## The China Effect on Metals, and, on Metals related, Share Prices

written by Jack Lifton | September 23, 2021

Perspective is the key to objective valuation. There are three global Metals' market classes; base metals, such as iron and aluminum; precious metals, such as gold, silver, and the platinum group metals; and critical technology metals, such as copper, lithium, cobalt, and the rare earths, in descending order of value to society. Today the majority demand for the physical metals in all three classes comes from China, which now accounts for nearly 60% of the physical demand for all metals!

You're reading and seeing, in the financial news, about the troubles of a Chinese property developer called Evergrande, and how its vast overleveraged (more debt than it can ever repay) position is collapsing and may soon spread through out the Chinese money and stock markets just as a contagion does if there are no remedies put forward for the disease. The talking heads in the mainstream media love this analogy, because it enables them to use their aging covid scare tactic system to characterize this as a Lehman moment in the Chinese economy.

China does not have a free market economy. All of its companies and banks are overseen from Beijing on a daily basis by China's State Council, regularly and incorrectly called China's cabinet by our mainstream media, but, in fact, it is the operational power center of China's foreign and industrial policy. In its turn, the State Council takes its direction from China's President, Xi Jinping, who dictates China's foreign and industrial policies.

The newsletter, Sinocism, addresses the Evergrande effect this way:

"... Xi [has] set out three tough battles for the government-poverty, pollution and financial risks. Significant progress has been made on the first two, but the battle against financial risks has lagged. Perhaps Evergrande will mark a turning point in that battle, or perhaps the problems run so deep that they will have to back off from the most stringent efforts to rein in real estate, as they have had to do after previous attempts to lance the festering economic and political boil that is PRC real estate.

The "advantage" of the PRC system in dealing with messes such as Evergrande is that regulators have significant powers to "persuade" other companies to help out, and a robust stability maintenance system to ensure that creditors, employees and apartment buyers will accept the best haircut on offer and not cause too much of a fuss. Yes there have been small protests, but if things play out as they have in other similar cases, protests will be allowed for a bit, as people need to vent, then organizers will be warned if not arrested, then the rest of the unhappy people will take what they are offered and "like it", with no recourse. Equity owners and foreign creditors don't really fit into that equation, they will likely get nothing.

So we have a big mess with a lot of people losing money but not one that is going to cause a systemic financial crisis inside the PRC. But as many analysts have been saying over the last few days, we should expect a bigger than expected slowdown in GDP growth (Italics and boldface mine), It is going to be an interesting year between now and the 20th Party Congress..."

So, as the Austrian emperor said to Mozart in Amadeus, "There you have it." In this case the very real probability of a

sharply reduced demand for almost all metals due to China's "expected slowdown in GDP growth."

The price for the ores of the most produced metal in the world and the most produced in history, iron, are a good predictor. China produced 1 billion tons of steel in 2019. This was 55% of all of the world's steel production. President Xi has stated that (ordered, in other words) the Chinese steel industry must reduce its output. The net effect has been a yo-yo'ing of iron ore prices, which in the last year doubled and has recently dropped by 25%. That kind of price variation will surely net out tracking China's GDP's gyrations. In fact, China's GDP really is the controlling factor in iron ore pricing.

China needs 1.67 billion tons of 62% (contained iron) ore per year to produce its current steel output. At today's prices that is nearly \$300 billion of cost. Compare that to the less than 0.5 million tons of ore concentrates needed to produce its official 130,000 mta of rare earths. At today's ore prices that comes to less than \$2 billion or just enough capital to supply the Chinese steel industry with ore for 2 days! Note well that the value of the official rare earths' production even when measured as processed high purity separated oxides would be less than \$5 billion. Only enough capital for 5 days of ore supply to the Chinese steel industry.

Better yet, look at gold. China was, again, in 2020, the world's top gold producer with an output of 365 tonnes, the market value of which was \$20 billion. China's gold reserves are now officially about 2,000 mt, which today has a value of \$125 billion. The average price of hot-rolled coil steel futures, so far, in 2021 has been \$1,000/mt, so that the output of the Chinese steel industry based on this average price will be \$1 trillion this year, before any value is added to it by its use to make industrial and consumer products. Think of that, China's

gold reserves are very large, but its steel production is worth many times more. I note that it is speculated that Chinese gold reserves are likely some 14,000 mt, which would be nearly a trillion dollars at today's dollar price of gold. Note also that the US steel output for 2019 was 77 million tons, or just 8% of China's, and the US' gold holding at 8,000 mt would be worth \$500 billion compared to the \$77 billion that its steel production is worth. Just the opposite of China?

