The Disruptive Discoveries Journal

Analysis of how disruption in commodities, geopolitics, and macroeconomics converge to create opportunities

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China Flanks Freeport To Further Consolidate The Lithium Ion Battery Business

Earlier this week the deal in which China Molybdenum Co. (603993:SHA) agreed to pay Freeport McMoRan (FCX:NYSE) \$2.65 billion for FCX's African copper assets reaffirms our view that asset shedding from the FCX project portfolio will continue (See the press release here).

FCX, with a \$13B market capitalization, made a bad bet in diversifying into the oil business at the cyclical peak and now must reckon with roughly \$20B in debt on their balance sheet. The debt maturity profile of the company is shown below:



Source: Bloomberg

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While it's a shame to have to part with such high quality assets, what really caught our eye was the fact that FCX has agreed to negotiate exclusively with China Moly on the FCX cobalt assets including the Kokkola Cobalt Refinery in Finland.

The potential cash inflow for FCX (forecast at \$100 million) clouds the more significant issue of cobalt supply chain control. China is already the world's leading producer of refined cobalt and, should the deal for the Kokkola refinery go through, will acquire an additional 15,000 tonnes per year of refined cobalt capacity as well as 870 million contained pounds of cobalt (on a consolidated basis) in top-tier assets in Africa.

Though we don't believe the narrative that there is a cobalt crisis, we do see higher looming cobalt prices as China plays the "long game" to dominate the cobalt supply chain. This makes sound strategic sense when you consider the plan for increased lithium ion battery capacity in China.

One of the greatest misunderstandings about the lithium ion battery space is that Tesla Motors (TSLA:NASDAQ) is the only game in town. This couldn't be further from the truth and while TSLA sucks all the oxygen out of the room with the plans for the Gigafactory, similar build outs are happening in Asia – specifically China. Our friends at Benchmark Mineral Intelligence have estimated that at least 12 lithium ion "megafactories" are forecast to come online by 2020 with 7 of them located in China.

It is for this reason that we think you'll see higher cobalt prices in the intermediate term as refined cobalt chemical production will not match the anticipated demand from the battery sector.

Ultimately, we see a great deal of tension in the lithium ion battery space. This is exciting as it creates disruptive discovery opportunities. TSLA's plan to accelerate production to 500,000 cars per year by 2018 and 1,000,000 per year by 2020, however absurd, is one example. The friendly take out of lithium ion battery producer SAFT Group (SAFT:EPA) by French oil and gas giant Total SA (TOT:NYSE) for €950 million is a much more significant move as it shows Big Oil coming to grips with lower oil prices and the need to diversify an existing business model into new markets. Though we've mentioned this before, the \$200 million raised by lithium exploration and development companies year-to-date in 2016 is impressive for an oligopolistic industry that only generated slightly over \$1 billion in revenues in 2015.

One of the reasons we've liked the cobalt and lithium stories is that the supply chains aren't "owned" by China in the same way as are rare earths. As the dust settles on the FCX/China Moly deal, the significance of this latest move should not be lost on us. China's "top down" strategy of acquiring assets with a vision of controlling the production of ore and higher margin goods further along the supply chain is still alive and well despite the country's economic challenges.

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