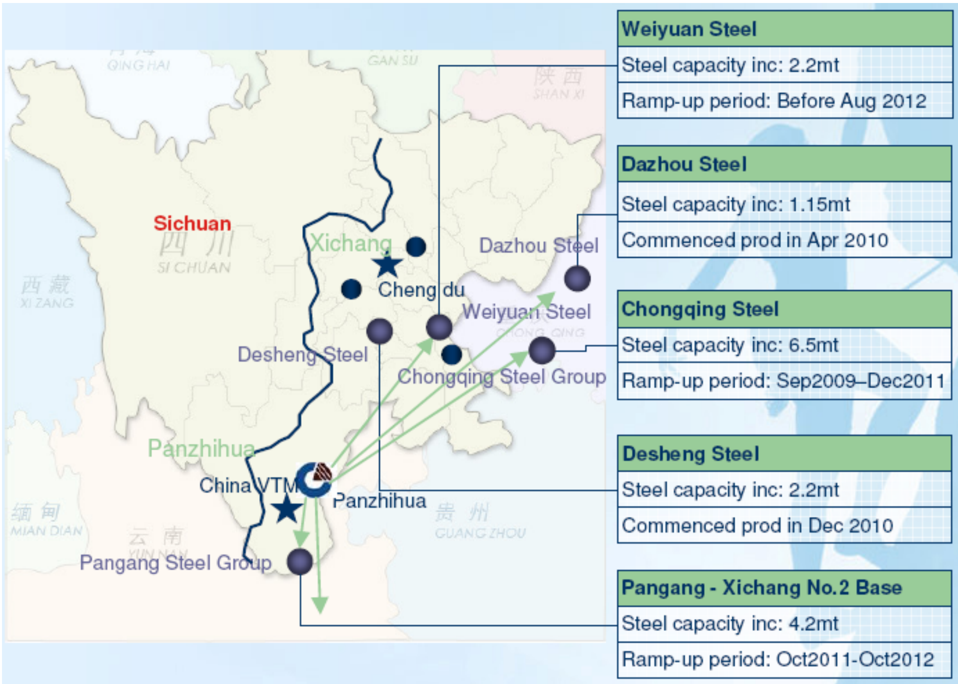
| | National | Southwest China * | Sichuan current | Sichuan 2012F |
|---|---|---|---|---|
| Iron ore production | 1072 | 120 | 100 | 116 |
| Average grade | 29% | 27% | 27% | 27% |
| Iron ore supply (Total Fe) | 311 | 32 | 27 | 31 |
| Iron ore demand (Total Fe) | 590 | 37 | 16 | 32 |
| Self-sufficiency ratio (supply/demand) | 53% | 87% | 169% | 98% |
| Current iron concentrate average price (Rmb/tonne, 65%, dry, with VAT) | 1300** | 1000 | 1000 | |

* Southwest China includes 4 provinces: Sichuan, Chongqing, Yunan, and Guizhou.

** Coastal area

*Source: Bloomberg, Wind, Mysteel, CIMB Research*

Figure 18: New metallurgy projects in Sichuan




*Source: Company, CIMB Research, Bloomberg*

# Financials

We project China VTM's core net profit to achieve a 3-year CAGR of 30% yoy to Rmb1,160.7m in FY13, on the back of a total production CAGR of 8.7% yoy as well as an ASP CAGR of approximately 9% yoy p.a. over the next three years.

**Higher ASP and gross profit margin for iron concentrates**. The price of iron ore has been on the rise since last year due to strong demand in China. The company's concentrate ASP was Rmb665 in FY10, 19% higher than in FY09 but still much lower than the import price, which has reached Rmb950 for the same grade. We expect the ASP to increase 9% in FY11-13 due to higher demand in the region and greater market exposure of local iron ore to coastal areas.

