Mining
Australia

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Fortescue Metals Group (FMG AU)

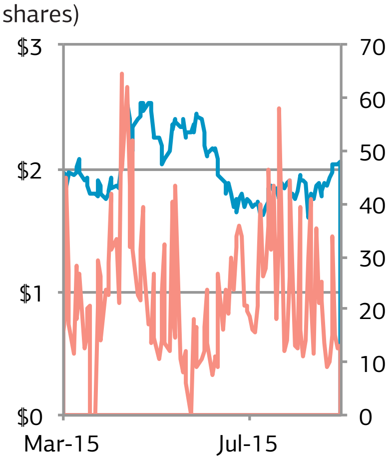
No Room for the Second-Class

- **Chinese steel production** to fall to 650 MMT by 2017. Property construction demand for steel to fall to pre-stimulus 2007 levels of 200 MMT.
- **Chinese imports of iron ore** to fall by 18% by 2017. We expect domestic supply of iron ore to stabilize around 200 MMTPA, even if they produce at a loss.
- **Our base case** long-term price for iron ore is now USD 43-45/ ton as low-cost producers expand production and demand falls.
- **We forecast FMG all-in cash costs** delivered to China at USD 39/dmt and that its break-even price of iron ore is USD 43/ton. We expect the company has reached the bottom of cost reductions and that C1 costs will fall to USD 21 per ton at best, not to the USD 18 the company claims.
- **The Chinese government** no longer supports investment in iron ore. Rumored suitors are simply unable to invest in FMG and there will be no white knight.
- **Debt to a single customer** could be the catalyst for restructuring.
- **Valuation:** We now see FMG as a go-to-zero. We reach the target based on a DCF valuation model. We close coverage of FMG with this report.

FMG (FMG AU)

Price	A$2.01
Rating	**SELL; Closing Coverage**
Price Target	**0**
Difference	100%
Market Cap	A$6.3 bln
Moving Avg.	A$46 mln
Free Float	67%

FMG (FMG AU) last share price in A$ (blue) and volume (pink, in mln shares)



Source: Bloomberg

No Place for FMG in the New World of Chinese Demand

Infrastructure, despite all the loud announcements, is flat this year.

We estimate that steel production will fall to 650 MMT over the next two years, to the level of 2011. The key drivers of the decline are:

- Demand from property construction will return to the pre-stimulus, 2007 level of around 200 MMT. This represents a decline of 35% from the peak of 318 MMT in 2014. Markets like Northeast China, where property construction fell by 35% 18 months ago, are now stabilizing. Core markets like East and South China started to fall this year and will not bottom until late 2016.

- Infrastructure, despite all the loud announcements, is flat this year. We expect the government will continue to use fiscal stimulus to ease the economic decline. Infrastructure spending has been very high for seven years. Funding and physical limits for continued growth have been reached, and we expect infrastructure steel demand to fall by 10% a year until it reaches the pre-stimulus level of 50 MMTPA.

- Manufacturing will decline as fixed asset investment dwindles. Rapid industrial capacity expansion fuelled expanding industrial demand for steel. Overcapacity in virtually all industrial sectors inevitably will lead to lower industrial demand for machinery.

- We expect steel exports to peak this year as the key markets of South East Asia bring new steel production capacity online.

Table 1. China Imports of Iron Ore to Fall 18% from Peak

MMT	2014	2015	2016	2017	2015	2016	2017
Domestic Steel Consumption	706	632	597	546	-10%	-6%	-8%
Construction Steel (60%)	424	391	337	293	-8%	-14%	-13%
Construction Property (45%)	318	285	242	207	-10%	-15%	-14%

Construction Infrastructure (15%)	106	106	95	86	0%	-10%	-10%
Manufacturing Steel (40%)	282	272	259	254	-4%	-5%	-2%
Exports of Steel	94	105	100	100	12%	-5%	0%
Total Production	800	768	696	646	-4%	-9%	-7%
Total Iron Ore Demand	1,200	1,152	1,044	969	-4%	-9%	-7%
Domestic Iron Ore Supply	260	230	200	200	-12%	-13%	0%
Import Requirements	940	922	844	769	-2%	-8%	-9%

Source: J Capital

We expect China's demand for iron ore imports to fall by 18% over the next two years. The domestic iron ore cost curve is no longer a meaningful way to predict the volume of supply. Most mines still producing today are state-owned and are producing below cost. We expect the state-owned miners to be supported to maintain production and therefore we forecast domestic supply constant at 200 MMTPA.

China Imports of Iron Ore to Fall 18% from Peak

With Chinese import demand falling to 844 MMT in 2016 we expect iron ore prices to average USD 45 in 2016 before falling to USD 43 in 2017 as demand falls and majors increase output. From Chinese import data, we can see the supply of iron ore to China by non-majors has fallen 34% YTD through July or around 50 MMT. Malaysia, which exported 12 MMT to China last year, has virtually stopped shipments. Iran exported 24 MMT last year and that is likely to halve to 12 MMT this year.