As a last example, lets look at lithium production in China. In 2020 it was approximately 300,000 mt of lithium carbonate (60% of world total). The current price of lithium carbonate is \$16,000/mt, so China's output is valued today at around \$5 billion, about the same as for its rare earths production.

If the Evergrande effect is to lower China's GDP then the demand for all three classes of metals will decline as will the prices of the raw materials necessary to produce them and the value of any additional supplies to be added by junior miners.

Do not consider just the selling prices of any one of the metals' classes ores or of the prices of the "finished" industrial and consumer raw materials when you are looking at an investment in a junior miner. Look at the overall market for the class or the total market for all of them. Metallic ores are a buyer's market, and 60% of all of those buyers are in China.

China's goal is to make its currency a, or the, global reserve currency, so watch out, because if and (probably) when metals and ores are priced in RMB then dollar inflation will be a very big factor in the pricing of metals and their ores. And, I believe, that whichever metals and ores of all of the classes are not produced or controlled domestically by any country in sufficient quantities for its own needs will after the conversion of pricing to RMB never be so produced after that.

China's rulers are not ready to let the RMB float, i.e., be convertible freely to other currencies in markets not controlled by China, and so its status as a reserve currency is not going to happen anytime soon.

But China's plans for the long term and security not profit is the driver of its Capitalism with Chinese Characteristics. The openly stated plan is for state capitalism to be replaced by socialism with Chinese characteristics. China has achieved self-sufficiency in the acquisition, processing, and fabrication of metals in all three classes. It is said that he who has the gold makes the rules. It would be better said that only he who is self sufficient in raw materials and energy makes the rules.

In the metals' markets if China sneezes the world catches a cold.

## For lithium, party like its 1790

written by Jack Lifton | September 23, 2021

The demand for Green Energy Metals (GEMs) as processed fine chemicals and high purity metals and alloys, ready for use in both consumer and military goods, already exceeds their supply. A good example of this is Tesla's decision to put back its pickup truck introduction, originally scheduled for Fall 2021, until sometime in 2022 due to a "shortage" of the correct type of battery cells. This is explained as a shortage of processing capacity, but, in fact, is obscuring an even more important shortfall, that of the supply of mineral raw materials, such as

those of lithium, cobalt, and the rare earths — the heavy rare earths.

One primary reason that the Soviet Union collapsed in 1991 was its central planning of industrial output with no other goal than increasing supply with the assumption that the demand was infinite. This was not socialism, fascism, or capitalism. It was stupidity in the form of the intellectual commandments of a self-appointed elite class of bureaucrats who knew what was good for the "masses." These Communist apparatchiks proved even more inept at understanding economics than their predecessors of the Tsar's bureaucracy.

China has now learned from the Soviet experience what not to do in managing a national economy. Its long-time mandarin class, still ruthlessly chosen on merit, has been retained and co-opted by the Chinese Communist Party, the CCP, to review the Party's long-term goals and recommend, get approval for, and carry out the steps required to achieve them, in five-year steps.

One brilliant achievement by the mandarinate has been the construction of a mineral resource acquisition and conversion (to industrially useful forms) system sufficient to achieve the long-term technological infrastructure mandates of the CCP.

I think, for example, that the <u>EV revolution</u> has already been won by China through economic imperialism focused on the acquisition of intellectual and mineral resources necessary to transform China's domestic transportation sector into the sole use of electricity for its power trains.

Just one generation ago China had essentially no original domestic production of automobiles, trucks, railroad engines, cars, airplanes, or ocean-going ships, except for its military and even that was limited to copies of foreign designs in factories themselves copied from or supplied by friendly foreign

powers, such as the then just recently collapsed Soviet Union.

The Soviet Union, like the United States, was a landlocked empire gifted with essentially all of both the fuel and non-fuel resources it needed until the end of World War II, which saw the dawn of the age of miniaturized electronic technology. China adopted internal self sufficiency as a national program in the 15th century, but lost that advantage in the 19th century to the great European seaborne empires that were seeking natural resources and markets globally to make up for deficiencies in both in their home markets.

China seems to have learned again how to become self-sufficient in both critical structural and critical technology mineral resources by adapting both its signature socialism and state-supported limited capitalism, which even China's Communist Party recognizes as Socialism/Capitalism with "Chinese characteristics." China is determined to recapture its 1790 position as the richest nation in the world.

With the long term planning that is very characteristic of Chinese thinking applied as a modifier to market capitalism's prohibition of price manipulation by government, China has acquired ownership of and access to both fuel and non-fuel mineral resources globally while limiting the building of resource processing to only domestic operations to ensure that its long term program for domestic self-sufficiency in both fuel and non fuel mineral resources is achieved in five-year steps that are intended to make China not only self-sufficient but also the world's leading economic power by 2049.

