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Australia | Mining

Fortescue Metals Group (FMG AU)

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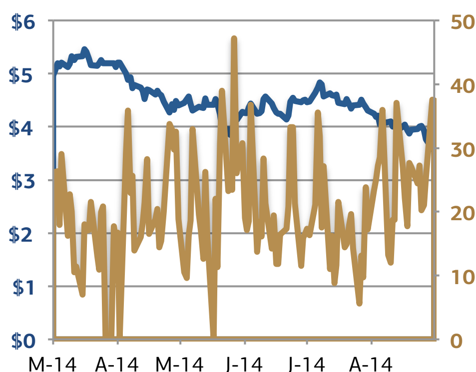
Fortescue Metals Group (FMG AU) six-month share price in AUD (blue) and volume (gold, in mln shares)



Source: Bloomberg, September 23, 2014

Fortescue Metals Gp. (FMG AU)

Price	AUD 3.66
Rating	**Sell**
Price target	**AUD 1.66**
Difference	**55%**
Market Cap	AUD 12.00 bln
Simple Moving Avg.	21.3 mln
P/E	3.77x

Source: Bloomberg, September 23, 2014

Margins Squeezed

– Already in crisis?

We believe FMG is struggling to sell high quantities of lower-quality iron ore in the oversupplied China market. Our checks, and analysis of company reports, led us to believe the company is holding at least 6 MMT of iron ore at ports in China. FMG strongly denies they have any inventory in China. FMG discounts to benchmark were 17% in July and August.

– Discounts high, prices low

We now see iron ore trading in a lower band of USD 80-90/ton. Steel demand is not improving, and domestic iron ore production is not contracting as much as expected. Steel mills will not restock going into winter this year. Steel mills and traders expect the high discounts on FMG iron ore to remain at these levels. We expect FMG discounts to average 15% in the first half of FY 2015.

– FMG cash may be dangerously low by December

FMG owes payments of USD 2.7 bln in FY 2015 H1 from debt repayments, dividends, capex, interest payments and delivery of prepaid sales. With falling iron ore prices and high discounts, we do not expect FMG to earn more than USD 1 bln in operating cash flow in the same period based on stated costs. We believe this will see FMG end the year with, at best, only USD 700 mln in cash.

– PT AUD 1.66, downside of 55%; SELL

We have assumed that the average price of iron ore will be USD 85/ton in FY 2015 falling to USD 80/ton in subsequent years.

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Wrong time to increase capacity

FMG must keep discounts high to make sales.

FMG is embattled on two fronts: the company not only faces rapidly declining iron ore prices, but needs to use high discounts to sell its newly commissioned supply. The key signs of FMG weakness are increasing inventory and receivables, as well as a new high discount level. Our checks, and analysis of company reports, led us to believe that FMG has built at least 6 MMT inventory in China (5% of FY 2014 sales), and increased discounts to 17% in July and August in a attempt to sell its 64% incremental production increase of iron. FMG CEO Neville Powers strongly denied they have any inventory in China in a statement to the Australian Financial Review on September 18th, "We don't own any of the stocks once they are on the ship. We do not own any iron ore [in China] and there's no iron ore being held for us on consignment."[1]

Reduced property construction, particularly the negative growth in residential property starts, is the key reason steel demand is falling. The Chinese iron ore market is now clearly in oversupply, with imports up 17% August YTD YoY, while pig iron growth is flat July YTD YoY. Iron ore prices will not rally above USD 100 anytime soon.

FMG faces lower iron ore prices and lower margins from discounts and will see its working capital demand rise. We continue to believe the company will struggle to repay debt and may need to raise capital before the end of 2014. We expect discounts will remain around 15%, as the company struggles to sell its production. It is also possible that FMG will have to slow production as sales slow. Inventory levels are already high and FMG can ill afford the increase in working capital costs of increasing inventory.

We believe that FMG breaks even when the price of 62% Fe iron ore is at USD 85, higher than the company's claim of USD 80 cash cost. We believe FMG must now contemplate closing its higher-cost Chichester mine to save USD 7/t in cash cost of mining and reduce oversupply in the market to arrest the iron ore price decline.

