The Disruptive Discoveries Journal

August 7, 2015

By Chris Berry (@cberry1)

Q2 Lithium Results: Full Steam Ahead, But Watch Where You Step

In keeping with tradition, each quarter I take a look at earnings announcements of select companies involved in Energy Metals value chains. Today I look at lithium. The thinking here is that dissecting financial results of companies involved in lithium production or use can give clearer guidance on the narrative of looming electrification (and growing materials demand to underpin this sea change). While it is true that all financials can be twisted or manipulated to spin a story, the ability to analyze financial statements can give reasonable insights into trends of this relatively small but growing business. The devil is always in the details.

As **Albemarle Corp (ALB:NYSE)** has fully digested Rockwood, I was particularly interested to see the quarterly results of the Performance Chemicals business segment which includes lithium. The results confirmed what we've all been hearing about strong demand in the lithium space as ALB's lithium segment sales were up 9% (\$127 million) compared to Q2 2014, adjusted EBITDA increased 26% (\$54 million) and the adjusted EBITDA margin of 43% was a 543 basis point increase from Q2 2014. Management indicated they expect this performance to continue as demand is solid and pricing is firm with an upward bias. Demand for battery grade lithium compounds was "global" in nature and so this geographic diversification of risk lends comfort to the idea of lithium demand growth rates well above global GDP continuing (perhaps in the 8 to 10% p.a. range).

For the sake of perspective, the \$127 million in lithium sales is only 13.6% of ALB's quarterly revenue, but puts the company on the trajectory to be roughly 50% of the global lithium market with respect to revenues. The EBITDA margins also put the company well ahead of any of its competitors. The Rockwood (and by extension Talison) acquisition appears to immediately be bearing fruit to ALB's bottom line. Earlier last month, ALB also announced plans to commence commissioning of its lithium carbonate plant in Chile with capacity of 20,000 tpy. Success here will be a key drive of ALB's growth in the lithium compounds market and should be watched closely.

Speaking of competitors, **FMC Corp (FMC:NYSE)** also reported results and with respect to lithium, they left a great deal to be desired when compared to ALB. Hampered mainly by foreign exchange headwinds and country risk in Argentina, FMC 's lithium segment delivered \$54.9 million in lithium sales in Q2 (and only \$4.6 million in lithium segment earnings), essentially flat compared to the same

THE DISRUPTIVE DISCOVERIES JOURNAL1 OF 3

quarter in 2014. This is slightly over 8% of FMC's quarterly revenue and management forecast similar results for the next quarter. As an aside, **SQM (SQM:NYSE)** has yet to report results, though their margins in Q1 we similar to those of FMC.

The tiny magnitude of these results raises what I think is likely the biggest challenge in lithium analysis:

While the lithium business is accretive to company financials (I couldn't find an instance where it wasn't), the small relative size of these numbers renders the lithium business as a "nice to have" or niche rather than real drivers of overall financial performance.

The lack of a pure play in the lithium space is regrettable and likely keeps investors out of lithium investment as too many other variables can affect share price performance.

Further up the value chain, **Tesla Motor's (TSLA:NASDAQ)** quarterly earnings call was one of the oddest calls I've listened to in quite awhile. I've been clear that I think TSLA is priced for perfection and while it is always exciting to watch a company tackle new obstacles and grow, how company management responds to the inevitable "bumps in the road" is telling. Those bumps now appear to be materializing in the form of slowing sales and potential dilution from a raging cash burn. The takeaways from the call were as follows:

Demand for the Model S and Model X is still intact, though the company lowered their estimate for delivered vehicles to 50,000 to 55,000 from 55,000 for 2015. They now expect to be free cash flow positive in Q1 2016.

TSLA's battery business should record between \$40 to \$50 million in revenue in 2015, ten times that in 2016, and generate a "few billion" in revenue in 2017 according to CEO Elon Musk. This is amazing growth and these numbers are sure to raise a few eyebrows. One can only hope they are accurate, for the sake of TSLA shareholders and anyone invested along the EV or battery supply chains. Musk also stated he thought the company had \$1 billion in Powerpack reservations and then added (I'm paraphrasing here), "provided they are real." Nice hedge! No wonder the stock is down \$20 as I write. Don't get me started on the free cash flow hemorrhage here, either.

