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

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Lithium Strategy Note: Re-positioning in a Bull Market

This isn't a bubble…yet, but there are reasons to be cautious and a strategy reassessment is in order.

In the wake of Tesla Motors (TSLA:NASDAQ) introduction of the Model 3 "mass market" EV, lithium development and exploration company share prices have absolutely exploded higher. This is despite the fact that TSLA hasn't actually sold (or even built) a single Model 3 yet, won't have it on the road for years, and continues to hemorrhage money. The $1,000 refundable reservation fee is simply a free option for a potential car buyer and gives TSLA an opportunity to defray dilution.

In the wake of this news, lithium developers are "making hay while the sun shines" through some truly impressive capital raising efforts.

My estimates year-to-date show that the lithium mining industry has raised a collective $198,000,000 USD with multiple offerings oversubscribed. For an industry that only generated $1 billion USD in revenues last year, this is impressive. Especially when you consider the overall funk in the commodity sector and that no major lithium producer is included in this total.

It also appears that lithium majors outside of China are positioning for accelerated demand with the JV announcement between SQM (SQM:NYSE) and Lithium Americas (LAC:TSX) as an example. This deal has generated a great deal of discussion and I think it's on balance good for both SQM and LAC.

For a development company to grow and have the opportunity to join the ranks of producers, ownership dilution is a stark reality. As the saying goes in mining, you can take your dilution in the ground or in the stock. My take is that the technical knowledge LAC gains coupled with a strengthened balance sheet positions them well against the tailwind of strong demand for lithium compounds. The debate around the deal value of $25 million misses the point in that LAC management has chosen the path of least resistance to a production decision and is worthy of a re-rating. Clearly the market agrees.

Given that most of the lithium developers are outperforming the majors and the broader equity indices year to date (the S&P 500 is up .18% YTD), I think the central question to consider now is:

How does your strategy evolve as an investor?

I have seen a total of four bubbles in the energy metals since 2007 (uranium in 2007, lithium in 2009, rare earth elements in 2011, graphite in 2012). Each time, the story was strikingly similar in that demand was underpinned by endless growth in China and resource nationalism while supply responses would not be able to meet the pace of accelerated demand.

Each time, commodity prices went parabolic and each time the story ended in tears for investors.

That is likely one of the most painful (and true) investing lessons I have learned in recent years.

So when you see returns such as these:

NAME	TICKER	SHARE PRICE	MKT CAP	CURRENCY	30 DAY ADV	YTD RETURN	1 YR RETURN
Albemarle Corp	ALB	$64.85	7.30B	USD	1.56M	15.78%	10.38%
Sichuan Tianqui	2466	¥167.00	43.21B	CNY	13M	18.65%	120.67%
Sociedad Quimica	SQM	$19.78	5.91B	USD	554,254	4.05%	4.05%
FMC Corp	FMC	$37.48	5.09B	USD	1.18M	-4.22%	-35.80%
Jiangxi Gangfeng	2460	¥58.72	22.19B	CNY	30.2M	3.70%	127.77%
Sichuan Yahua	2497	¥6.79	6.52B	CNY	17.8M	-22.31%	-33.95%
Orocobre Ltd	ORE	$3.20	670.34M	AUD	538,229	39.19%	46.12%
Pilbara Minerals	PLS	$0.63	545.1M	AUD	7.84M	89.06%	1451.28%
Galaxy Resources	GXY	$0.35	442.55M	AUD	5.48M	204.35%	993.75%
Lithium Americas	LAC	$0.78	258.11M	CAD	1.47M	113.70%	11.43%
Neometals Ltd	NMT	$0.40	223.64M	AUD	1.86M	135.29%	515.38%
Nemaska Lithium	NMX	$0.99	218.65M	CAD	1.44M	125.00%	518.75%
Bacanora Minerals	BCN	$1.26	126.58M	CAD	12,444	-23.64%	-23.64%
Lithium X	LIX	$1.52	76.76M	CAD	497,248	237.78%	280.00%
Pure Energy Minerals	PE	$0.75	49.67M	CAD	452,548	33.93%	212.50%
Avalon Advanced Mat	AVL	$0.25	44.40M	CAD	793,814	92.31%	-24.24%
Lithium Australia	LIT	$0.25	51.17M	AUD	2.48M	48.48%	469.77%
Critical Elements	CRE	$0.31	36.93M	CAD	332,923	64.86%	52.50%
Houston Lake Mining	HLM	$0.32	32.72M	CAD	99,249	113.33%	128.57%
Dajin Resources	DJI	$0.16	18.97M	CAD	398,682	10.71%	82.35%
International Lithium	ILC	$0.15	15.54M	CAD	156,469	93.33%	383.33%

Source: Bloomberg; All returns in local currency

…it seems that the only prudent course of action and strategy is to sell into the unyielding strength in the lithium market. This is despite the tight market, both currently and going forward. Another valuable lesson I've learned in the small cap sector is that where there's money on the table, you take it. After all, you never go broke taking profits!

Please excuse the snarky tone, but given the pace of change in technology, speculation in the lithium market, and the overall uncertain macroeconomic backdrop, locking in gains in lithium is a given at this stage of the cycle.

A major tailwind in cost deflation in lithium ion batteries and various forms of energy (wind and solar, in particular) is likely to continue and therefore the demand for lithium seems valid by any rational expectation. However, the ability of equities to get ahead of demand is well documented.

Assuming global demand in 2015 of 170,000 tonnes of LCE, here is what the market looks like at an 8, 10 and 12% CAGR to 2025:

		8%	10%	12%
2015	170,000			
2016		183,600	187,000	190,400
2017		198,288	205,700	213,248
2018		214,151	226,270	238,838
2019		231,283	248,897	267,498
2020		249,786	273,787	299,598
2021		269,769	301,165	335,550
2022		291,350	331,282	375,816
2023		314,658	364,410	420,914
2024		339,831	400,851	471,423
2025		367,017	440,936	527,994

Source: HMP,LLC

Assuming an 8% CAGR to 2025, lithium demand could grow by 115% from 2015. Even at this conservative growth rate, it ought to make you nervous. At my assumed 8% growth rate, this will require an additional ~20,000 tpa LCE every year to 2025. That's roughly one new lithium mine per year. Can the existing producers and incumbents meet this forecast?

The supply response has so far been uncertain with Orocobre (ORE:ASX), Galaxy Lithium (GXY:ASX), and Neometals (NEM:ASX) all contributing to lithium supply in the near term, but after that, capacity additions become much more uncertain as the "next wave" of producers will grapple with the technical and financial challenges of building a mine and producing a product an end user will pay for. Majors such as Albemarle (ALB:NYSE) have also made pronouncements around capacity expansion, but this isn't imminent. Clearly something has to give.

The good news is that due to the cost deflation I referenced earlier, this will remain supportive of lithium demand but more importantly it is likely to create a whole class of opportunities around mobility. Some examples include vehicle connectivity, nanotechnology advances in the battery space, and sensor technology – three areas I am spending more time on these days.

Lithium isn't a bubble (yet). The demand sources are widespread and growing and production isn't controlled by a single country (as it is in the case of rare earths). I expect lithium compounds prices to remain elevated for the next 18 months as supply will struggle to maintain the pace of demand growth. Beyond that, who knows?

Let me state again, however, that a focus on lithium pricing and the TSLA story is misplaced. What really matters to the miners is the ability to compete in an oligopoly and that is done through lowest cost production.

We have proven with graphite that the closer a company gets to production, the lower the market cap tends to fall. Whether or not lithium will follow the same path remains to be seen, but taking profits as this dynamic market continues to evolve is the most prudent course of action.