Oversupply

China's steel demand down 2-8% this year.

We believe China's domestic steel demand is down between 2-8% this year and steel production is down 2-5%, with a 36% increase in

[1] http://www.afr.com/p/business/companies/fortescue_nev_power_denies_china_0O3qpLMJSvqWT5RCapj2GP

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exports making up the difference. Imports of iron ore surged 17% YTD August, and domestic iron ore production is down by only 20%. Those numbers indicate excesses of iron ore this year of around 70 MMT. This is already apparent in the 30 MMT of increased inventory at port YTD Sept and the 200% increase in inventory at domestic mines YTD Sept. Oversupply has been a key driver of falling iron ore prices.

Steel mills remain financially strained and unable to hold large amounts of iron ore or steel inventory, while at the same time, steel mill production is exceeding demand. This has led to declining steel prices, putting further cost pressure on iron ore prices.

Tougher to hold inventory

Banks have tightened the terms of letters of credit to traders, making it harder for some traders to hold iron ore inventory. The depreciation of the RMB in January-March made using iron ore as a financial product less attractive. Both factors have helped push down the price of iron ore.

Banls have tightened LOC terms for traders.

Meanwhile, domestic iron ore is not being displaced as fast as expected by losses. Over the past week, we spoke with more than ten domestic iron ore mines and with the industry association. Large miners told us that they will continue to expand. This was consistently true of SOE mines whether or not owned by steel mills. Large private mines also said they will continue producing.

Most small and medium private mines have already stopped producing. Large in number, this group produces only around 20% of domestic iron ore.

No restocking

We do not expect any significant restocking this year. We visited several steel mils and steel traders last week in China. They all indicated that they were holding around half their normal levels of inventory and that they do not intend to significantly restock going into the winter for the following reasons:

- High port stock levels mean no supply constraints.
- Falling prices make high inventory an uncompetitive strategy.
- There are no transport constraints, and transport costs are falling.

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- The Dalian futures exchange allows hedging against price.
- Steel mills remain financially constrained despite marginal profits and cannot afford to hold high inventory.

We do expect that there will be a mild restocking starting in October that may arrest the fall of iron ore prices.

Low demand

September and October will see weaker than expected steel demand.

Steel mills are not expecting strong demand in the normally seasonal strong months of September and October. We expect that steel demand will be below expectations in these months and that steel production will fall as private steel mills reduce capacity utilization. This will have a negative effect on price and may well counter the price effect of any mild restocking.

We therefore adjust our forecast for iron ore prices in Q4 down from USD 85-95 to USD 80-90/ton. We expect FMG will have cash flow operations in FY 2015 Q2 of only USD 200-400 mln.

FMG inventory builds up. Where is it?

Our research and analysis led us to believe FMG is holding at least 6 MMT of iron ore at ports in China. Our checks early this year indicated that inventory of FMG product in China had increased dramatically, from around 15 MMT to 25 MMT, of which we believed 6 MMT was owned by FMG in bonded warehouses. FMG has strongly denied that they have any inventory in China. We still cannot resolve where the inventory is being held and have requested further clarification from FMG. They have yet to reply to this request.

FMG has not replied to our request for inventory location clarification.

When FMG reported its annual results, inventory increased 63% over the last financial year. Moreover, FMG receivables increased from 1.4 MMT of iron ore to 5 MMT. FMG has not only had to discount heavily to sell its increased production but now, it now needs to hold higher levels of inventory and sell iron ore on credit terms.

