



MASSIFCAPITAL

COBALT 27 CORP. (TSX:KBLT)

INVESTMENT REVIEW | SPECIAL SITUATION
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MASSIF CAPITAL, LLC | CHARLOTTE, NC

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Currency Note: Cobalt 27 Reports financials in US Dollars and trades on the Toronto Stock Exchange in Canadian Dollars. All values are in USD except when noted otherwise. Share prices in valuations are converted to CAD from USD at a rate of 1.00 USD to 1.33 CAD.

Investment Overview

Cobalt 27 (TSX:KBLT) is a cobalt and nickel royalty, and streaming (R&S) company that we believe has assets worth US\$575 million, or 9.80 CAD per share, a 151% premium to the firm's current price. The firm's primary assets consist of a recently acquired joint venture interest in the Ramu Nickle-Cobalt mine in Papua New Guinea and a streaming¹ interest in Voisey Bay; a Vale owned nickel mine in Canada. Both assets will begin to generate attractive returns for shareholders over the next 18 months. Additionally, the firm has several compelling royalty and streaming interests in pre-production mines that are awaiting final investment decisions.

We believe the firm is an attractive long-term investment on the basis of their two primary assets alone, let alone when the physical cobalt stocks and royalty and streams are included. However, a special situation has arisen as a result of the recently announced takeover bid by Pala Investments. In June, Pala made an offer to acquire 100% of the shares outstanding² at CAD 5.75. Although this represents a reasonable premium to the share price at the current time, it is not a 100% cash offer, and it is not in the best interests of long-term shareholders. The KBLT management team has conditionally accepted the offer, and shareholders will have an opportunity to vote on the matter on September 12th. We will be voting against the deal.

We do not believe the offer represents a fair value for the assets, nor do we believe that the acquisition will be successful. The result is a situation in which investors have an opportunity to acquire a partial position in an attractive firm as a play for a short-term gain of roughly 47% should the deal go through. And, if the acquisition is unsuccessful, speculators have an opportunity to become investors and add to their positions at lower prices as arbitrageur's exit.

We view this as a situation in which investors have a rare opportunity for a short-term gain and should the catalysts for the short term gain not occur, the chance to hold for a much larger long-term gain that is not impacted by the short-term catalyst.

Business Model

KBLT has pursued several lines of business since the firm's IPO, all of which are focused on the accumulation of assets related to battery metals. The firm is engaged in outright mine ownership (although not operations), royalty and streaming (R&S) of battery metals and holding a physical stockpile of cobalt. As a result, KBLT has four primary assets: a physical stockpile of cobalt held in bonded warehouses, a 32.6% streaming interest in Voisey Bay, an 8.56% direct joint venture interest in the Ramu Nickle mine and approximately 12 royalty and streaming interests in pre-production nickel and cobalt

¹ KBLT has both mine streams and royalty interests. Streams are "paid" in the form of a physical delivery of a specified commodity whereas royalties are settled in cash.

² 100% of the shares outstanding that the firm did not already own. As the largest shareholder with roughly 18% of the float, this equates to purchasing just over 80% of the remaining share count.

mines globally. The challenge for the current management team going forward (under the assumption the firm is not taken out) is to figure out the best way to monetize these assets and gain the scale necessary to attract institutional investors to the firm.

The Voisey Bay stream will begin delivering physical cobalt to the firm within the next 24 months and the Ramu-Nickel mine is currently operating and should already be adding value to the firm, but we await second-quarter results to see what form that value will take. At the current time, the physical stockpile of cobalt is easy to monetize, but it is probably best to hold given the recent fall in the price of cobalt. We believe the metal has a positive outlook in the medium and long term.

The portfolio of royalties and streams are attractive but are several years away from production. Management is well-positioned to build an industry leader in terms of their collection of assets, but the firm as is, is undersized, precluding much in the way of institutional investment. Management's background is mostly in private equity and investment banking, and they manage the firm like a financial engineering project.

Management has an opportunity to be an early mover in building a pure battery metals company. The long-term potential for such a firm is very bright, but the realization of this bright future, in our opinion will require a management team with a different focus, skill set and above all else a good incentive structure for management that aligns their interest with that of shareholders. Should the transaction be voted down, we will seek a change in the firm's leadership.

