24 January 2024

Commodity Economics Comment

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Lithium, no longer stratospheric

- Of the commodities we track, lithium had been a market darling. An extraordinary boom was underway, with prices rising very sharply from 2020, to stratospheric levels by 2022 and into early 2023. Some of that exuberance has turned out to be irrational, and prices have plummeted since – not an unfamiliar path for commodity markets. Concerns about significant undersupply have been replaced by concerns about near-term oversupply, as new mines have ramped up, inventories have accumulated and exceptionally strong demand growth has also inflected. The big, structural, energy-transition-related demand story is still there, but a shake-out on the production side is underway, as sky-high prices settle back to down cruising altitudes.

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For those observers that are less familiar with this, still somewhat niche, market, the cycle in lithium prices over the past few years has been truly extraordinary (see chart below). The Bloomberg lithium price index rose by around 900%, into the stratosphere, between end-2020 and its recent early-2023 peak. The price of lithium, on this index, has since fallen by almost 80%, although this still leaves prices over double their end-2020 levels.

Of course, the lithium story has many of the dynamics that are familiar in commodity markets. First, a surge in demand and concerns about significant undersupply, drive a boom in prices. Second, the high prices then motivate a ramp-up in investment, but it takes time for this to come on stream. Finally, when it does, supply gets boosted, prices fall and a shake-out happens as higher cost projects that were motivated by the very high prices are no longer viable.

It turns out, lithium has been through a similar, but smaller cycle, before, between 2015 and 2019. Back then, lithium prices rose by nearly 250% before falling by around 65%, leaving prices around 19% above the pre-boom levels. At the time, this seemed like a huge cycle, indeed we described this earlier 'super-cycle' as it played out in real time (see *Global Commodities: After a roller-coaster ride,* 15 March 2019). History doesn't quite repeat, but it rhymes.

The second, and more recent cycle, was super-charged by the ramp-up in energy transition-related public policy – including in US, Europe and China – that came at the same time as the COVID-19 pandemic, and is ongoing. Not only has the energy transition accelerated and, of course, become a story of much greater volumes of needed materials, it has also become increasingly bolstered by state funding, seemingly increasing the certainty of demand.

But the stratospheric lithium prices motivated a substantial ramp-up in investment, and also saw battery producers ramp up inventories, to affirm supply. The subsequent sharp fall in prices has reflected ample supply and high inventories. The strong structural demand story has weakened a bit too, as the rush to

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buy electric vehicles has slowed a bit. Exceptionally strong growth in EV sales volumes in China in 2022, of 82% y-o-y (World Economic Forum, 2023), is unlikely to be repeated even if demand growth still remains very strong. In some locations a further strong ramp up in EV demand is being hampered by the slower pace of roll-out of infrastructure to support them.

Importantly, although the squeeze on lithium supply may be over for the time being (the second 'hog cycle' or 'super-cycle' looks to be over), the structural demand story remains strong. On the 'stated policies scenario', that is based on current government policies, the International Energy Agency (IEA, 2023) estimates that lithium demand will rise by 13 times between 2020 and 2040. But, to actually meet the Paris objectives, the IEA forecasts a rise in lithium demand of over 40 times (see page 22 in *Global Commodities: The 'super squeeze' and China's slowdown,* 14 September 2023). A lot more lithium will be needed in the medium term.

In the short run, there is a shake-out, as markets adjust to lithium prices that are not stratospheric. High cost producers and the marginal projects will get priced out. Finding equilibrium in the supply and demand balance in the short run will be challenging too. Hampered by imprecise price signals in what is still only a fledging market. Although the chart below is a summary indicator, there are many prices for lithium and also different grades and types of lithium.

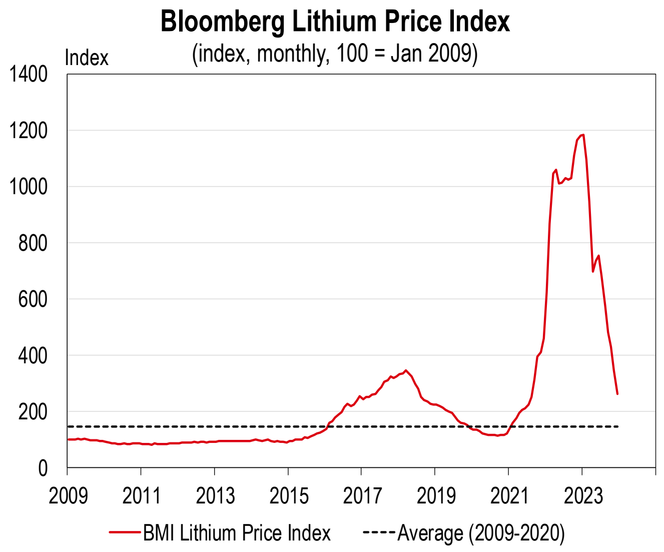
Our colleagues in HSBC's equities team, including Howard Lau, Evan Li and Santhosh Seshadri expect that a surplus of lithium will persist this year, putting further pressure on prices and they note that a 'deeper consolidation will need to happen for prices to rebound' (see *Asia Resources: 2024 Essentials: Five questions, five ideas,* 22 January 2024).

Of course, these developments are all of key importance for the lithium industry, but from a macroeconomic perspective the implications are limited.

For the top two producers, Australia (53% of global supply), Chile (25% of global supply), lithium is still only a small part of the overall export baskets (<4% in Australia and <6% in Chile in 2023, by value in 2023). For Chile, copper dominates and for Australia, iron ore, LNG and coal are the big ones. Despite the investment ramp-up in the lithium space, it too is only a small share of overall resources investment.

As we pointed out recently, improving supply for a range of commodities, suggests some easing in the 'super-squeeze' (see *Will the 'super-squeeze ease?,* 12 January 2024). Clearly, lithium is an example where the supply squeeze has eased, at least for now. But lithium alone, which is not traded enough to even be in the main IMF commodity price index (and only carries a very small, 0.3% weight in the IMF's 'energy transition metal index') is not going to change the thesis.

1. No longer in the stratosphere



Source: Bloomberg

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