Inventory reconciled with production

We cannot understand where FMG is holding 6 MMT of processed iron ore inventory from a reconciliation of FMG production data with its reported inventory data:

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Table 1. FMG inventory changes

Wet MMT	Jun-13	Dec-13	Jun-14
Total ore inventory at the mine	22.2	31.3	27.0
Total ore inventory at the port	2.1	5.2	9.7
Total inventory (wet MMT)	24.3	36.5	36.7

Source: Company Reports, BC Iron, J Capital

This is our reasoning:

- Total inventory was around 24 MMT at the beginning of FY 2014, rose to 36.5 MMT in December 2013 and finished FY 2014 at 36.7 MMT.
- Composition of the inventory changed dramatically. Mine inventory went from 22.2 MMT to 27.0 MMT, but port inventory went from 2.1 MMT to 9.7 MMT.
- Port inventory cannot be that high because:
  - The FMG port stockyard can only physically hold 3 MMT and FMG has stated it has 3 MMT at port.
  - If you value the inventory at port, using C1 costs, and 9.7 MMT, it is USD 100 mln lower than the reported inventory.
- Holding inventory in China seemed like the most plausible explanation.
  - If you assume that there is 3 MMT at FMG's port, and take the remaining 6.7 MMT assume it is at port in China and value it using delivered costs, the inventory value balances.

FMG had already stated it had 3 MMT at port, the maximum of its port stockyard capability.

Stephen Pearce, FMG CFO, stated on the annual results call: "We started the year with 25 MMT [of inventory] and finished with 35 MMT" and "We have 3 MMT of stock at port" and that there was "Not so much of [an inventory] movement from December to June". That is true, but where is the company holding 6.7 MMT of processed iron ore if it is not at its Australian port or in China? There is no stockyard in the mine that can hold that level of processed iron ore. We are waiting on FMG's response to this question.

FMG released a detailed statement of ore reserves (ore you can extract economically) and mineral resources (ore you expect you can extract economically) with its annual results. Reserves statement

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reveals there are 31 MMT (DMT) of inventory in ore reserves and then 35 MMT in mineral resources. Mineral resources inventory is unusual and cannot, by definition, be included in inventory in current assets as it is not available for sale in the next 12 months.

Checks at port

We recently visited Caofeidian Port, the largest iron ore port in China, and found 3 MMT of FMG iron ore held in the bonded zone. Similar checks in April at Jintang Port, also a major port, found around 3 MMT of FMG iron ore in the bonded zone. Ownership of the inventory held in the bonded zones is unclear. It appears that the bonded zone logistics company has possession of the stock, but on a consignment basis. FMG strongly denies they have made any sales on a consignment basis.

FMG's iron ore at Caofeidian Port Bonded Zone. Photo by J Capital Research | August 30, 2014.

Discount, price and traders

Iron ore trader sentiment is very negative. They believe that ore will trade in a band from USD 80-95 and USD 70-85 in 2015. FMG has guided that its discount levels will be in the range of 10–15% below the benchmark 62% Fe on a Fe unit basis, and we concur.

FMG announces a contract discount price around the middle of the month for the following month. We monitor port spot prices (traders selling inventory at Chinese ports) and the implied discounts for FMG product. Port spot prices are a leading indicator of how FMG will set its contract discount prices. From analysis of these available

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discounts against FMG reported earnings and our discussions with iron ore traders, actualized FMG discounts are about 2% points higher than these discounts. FMG will provide higher than its "published" contract discount rate to key customers. Some key customers may receive discounts greater than 2% and some less. These favorable discounts appear to be linked to annual volume targets. The greater the volume the greater the discount in a form of rebate.

We recently visited a number of iron ore traders in China to better understand the current trading environment and discount for FMG. Most traders we met with did not purchase directly from FMG but from larger traders like Prosperity Steel United and Caghill that have long-term contracts. They can get the discount levels that are published by FMG from those traders. They believe that the large trading houses get a further 2% discount on average. Small traders said they can sometimes get higher discounts because the larger trading companies are pursuing volume targets to get rebates. FMG sells about 50% of its volume on LTC to steel mills compared with RIO and BHP, which sell about 70-80% of their volume to steel mills on LTC. Traders said that, as FMG production is increasing dramatically, FMG has struggled to grow LTC at the same rate and therefore needs to rely more heavily on traders. With increasing volume of iron ore supply and an oversupplied market, the traders gave this as a key reason why discounts have been increasing.