Panasonic (PCRFY:OTCBB, 6752:TYO), the largest lithium ion battery cell manufacturer in the world with approximately 20% of the market, is only forecasting operating margins of 5.6% in 2016 for their battery business. It is true that we not comparing similar products here, but constructing a portfolio demands the right blend of diversification to spread out risk and margin capture to generate absolute returns. Issues like this raise an important question:

The Optimal Lithium Portfolio

So where is the optimal position in the battery supply chain? ALB with 43% EBITDA margins (in their lithium business) and 24% EBITDA margins for the company as a whole or Panasonic with 5% margins? Or somewhere else altogether? If lithium only accounts for 2 to 3% of the cost of a lithium ion battery, how much leverage can you as an investor expect if there is a spike in the lithium price? Also as batteries become commoditized, it's not hard to envision a price war amongst lithium ion battery manufacturers to win market share. This is good for consumers, but perhaps more challenging for the companies themselves. Again, it depends on how you're positioned.

THE DISRUPTIVE DISCOVERIES JOURNAL2 OF 3

The point of this note isn't to pick on companies, but rather to look rationally at the results and try and gauge whether or not the Energy Metals will have their day in the sun amidst this terrible metals market environment. On that note, it's looking increasingly like lithium is diverging from its cousins.

What makes lithium particularly interesting is that the price hasn't fallen in the way the prices for graphite, rare earths, vanadium, cobalt, or uranium have. Some of this is the result of a strong US dollar, but I think it has more to do with the deflationary impacts of excess supply on the market and muted demand. I've heard circumstantial chatter of a tonne of lithium carbonate trading recently for \$6,500 USD, in line with recent transactions. While this is positive for the lithium sector, it's also important to remember that where you are on the value chain matters. The reality appears to be that the lithium market is tighter than you would believe. With the major producers all confronting various problems (SQM: political and legal, FMC: operational, Chinese: capital markets credibility) raising the possibility of a supply pinch, I am comfortable with assuming a 5% increase in yearly lithium pricing going forward. We cannot say the same for almost any other metal we're following.

So as the lithium majors optimize balance sheets and position to capture market share, the sector is poised for growth and is a positive story in an otherwise moribund commodity environment. I have left out a closer examination of Chinese producers, but my research indicates that the steady demand for lithium in China is intact despite the overall slower growth rate in the economy. I see no reason to change our call that 2017 is the year of the lithium inflection point, so this offers ample time to position accordingly.

The material herein is for informational purposes only and is not intended to and does not constitute the rendering of investment advice or the solicitation of an offer to buy securities. The foregoing discussion contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (The Act). In particular when used in the preceding discussion the words "plan," confident that, believe, scheduled, expect, or intend to, and similar conditional expressions are intended to identify forward-looking statements subject to the safe harbor created by the ACT. Such statements are subject to certain risks and uncertainties and actual results could differ materially from those expressed in any of the forward looking statements. Such risks and uncertainties include, but are not limited to future events and financial performance of the company which are inherently uncertain and actual events and / or results may differ materially. In addition we may review investments that are not registered in the U.S. We cannot attest to nor certify the correctness of any information in this note. Please consult your financial advisor and perform your own due diligence before considering any companies mentioned in this informational bulletin.

The information in this note is provided solely for users' general knowledge and is provided "as is". We at the Disruptive Discoveries Journal make no warranties, expressed or implied, and disclaim and negate all other warranties, including without limitation, implied warranties or conditions of merchantability, fitness for a particular purpose or non-infringement of intellectual property or other violation of rights. Further, we do not warrant or make any representations concerning the use, validity, accuracy, completeness, likely results or reliability of any claims, statements or information in this note or otherwise relating to such materials or on any websites linked to this note. I own no shares in any companies mentioned in this note and have no financial relationship with any company mentioned.

The content in this note is not intended to be a comprehensive review of all matters and developments, and we assume no responsibility as to its completeness or accuracy. Furthermore, the information in no way should be construed or interpreted as – or as part of – an offering or solicitation of securities. No securities commission or other regulatory authority has in any way passed upon this information and no representation or warranty is made by us to that effect. For a more detailed disclaimer, please click here.