From the perspective of the human race, the distribution of both fuel and non-fuel mineral deposits is random. It can be argued that beginning in antiquity one important driver for imperialism has been at heart a quest to secure sufficient supplies of those mineral resources for one nation state to meet its demand for those resources within its own political control. From earliest times desirable or necessary resources were sought out first by trade and then by military or (lately) economic conquest.

I've been reading the Magazine of Fantasy & Science Fiction since it began (originally) as the Magazine of Fantasy "and" Science Fiction in 1949. Full disclosure: in the summer of 1955 my friend's older brother went off to college and he gifted me with most of the Astounding, Galaxy, and F and SF magazines published since the end of World War II. I spent that summer reading them voraciously and have continued to do so ever since.

The latest announcement by the analytical data service, Benchmark Minerals' Intelligence, on lithium-ion battery cathode production in 2030, is something that I think should be in the Magazine of Fantasy & Science Fiction.

Benchmark tells us that their review of built and planned battery "giga factories" makes them predict a global total of 610 gigawatt hours of lithium-ion battery cathode production by 2030. This "prediction" is a projection that vitiates all of the EV transformation predictions except for the one within China.

To make 100 kWh batteries for one million vehicles, such as the Tesla Model 3s, would take 90 million gigawatt hours of batteries, which would require 16,000 tons of lithium measured as metal. To make the 5 million such vehicles mandated (required of it) by the Chinese 0EM automotive industry for 2025 will require some 80,000 tons of lithium for the batteries. This would be equal to all of today's annual production of lithium, globally. China today, in mid 2021, is well on its way to achieving that goal. It, today, already processes more than 60% of the world's lithium mineral production into 82% of the

world's lithium-ion chemicals for battery cathodes, which is incorporated into its, today's, 82% of world cathode production capacity!

China has made substantial investments, globally, in additional lithium production for its internal use. Many of these investments make no sense to Western capitalists because they do not seem to have profitability as their goal, but, rather, just supply increase. Western capitalism rejects this goal and calls it "discredited" state planning of supply. They are all wrong. The Chinese mandarinate is attempting to match future supply to future demand in China!

How much lithium will be processed in China in 2025? Enough to meet the EV production goal required by the current 5-year plan. How many lithium-ion batteries for vehicles will be produced in China in 2025? Enough to meet the production goal of the current 5-year plan.

These are the only predictions/projections that matter for EV battery demand in 2025.

Chinese money, externally, will continue to flow to the lithium exploration, early stage pilot production, and production sectors. Analysts will puzzle over China's strategy and bleat about nonsensical overpayment. They say the same about cobalt and puzzle over Chinese rare earths pricing.

But we know what they're doing.

Enjoy the Western GEMs rush while the Chinese are building their capacity for China 2025 and beyond(?).

Finally, I note that many Western economists are stating that the commodity markets are overpriced. Solely for Western demand they are, but not yet for Chinese demand.

## The Technology Metals Show with Neo Lithium's Waldo Perez on the state of the lithium market

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Technology Metals Show hosts Jack Lifton and Peter Clausi interview Waldo Perez, President, CEO and Director of Neo Lithium Corp. (TSXV: NLC | OTCQX: NTTHF) on the state of the lithium market. "When it comes to lithium there are two places and two sources." Waldo started. "First is the Puna plateau which is Chile, Bolivia and Argentina for brine resources. 60% of the lithium of the planet is located in an area that covers this plateau." He continued, "The other source is a mineral called spodumene. This mineral is more common in the planet but the best spodumene is found in Australia."

In this interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Waldo went on to say that CATL — largest battery producer in the world, is a strategic investor in Neo Lithium. He explained that Neo Lithum's Tres Quebradas (3Q) Lithium Project was selected by CATL because it is the highest grade undeveloped project in the world and has low OPEX and CAPEX. The project has 50% IRR and payback of less than 2 years. To watch the full interview, click here

## About Neo Lithium Corp.

Neo Lithium Corp. has quickly become a prominent new name in lithium brine exploration by virtue of its high quality 3Q Project and experienced team. Neo Lithium is rapidly advancing its recently discovered 3Q Project — a unique high-grade lithium brine lake and salar complex in Latin America's "Lithium Triangle". The 3Q Project is located in the Catamarca Province, the largest lithium producing area in Argentina covering approximately 35,000 ha including a salar complex of approximately 16,000 ha.

To learn more about Neo Lithium Corp., <a href="click here">click here</a>

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