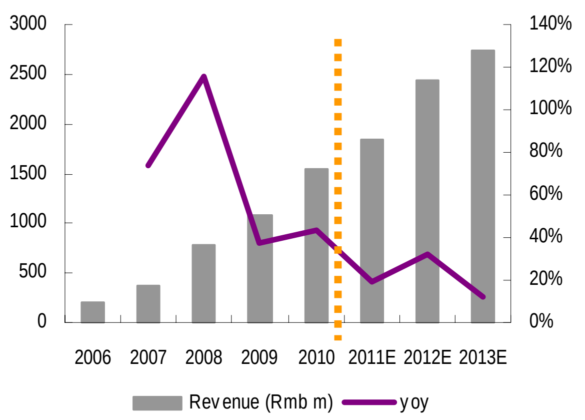
**Extension of production chain.** The company aims to extend its production chain to include new capacity at the Xiushuihe Pelletising Plant. Assuming pelletising turns in a net profit of Rmb40 per tonne, 1m tonnes of pellets will rake in net profit of Rmb40m.

**Capex to decline in line with conservative acquisition forecasts.** We project the company's capex to decrease from a historical high of Rmb1,405m last year to Rmb300m on the back of the completion of the Aba Mining acquisition and other construction work.

**Decrease in admin expenses.** We expect administrative expenses to decline to Rmb65m in FY11 given lower share options and consulting expenses. The company's administrative expenses skyrocketed 123.3% yoy from Rmb35.6m in FY09 to Rmb79.5m in FY10. The increase was mainly due to 1) expenses of Rmb19.5m for equity-settled share options granted to the management and employees, 2) professional consulting fees of Rmb30m for potential and completed acquisition activities in FY10, and 3) higher staff costs as a result of a higher average number of administrative staff.

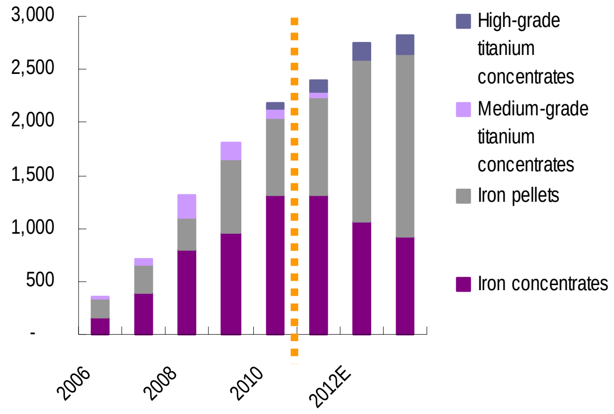
**Healthy balance sheet.** China VTM's balance sheet is quite healthy with an asset-liability ratio of only 25%. The company now has Rmb1.1bn cash on hand and total liabilities of only Rmb944m. We think the company is able to carry out more acquisitions to further expand its footprint.

**Figure 19: Revenue growth over next three years**



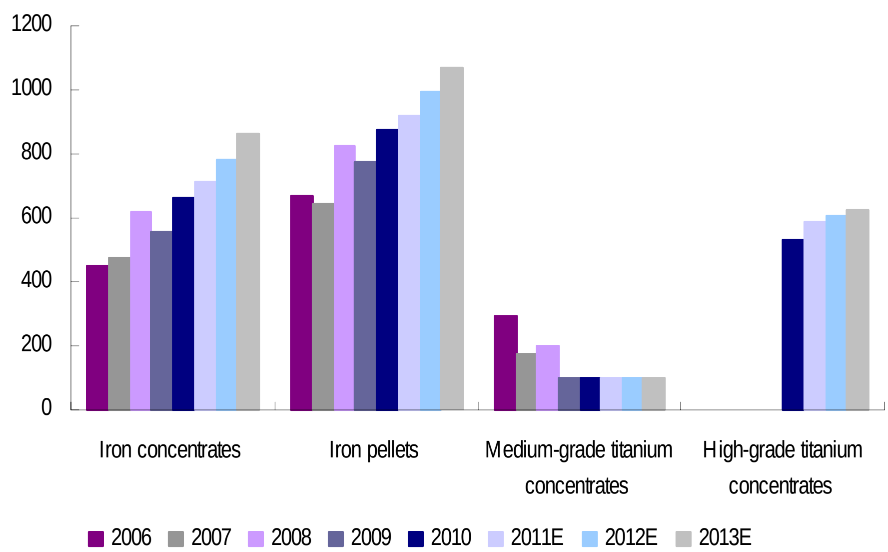

Source: Company, CIMB Research, Bloomberg

**Figure 20: Production breakdown (m tonnes)**




Source: Company, CIMB Research, Bloomberg

**Figure 21: ASP projection (Rmb/tonne)**




Source: Company, CIMB Research, Bloomberg

## Valuation and recommendation

**Initiate with OUTPERFORM, target price HK$4.35.** We like the company for its attractive valuation and potential gains from higher imported iron ore prices. China VTM is trading at 6.4x FY12 P/E.