Price Implied Value of Assets

For the purposes of comparison, we think it is important to allocate the current market capitalization of the company across the various assets of the company, excluding cash. We have divided the asset values as follows:

Physical Cobalt is accounted for at market prices: \$14.35 per pound for alloy grade cobalt and \$14.08 for standard grade cobalt. KBLT currently has 4.83 million pounds of alloy grade cobalt and 1.57 million pounds of standard grade cobalt. KBLT management paid \$300 million for the Voisey Bay Stream and \$70 million for 8.56% stake in the Ramu mine. As such we assume, after subtracting the value of the physical cobalt, Voisey Bay is worth 81% of the remaining value of the firm and Ramu is worth 19% of the remaining value. We assume other streams and royalties have zero value even though two of the nine streams are in development as all revenue is several years off at best. The resulting valuation is as follows:

Current Market Capitalization (8/14/2019):	\$245 Million (338 Mil CAD)
Physical Cobalt:	\$92 Million
Voisey Bay:	\$124 Million
Ramu	\$29 Million

Asset Overview

Voisey Bay

Voisey Bay is an open-pit nickel-cobalt mine in Newfoundland, Canada that has been operated by Vale since the firm's acquisition of Inco in 2006, a year after mining operations at Voisey Bay commenced.³ The mine is currently undergoing an expansion focused on the development of two underground deposits with production expected from these satellite deposits to commence in 2021. The expansion will significantly increase the volume of cobalt produced as a byproduct from nickel mining. Processing for the cobalt byproduct is conducted at the Long Harbor Processing Plant, where a cobalt circuit was added to the nickel processing facilities in 2016-2017. Both deposits will be exploited underground (The Reid Brook deposit and the Eastern Deeps deposit) and have expansion potential.

The Voisey Bay cobalt stream was acquired in June of 2018 and entitles KBLT to 32.6% of all cobalt production from both the existing open pit mine (referred to as the Ovoid) and the Voisey Bay Mine Expansions (the aforementioned Reid Brook and Eastern Deeps underground deposits) commencing on January 1st, 2021. The stream was purchased for US\$300 million, the terms of the stream agreement call for KBLT to pay 18% of a cobalt reference price⁴ for the stream at the time of delivery and 22% once KBLT has recovered the full value of the \$300 million advance paid for the stream.

Current resource estimates suggest that at commercial production, the mine will produce ~5.8 million lbs. of cobalt per year, with KBLT contractually obligated to receive ~1.9 million lbs. per year. The mine has an estimated remaining life of 17 years, providing KBLT with a cumulative stream of roughly 24 million lbs.⁵ Not considered in these numbers are indicated and inferred mineral resource at Reid Brook, which would add an additional 5.87 million pounds of cobalt to the potential stream. It is also important to highlight that the stream KBLT negotiated remains in place as long as cobalt is extracted using the same underground infrastructure as is planned for the development of the Reid Brook and Eastern Deeps deposit and both deposits have the potential for further extension below the currently explored levels.

At the current cobalt prices, management looks like they misallocated capital and overpaid. \$300 million divided by 24 million pounds of cobalt means that KBLT paid a base price of \$12.5 per lbs of cobalt that they must pay an additional \$2.57 for at the time of delivery (18% of a reference price which is currently \$14.30 per lbs as of 8/13/2019). The current all-in implied cost to KBLT for cobalt is \$15.07 or a loss of \$0.77 per lbs. We believe this analysis is short-sighted, nevertheless, the spot price was used in the valuation of the stream for the proposed Pala transaction. The current cobalt price is just off a recent low of \$11.80 and near all-time lows (all-time lows are around \$10 vs. inflation adjust long-run average of \$22). Furthermore, the historical period referenced in the price data above (dating back to 2005) covers a period in which cobalt has mostly had limited large scale industrial or consumer applications, a fact that is changing with the advent of EVs.

³ For those interested in learning more about the discovery and development of this asset, which is a world class nickel deposit, we suggest reading [The Big Score: Robert Friedland, INCO and The Voisey Bay Hustle](#).

⁴ Metal Bulletin Cobalt free market US\$ per pound warehouse price.

⁵ The mine is expected to operate at 86% of capacity for the first four years of its life. Thus, the cumulative capacity attributable to KBLT is not 17 years at 1.9 million lbs. per year.