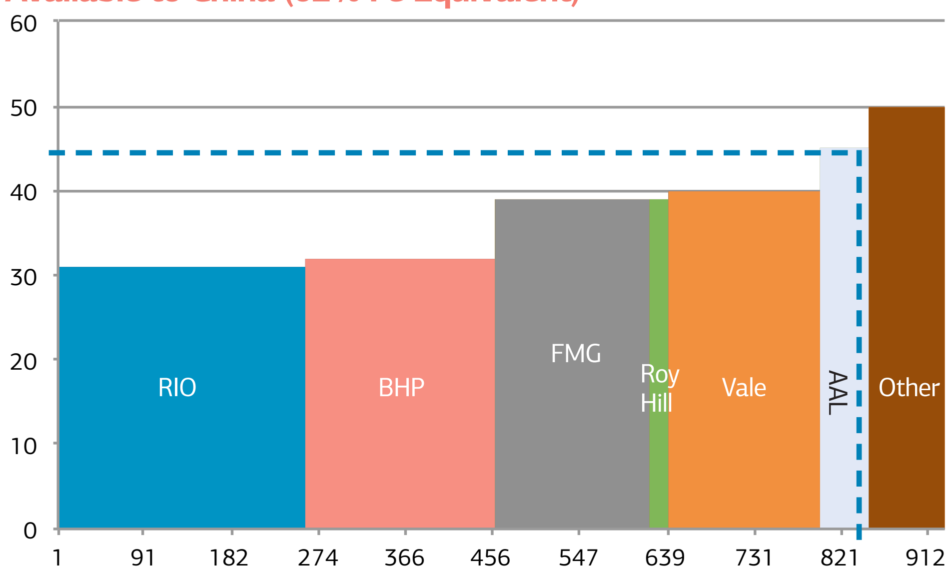
We estimate that the current non-major volume that remains profitable above USD 50/ton is around 100 MMTPA and of that, 45 MMT, produced by Anglo American, is profitable above USD 45/Ton.

As Chinese import demand falls to 845 MTPA in 2016, we expect Anglo American to be the marginal supplier and that the price of iron ore will be set at around USD 45/ton. In 2017, import demand will fall to 770 MMT and expansion of at least Roy Hill will increase supply by 30 MMT. That means that FMG will become the marginal supplier and the price will fall to around USD 43/ton.

Vale, FMG, and Roy Hill all have similar costs on a CFR China 62% Fe equivalent. The difference is the product quality. Vale attracts a premium of around 6% for its 65% Fe product and FMG a discount of at least 7% for its 58% product. Roy Hill's product is just under 62% and will most likely trade close to the benchmark price. FMG, with its discounted, lower-quality product, will be the marginal supplier by 2017.

We do not see iron ore prices falling below USD 40/ton. Chinese steel demand would need to fall below 450 MMT before the delivered costs of RIO and BHP at USD 32/ton define the price of iron ore. We do not think this is likely.

Chart 1. 2016 Cost Curve of Supply of Seaborne Iron Ore Available to China (62% Fe Equivalent)



Source: Company Reports, China Customs, J Capital

FMG Unstainable Cost Reductions

FMG reduced average delivered costs of iron ore by USD 14/ton in FY 2015. C1 Costs went down to USD 22/ton in the June quarter. The company has forecast USD 18/ton. We do not believe it. We expect costs to remain at around USD 21/ton (assuming an exchange rate of AUD 0.77/1 USD, which FMG used for its forecast).

FMG's remarkable cost reduction had two unstainable elements.

"Waste"

The first is the classification of 8-10 tons of DID as waste on its balance sheet, enabling FMG to sell with no mining cost. A careful analysis of FMG production and inventory data reveals a hole of around 8 MMT of iron ore in inventory.

On our site visit to FMG in October 2014, senior management essentially corroborated this view. They told us that there was at least 10 MMT of DID ore stockpiled before the Kings OPF commenced processing. They mine around 3 MMT of DID per quarter and process around 4 MMT of ROM ore. We were told the DID was waste and was processed at no cash cost of mining. In 1H 2015 ROM stocks are overestimated when compared with production. In 2H ROM Stocks fall dramatically and inventory is missing around 8MMT. We estimate this saved FMG around USD 2/ton over FY2015 and is no longer available as a cost reduction technique. We therefore expect cost to increase by USD 2/ton from this factor.

Strip Ratio

FMG clearly was high-grading its mine, as the strip ratio in the June quarter was only 1:1 and FMG has stated it will rise back up to 1:1.8 by the end of FY 2016. This resulted in a cost saving of USD 2.6/ton in FY2015. We expect the increase in strip ratio will add USD 5/ton to the cost of production in FY2016.