There are only two iron mining companies listed in Hong Kong, IRC and China VTM. As IRC is not turning a profit at the moment, we refer to global iron ore mining companies with similar business models and industry outlook instead to derive our target price for China VTM. The sector average for global iron ore mining companies is 7.7x FY12 P/E, which we believe the company could trade at given a good earnings outlook for upstream businesses compared to downstream, potential acquisitions and the revaluation of regional iron ore prices. We also believe China VTM's valuations are attractive.

Potential catalysts include the acquisition of Aba Mining and other targets, further increase in the price of imported iron ore and the coming onstream of the upgraded portion of the Xiushuihe Mine and its Pelletising Plant.

**Figure 16: Peer comparisons**

| | Bberg ticker | Rec. | Price | Target price | Mkt cap (US$ m) | Core P/E (x) CY11 | Core P/E (x) CY12 | 3-yr EPS CAGR (%) | P/BV (x) CY11 | ROE(%) CY11 | Div yield (%) CY11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Steel** | | | | | | | | | | | |
| Angang Steel - H | 347 HK | NR | HK$ 10.60 | n.a. | 9,859 | 16.4 | 13.2 | 41.9 | 1.1 | 6.6 | 3.7 |
| Maanshan Iron & Steel - H | 323 HK | NR | HK$ 4.42 | n.a. | 4,376 | 17.2 | 12.4 | 39.8 | 0.9 | 5.7 | 3.2 |
| Chongqing Iron & Steel - H | 1053 HK | NR | HK$ 2.01 | n.a. | 448 | 31.2 | 13.2 | n.a. | 0.5 | 1.7 | 1.5 |
| China Oriental Group | 581 HK | NR | HK$ 3.02 | n.a. | 1,137 | 5.3 | 4.8 | 11.6 | 0.7 | 14.4 | 5.1 |
| Baoshan Iron & Steel | 600019 CH | NR | Rmb 7.35 | n.a. | 19,709 | 8.9 | 7.5 | 11.2 | 1.0 | 12.4 | 6.5 |
| Wuhan Iron & Steel | 600005 CH | NR | Rmb 4.87 | n.a. | 7,527 | 22.4 | 15.9 | n.a. | 1.3 | 6.1 | 2.0 |
| Shanxi Taigang Stainless | 000825 CH | NR | Rmb 6.52 | n.a. | 5,687 | 25.0 | 15.6 | n.a. | 1.6 | 6.8 | 2.1 |
| Nippon Steel | 5401 JP | NR | JPY 245 | n.a. | 20,193 | 11.8 | 9.6 | n.a. | 0.8 | 7.0 | 1.8 |
| JFE Holdings | 5411 JP | NR | JPY 2152 | n.a. | 16,010 | 11.1 | 8.6 | 44.8 | 0.8 | 7.0 | 2.2 |
| ArcelorMittal | MT NA | NR | Eur 24.09 | n.a. | 53,674 | 5.8 | 4.1 | 37.3 | 0.4 | 7.1 | 5.0 |
| **Simple average** | | | | | | **17.5** | **10.9** | **31.1** | **0.9** | **6.7** | **3.1** |
| | | | | | | | | | | | |
| **Iron ore mining** | | | | | | | | | | | |
| China VTM | 893 HK | O | HK$ 3.66 | HK$ 4.35 | 976 | 8.6 | 6.4 | 29.6 | 2.1 | 25.3 | 2.3 |
| IRC LTD | 1029 HK | NR | HK$ 2.16 | n.a. | 934 | 39.7 | 46.3 | n.a. | 1.2 | 2.9 | - |
| Vale | VALE5 BZ | NR | BRL 45.20 | n.a. | 152,523 | 5.9 | 5.8 | 10.4 | 1.6 | 30.1 | 4.0 |
| Rio Tinto | RIO AU | NR | AUD 82.10 | n.a. | 152,171 | 7.9 | 7.9 | 9.0 | 2.0 | 29.2 | 1.6 |
| BHP Billiton | BHP AU | NR | AUD 46.67 | n.a. | 245,254 | 9.9 | 9.2 | 28.4 | 3.5 | 39.4 | 2.2 |
| FMG | FMG AU | NR | AUD 6.23 | n.a. | 18,463 | 9.0 | 7.2 | 67.1 | 4.7 | 67.3 | 1.0 |
| **Simple average** | | | | | | **8.2** | **7.5** | **28.7** | **2.9** | **41.5** | **2.2** |