The "value in use" argument

FMG believes that the high level of discount will go down as steel mills recognize "value in use." So what is value in use? This is the concept that steel mills will recognize the lower per unit of Fe cost of the discounted FMG product and this will drive demand and push down discounts. Pricing is not that simple. Iron ore that is lower than 62% Fe has additional costs.

FMG's "value in use" argument is just not credible.

For each 1% point of Fe below 62%, the amount of coal required increases by 2% and quality of steel goes down 3%. For the FMG average iron ore grade the "value in use" implies a discount of 10%. Over the last few years, in a supplied constrained market, the discount has hovered around 1–4%, well below the implied "value in use" discount of 10%. Now that the market is oversupplied it is just as likely that discounts will be greater then the "value in use" discount of 10%.

Traders told us that FMG product at a 15% discount is attractive. FMG September discounts declined to 13%, which traders said

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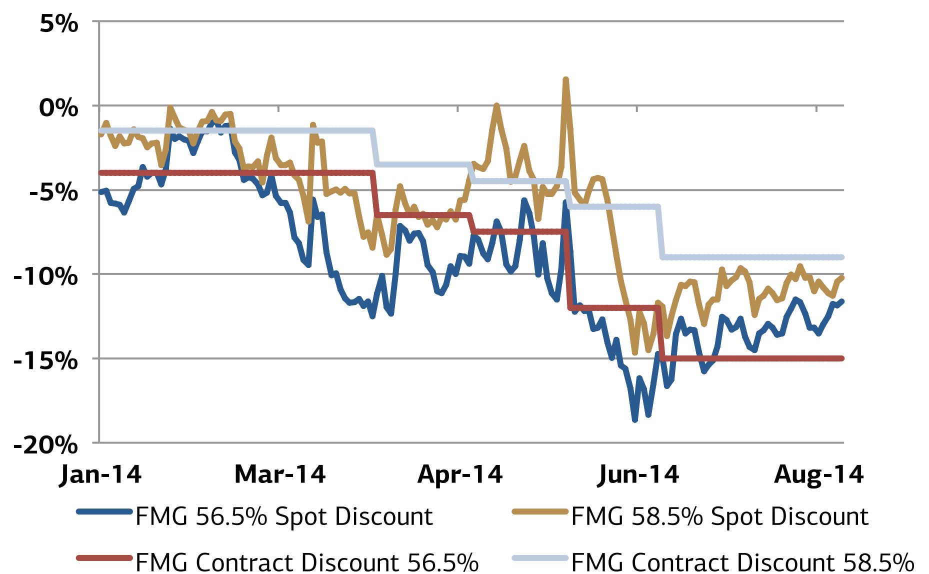
reduced demand for FMG product. The recently announced October discounts were steady at 13%. We expect the actualized FMG discount will remain higher than FMG's announced discounts in the 14-18% range, rather than the 10-15% range forecast by FMG.

Chart 1. FMG contract discount and port spot discount vs. 62% Platts



Source: Mysteel, Steelhome, J Capital

Who is pre-paying?

We believe Prosperity Steel United is the key customer that is making prepayments to FMG.

We believe FMG's largest customer is Prosperity Steel United (PSU), a Singapore-based trading company. PSU has a very low profile but is most likely one of the largest iron ore trading companies operating in China. We believe it will sell 60 MMT in 2014. PSU owns and operates a fleet of 11 Capesize (240,000 ton) ships. Other major traders such as Glencore will trade around 60 MMT and Cargill around 50–60 MMT of iron ore to China this year. We expect PSU will trade 30 MMT of FMG's iron ore this year and traded around 22 MMT of FMG iron ore last year, making it FMG's largest customer.

We believe PSU is the key customer that is making prepayments to FMG. PSU, being a Singapore based company, most likely has borrowing costs of around 1%. PSU is most likely using the prepayments to ensure it can get a very large supply (20% of FMG output) and favorable discounts. We estimate it receives discounts in the range of 3-5% points greater than the standard contract discounts. As PSU wishes to maintain a price advantage and access to large volumes of supply it may not drawdown the prepayments but continue, as it appears they have over the last six months, to keep a high balance of prepayments. FMG's prepayments did not

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decrease over the last six months and they stated that they have signed no new agreements. We believe PSU prepayments should be considered as a loan rather than a prepayment.