FMG will realize other savings from cost-control initiatives, falling exchange rates, and falling oil prices. We estimate these savings will be around USD 8/ton. In short FMG costs have hit the bottom.

Table 2. Cost Reductions in FY 2015

	(USD/T)
Exchange Rate and Oil Price Fall	4.7
High Grading	2.6
DID Waste Processing	2
Productivity (vol)	0.6
Contractor Consolidation	1.2
Roster Changes	0.9
Procurement Initiatives	1
Mining Initiatives	0.5
OPF Upgrades	0.5
Total	14

Source: Company Reports, J Capital

Table 3. C1 Cost Forecast FY 2016 (AUSD 0.77US)

	(USD/T)
Savings	
Procurement Initiatives	1.00
Mining Initiatives	1.00
OPF Upgrades	0.50
Oil Price (USUSD 50/ton)	2.80
Exchange Rate	2.65
Total Savings	7.95
Cost Increases	
End of DID Inventory	2.00
Increased Strip Ratio	5.00
Total Increase	7.00
Net Change	-0.95
C1 Cost JunQ15	22.16
C1 Forecast FY 2016	21.21

Source: Company Reports, J Capital

No White Knights

FMG has rallied on rumors that a Chinese company may invest in FMG at the asset level. We do not believe this will happen. China has shifted its overseas investment priority to oil and gas and away from bulk commodities like iron ore. There has been no major investment in iron ore by a Chinese company for two years. The China Development Bank has not supported any international iron ore mine investments in that period. Senior management at Mimmetals, a major Chinese international resource player, has stated privately that there is no government support for investment in iron ore mines. We know of at least one private Chinese company invested in a junior Australian iron ore mine that was recently forced to repay a Chinese bank loan used to fund the mine. The Chinese bank wanted no exposure to iron ore mines.

The two companies most frequently cited as suitors are Hebei Iron and Steel and Tewoo.

Tewoo, Tianjin's largest SOE, is a significant iron ore importer and had planned to invest over USD 1 billion in the London-listed African Minerals but finally withdrew this year after years of discussion and a letter of intent. Tewoo has been in talks with FMG for several years to become an investor in FMG at the asset level. Tewoo almost signed a letter of intent with FMG at the 2014 Boao Forum in Hainan only to cancel at the last minute. Tewoo's former Party Secretary Wang Zhizhong was arrested on charges of corruption on April 21, 2015. Any organization that has a senior official charged with corruption is paralysed for years. Tewoo is not coming to FMG's rescue anytime soon.

Hebei Iron and Steel, Hebei's largest SOE, producing 47 MMTPA of steel, is also rumored as potential suitor. Hebei Iron and Steel is being forced to reduce overcapacity and pollution from its steel mills. It has also just committed over USD 2 billion to build a 5 MTPA steel mill in South Africa. The Party secretary for Hebei Province was arrested for corruption on July 24 this year. We consider it highly unlikely that Hebei Iron and Steel has the capacity or would receive the financial support to invest in an iron ore mine at this time.

Catalyst for Restructuring

FMG's largest customer now accounts for 42% of all its sales.

FMG's cash position and its exposure to one customer are potential catalysts for a restructuring. FMG's largest customer, which we believe is Singapore's Prosperity Steel United (PSU), now accounts for 42% of all its sales. We believe the prepayments of USD 878 million are mainly from PSU. These prepayments are 12% of revenue and would use around 50% of available cash if they were to be repaid. FMG's cash on hand includes USD 330 million in restricted cash that can be used only for paying down debt, so FMG's available cash is now less than USD 2 billion. If PSU, a major iron ore trader, was to have difficult times this could be the catalyst for the restructuring of FMG.

Valuation: FMG is Most Likely a Go to Zero

In our best-case scenario, we see an equity value of AUSD 1.73 for FMG. This requires that China steel production remain at current levels. This is unlikely and we therefore expect that FMG is now a go-to-zero. The secured debt holders will become the new owners of the company. A restructured FMG without finance cost would be cash flow positive in our base case scenario. Debt holders believe this scenario is likely. FMG's 6.875% bond maturing in 2022 is trading at 15.5% yield or at USD 0.64 in the dollar, while the FMG secured bond 9.75% maturing in the same year is trading at a yield of 11% or at USD 0.94 in the dollar.

We are closing coverage of FMG.

We used a DCF model with a WACC of 10.25% and terminal growth of 3%.

Table 4. FMG Valuation Scenario

Scenario	Iron Ore USUSD /T	AUD/USD	Valuation USD/Share	AUD/Share
Best	USD 50	USD 0.60	USD 1.21	USD 1.73
No Equity Value	USD 47.5	USD 0.60	0.02	0.03
Base	USD 45	USD 0.65	0	0
Worst	USD 43	USD 0.70	0	0

Source: J Capital

Disclaimer

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