*O = Outperform, N = Neutral, U = Underperform, NR = Not Rated, TB = Trading Buy and TS = Trading Sell*
*Source: Company, CIMB Research*

# Glossary

**Titanium.** A light, strong, lustrous, corrosion-resistant transition metal with a white-silvery-metallic colour.

**Vanadium.** A rare, soft and ductile element. Vanadium is found combined in certain minerals and is used mainly to produce certain alloys.

**Titano-magnetite**. One of the four main types of iron ore deposits mined by current iron ore mining methods.

**Vanadium-bearing titano-magnetite.** A type of iron ore that contains oxides of vanadium and titanium, in addition to iron oxide.

**Iron ore.** Compounds of iron and oxygen (iron oxides) mixed with impurities (gangue); it is a mineral which when heated in the presence of a reductant will yield metallic iron.

**Iron ore products.** Iron concentrates or iron pellets.

**Iron concentrates.** Concentrates whose main mineral content (by value) is iron.

**Iron pellet.** A round hardened clump of iron-rich material made of iron concentrates. It is suitable for application in blast furnaces.

## Financial tables

### PROFIT & LOSS

| *(Rmb m, FYE Dec)* | 2009 | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|---|
| Revenue | 1,084 | 1,554 | 1,851 | 2,450 | 2,746 |
| Operating expenses | (715) | (880) | (876) | (1,119) | (1,188) |
| EBITDA | 368 | 674 | 976 | 1,330 | 1,558 |
| Depreciation & amortisation | (42) | (86) | (125) | (168) | (201) |
| EBIT | 327 | 588 | 851 | 1,162 | 1,357 |
| Net interest & invt income | (9) | (18) | 0 | 0 | 0 |
| Associates' contribution | 0 | 0 | 0 | 0 | 0 |
| Exceptional items | 0 | 0 | 0 | 0 | 0 |
| Others | 41 | 30 | 30 | 30 | 30 |
| **Pretax profit** | **359** | **600** | **881** | **1,192** | **1,387** |
| Tax | (70) | (117) | (150) | (202) | (235) |
| Minority interests | 39 | 51 | 9 | 9 | 9 |
| **Net profit** | **328** | **533** | **740** | **999** | **1,161** |
| Adj. wt. shares (m) | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 |
| Unadj. year-end shares (m) | 2,075 | 2,075 | 2,075 | 2,075 | 2,075 |

### KEY RATIOS

| *(FYE Dec)* | 2009 | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|---|
| Revenue growth (%) | 37.0 | 43.4 | 19.1 | 32.3 | 12.1 |
| EBITDA growth (%) | 66.8 | 83.0 | 44.7 | 36.4 | 17.1 |
| Pretax margins (%) | 33.1 | 38.6 | 47.6 | 48.7 | 50.5 |
| Net profit margins (%) | 30.2 | 34.3 | 40.0 | 40.8 | 42.3 |
| Interest cover (x) | 35.4 | 33.0 | N/A | N/A | N/A |
| Effective tax rates (%) | 19.4 | 19.5 | 17.1 | 17.0 | 17.0 |
| Net dividend payout (%) | 0.0 | 15.1 | 15.0 | 15.0 | 15.0 |
| Debtors turnover (days) | 37.9 | 40.5 | 44.8 | 38.7 | 38.3 |
| Stock turnover (days) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Creditors turnover (days) | 32.7 | 40.0 | 55.1 | 52.5 | 56.6 |