FMG cash flow problems

We believe FMG's cash flow from operations will drop severely in FY 2015 H1.

We believe that FMG's cash flow from operations will be in the range of USD 500 mln to USD 1 bln in FY 2015 H1, down from USD 2.6 bln in FY 2014 H2 and USD 3.6 bln in FY 2014 H1. FMG has a large number of cash payments in FY 2015 H1, totaling around USD 2.7 bln. With the declining iron ore price and high discounts, FMG's cash from operations has slowed to a drip. We expect cash flow from operations could be as low as USD 200 mln in FY 2015 Q2, using FMG costs, or negative if the costs are USD 5 higher than we expect they are. This would leave FMG with dangerously low cash levels of around USD 700 million by the end of 2014 using FMG costs but at around zero if we use our higher cost levels.

FMG last had cash balances as low as USD 700 mln in December 2009 when it had USD 3.2 bln in revenue and USD 2.7 bln in gross debt, about 27% of it current revenue and gross debt of USD 9.5 bln.

Table 2. Cash payments in FY15 H1, estimates

Date	Payments	USD mln
October	Dividend	300
October	Debt repayment	500
December	Tax payment	666
July - December	Prepaid shipments	336
July - December	Interest payments	250
July - December	Capex payments	650
July - December	Total cash payments	2,702

Source: Company Reports, J Capital Research

Table 3. Cash flow from operations

	FY15 Q1	FY15 Q2	FY15 Q2
Platts 62 Fe		USD 85	USD 80
Average price (dry MMT)	74.5	67.5	63.5
Average landed cost (dry MMT)	56	56	56
Average margin (dry MMT) using FMG costs	18.5	11.5	7.5
Production (dry MMT)	36	36	36
Cash from operations (USD mln)	666	414	270
Total FY 2015 H1 (USD mln)		1,080	936

Source: J Capital Research, Company Reports

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Table 4. Cash balance as of Dec 31, 2014

	USD mln
Cash balance at June 30, 2014	2,398
Plus cash from operations FY 2015 H1	1,000
Less cash payments FY 2015 H1	2,702
Cash balance at December 31, 2014	696

Source: J Capital, Company Reports

Potential catalyst

Should the iron ore price stay below USD 85/ton, we believe the following scenarios are now possible:

1. A capital raise to reduce and restructure debt.

2. Closing of the relatively higher-cost Chichester mines to reduce mining cost by USD 7/ton. The Solomon mines are much lower-cost mines with a mining cost of around USD 20/ton compared with USD 30/ton for the Chichester mines. The Solomon mines produce around 60 MMTPA, compared with 85 MMTPA at the Chichester mines. This action would reduce cost and supply and would lead to a rise in price and margin for FMG.

DCF Valuation AUD 1.66

Our DCF valuation is based on the following assumptions:

- The iron ore price for Platts 62% Fe will average USD 85/ton in FY 2015 and fall to USD 80/ton in subsequent years. Previously we had USD 100 and USD 90, respectively.

- The AUD will average USD 0.85 in FY 2015 before falling to USD 0.70 in subsequent years. Previously we had the exchange rate at USD 0.80 in subsequent years.

- We have a terminal growth rate of 3%. Previously 2%.

- We estimate C1 costs will be USD 34/ton in FY 2015 and will rise to USD 35/ton in subsequent years. FMG forecasts C1 Costs at USD 31-32/ton. We don't believe the cost improvement in the Chichester mines and forecast the strip ratio for those mines at 3.5 rather than the company's 3.

If we use FMG cost guidance then our model would have a target price of AUD 2.72.

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Risks

- We are incorrect in our analysis of inventory and FMG is not struggling to sell the increased production.
- A change of policy in China and effective fiscal and monetary policy is able to increase property construction

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