### BALANCE SHEET

| *(Rmb m, end Dec)* | 2009 | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|---|
| Fixed assets | 496 | 1,476 | 2,083 | 2,720 | 3,020 |
| Intangible assets | 150 | 491 | 367 | 273 | 213 |
| Other long-term assets | 194 | 293 | 299 | 305 | 311 |
| **Total non-current assets** | **840** | **2,261** | **2,749** | **3,298** | **3,544** |
| Cash and equivalents | 1,884 | 1,096 | 1,045 | 2,171 | 3,481 |
| Stocks | 0 | 0 | 0 | 0 | 0 |
| Trade debtors | 137 | 208 | 247 | 272 | 305 |
| Other current assets | 212 | 170 | 183 | 210 | 223 |
| **Total current assets** | **2,233** | **1,473** | **1,475** | **2,652** | **4,008** |
| Trade creditors | 86 | 255 | 304 | 402 | 450 |
| Short-term borrowings | 100 | 175 | 0 | 0 | 0 |
| Other current liabilities | 275 | 383 | 387 | 393 | 399 |
| **Total current liabilities** | **461** | **813** | **691** | **795** | **850** |
| Long-term borrowings | 0 | 125 | 0 | 0 | 0 |
| Other long-term liabilities | 6 | 6 | 6 | 6 | 6 |
| **Total long-term liabilities** | **6** | **131** | **6** | **6** | **6** |
| **Shareholders' funds** | **2,514** | **2,775** | **3,509** | **5,123** | **6,662** |
| Minority interests | 93 | 14 | 18 | 27 | 35 |
| NTA/share (Rmb) | 1.14 | 1.10 | 1.51 | 2.34 | 3.11 |

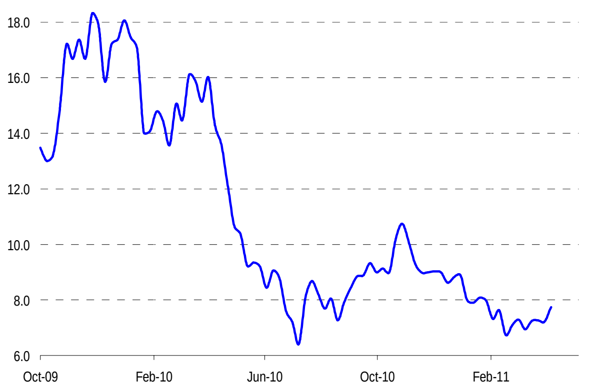
### KEY DRIVERS

| *(FYE Dec)* | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|
| Sales Vol - iron concentrate | 2,044.6 | 2,244.6 | 2,594.6 | 2,644.6 |
| Sales Vol - Titanium concentrate | 145.1 | 145.1 | 161.7 | 169.8 |
| ASP - iron concentrate | 665.1 | 711.6 | 782.8 | 861.1 |
| ASP - Titanium concentrate | 533.8 | 587.2 | 604.8 | 622.9 |
| Unit cost - iron concentrate | 267.0 | 275.0 | 283.3 | 291.8 |

### CASH FLOW

| *(Rmb m, FYE Dec)* | 2009 | 2010 | 2011F | 2012F | 2013F |
|---|---|---|---|---|---|
| Pretax profit | 359 | 600 | 881 | 1,192 | 1,387 |
| Depreciation & non–cash adj. | 42 | 86 | 125 | 168 | 201 |
| Working capital changes | 381 | 878 | (4) | 47 | 2 |
| Cash tax paid | (70) | (117) | (150) | (202) | (235) |
| Others | (369) | (683) | 168 | 221 | 255 |
| **Cash flow from operations** | **342** | **764** | **1,019** | **1,426** | **1,610** |
| Capex | (239) | (975) | (300) | (300) | (300) |
| Net investments & sale of FA | 0 | 0 | 0 | 0 | 0 |
| Others | (89) | (776) | 0 | 0 | 0 |
| **Cash flow from investing** | **(328)** | **(1,750)** | **(300)** | **(300)** | **(300)** |
| Debt raised/(repaid) | 100 | 200 | (225) | 0 | 0 |
| Equity raised/(repaid) | 1,662 | 15 | 0 | 0 | 0 |
| Dividends paid | (20) | 0 | 0 | 0 | 0 |
| Cash interest & others | (4) | (445) | 0 | 0 | 0 |
| **Cash flow from financing** | **1,737** | **(230)** | **(225)** | **0** | **0** |
| **Change in cash** | **1,752** | **(1,216)** | **494** | **1,126** | **1,310** |
| **Change in net cash/(debt)** | **1,652** | **(1,416)** | **719** | **1,126** | **1,310** |
| **Ending net cash/(debt)** | **1,784** | **796** | **1,045** | **2,171** | **3,481** |

### 12M - FORWARD FD CORE P/E (X)




*Source: Company, CIMB Research, Bloomberg*

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## RECOMMENDATION FRAMEWORK #1 **

| STOCK RECOMMENDATIONS | SECTOR RECOMMENDATIONS |
|---|---|
| **OUTPERFORM:** The stock's total return is expected to exceed a relevant benchmark's total return by 5% or more over the next 12 months. | **OVERWEIGHT:** The industry, as defined by the analyst's coverage universe, is expected to outperform the relevant primary market index over the next 12 months. |
| **NEUTRAL:** The stock's total return is expected to be within +/-5% of a relevant benchmark's total return. | **NEUTRAL:** The industry, as defined by the analyst's coverage universe, is expected to perform in line with the relevant primary market index over the next 12 months. |
| **UNDERPERFORM:** The stock's total return is expected to be below a relevant benchmark's total return by 5% or more over the next 12 months. | **UNDERWEIGHT:** The industry, as defined by the analyst's coverage universe, is expected to underperform the relevant primary market index over the next 12 months. |
| **TRADING BUY:** The stock's total return is expected to exceed a relevant benchmark's total return by 5% or more over the next 3 months. | **TRADING BUY:** The industry, as defined by the analyst's coverage universe, is expected to outperform the relevant primary market index over the next 3 months. |
| **TRADING SELL:** The stock's total return is expected to be below a relevant benchmark's total return by 5% or more over the next 3 months. | **TRADING SELL:** The industry, as defined by the analyst's coverage universe, is expected to underperform the relevant primary market index over the next 3 months. |

** This framework only applies to stocks listed on the Singapore Stock Exchange, Bursa Malaysia, Stock Exchange of Thailand and Jakarta Stock Exchange. Occasionally, it is permitted for the total expected returns to be temporarily outside the prescribed ranges due to extreme market volatility or other justifiable company or industry-specific reasons.*

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## RECOMMENDATION FRAMEWORK #2 **

| STOCK RECOMMENDATIONS | SECTOR RECOMMENDATIONS |
|---|---|
| **OUTPERFORM:** Expected positive total returns of 15% or more over the next 12 months. | **OVERWEIGHT:** The industry, as defined by the analyst's coverage universe, has a high number of stocks that are expected to have total returns of +15% or better over the next 12 months. |
| **NEUTRAL:** Expected total returns of between -15% and +15% over the next 12 months. | **NEUTRAL:** The industry, as defined by the analyst's coverage universe, has either (i) an equal number of stocks that are expected to have total returns of +15% (or better) or -15% (or worse), or (ii) stocks that are predominantly expected to have total returns that will range from +15% to -15%; both over the next 12 months. |
| **UNDERPERFORM:** Expected negative total returns of 15% or more over the next 12 months. | **UNDERWEIGHT:** The industry, as defined by the analyst's coverage universe, has a high number of stocks that are expected to have total returns of -15% or worse over the next 12 months. |
| **TRADING BUY:** Expected positive total returns of 15% or more over the next 3 months. | **TRADING BUY:** The industry, as defined by the analyst's coverage universe, has a high number of stocks that are expected to have total returns of +15% or better over the next 3 months. |
| **TRADING SELL:** Expected negative total returns of 15% or more over the next 3 months. | **TRADING SELL:** The industry, as defined by the analyst's coverage universe, has a high number of stocks that are expected to have total returns of -15% or worse over the next 3 months. |

*** This framework only applies to stocks listed on the Hong Kong Stock Exchange and China listings on the Singapore Stock Exchange. Occasionally, it is permitted for the total expected returns to be temporarily outside the prescribed ranges due to extreme market volatility or other justifiable company or industry-specific reasons.*