Furthermore, any pessimism of potential cobalt price appreciation suggests a poor understanding of the actual process of mining cobalt. Cobalt is difficult to find and generally does not occur as a standalone metal but rather as a by-product of copper and nickel, both of which are themselves challenging metals to mine. In short, even though cobalt has real-world applications, there are few if any cobalt mines and even fewer firms focused exclusively on cobalt. This means that copper and nickel demand is essential to cobalt supply. Of the two primary metals of which cobalt is a byproduct, copper is increasingly difficult to find and increasingly found problematic locations (for example the DRC) and nickel is usually found in its laterite form. Nickel laterite is not useful for batteries and primarily used in stainless steel, which means it has a specific consumer base with a growth rate roughly equivalent to GDP, creating an imbalance in demand for nickel laterite and cobalt. Finally, cobalt is almost unique in the world of metals in its heavy reliance on a single supply country, the Democratic Republic of Congo (DRC)⁶, a location that is best known for its violence, questionable labor and mining practices, and for 60% of the global cobalt supply.

Cobalt demand has not materialized in the way the dramatic price action of 2017-2018 may have implied, but that is not surprising after all cobalt demand is a tech-driven demand and “we tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.”⁷ The market got the sequence of events, as it so often does in commodities, wrong. There is not, nor will there be shortly, an EV in every driveway, as such the demand growth is not in the present but in the future. The potential penetration of EVs remains though, and consumers will increasingly have limited choice as car companies the world over are rushing to produce EVs, sometimes to the exclusion of internal combustion engine cars. In short, the price spike of 2017-2018 was unwarranted, the demand for the cobalt at that time did not exist to justify the spike, but the current price collapse is equally as unjustified by the fundamentals, after all the underlying narrative behind the price spike of 2017-2018 remains.

Returning for a moment to the supply side, the current annual cobalt supply is roughly 135,000 tons a year vs. demand of roughly 136,000 tons a year, of which only 10% or so is used in EVs. The market is clearly tight, and may already be in a deficit, but next year there is no question it will be in a deficit. The reason for this is that Glencore, operator of Mutanda, a copper-cobalt mine in the DRC that produces 20% of global cobalt supply, is being put into care and maintenance. If and when the mine will return to production is unclear, but it will require significantly higher copper prices, as the cobalt is, as already discussed just a byproduct. Furthermore, Glencore has lowered its cobalt production guidance for 2019 from its Katanga mine from 26,000 tons of cobalt to 14,400 tons of cobalt, a reduction of global supply this year of 8.59%.

In short, Cobalt appears to be well-positioned for a potential short-term recovery driven by supply-side constraints, and well-positioned for long-term price appreciation if you believe that EV's will replace the internal combustion engines.

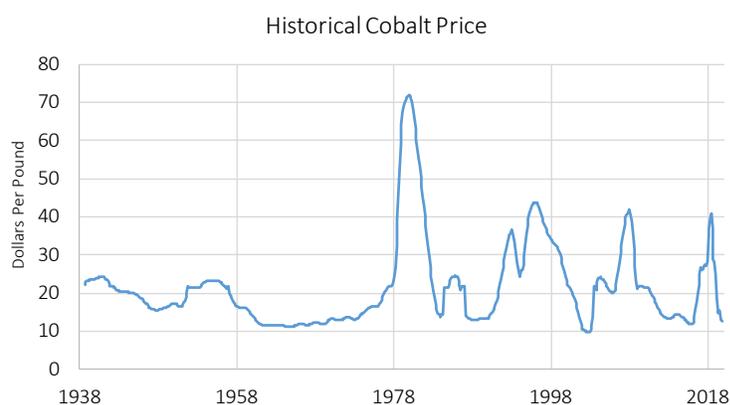
The Value of the Voisey Bay

We have examined the value of the cobalt stream in several different ways. Our downside scenario is based on a Monte Carlo simulation in which the cobalt price, mine production, and the discount rate

⁶ Tier 1 OEMs are rightly concerned about the political risk associated with the DRC.

⁷ This quote is attributed to Roy Amara and is referred to as Amara's Law

were all subject to varying levels of uncertainty as outlined in the footnote below.⁸ In regard to production volume uncertainty, we have maintained a tight range of production outputs, in keeping with historical productivity of the mine. The discount rate range is such that appropriate consideration is given to the potential that the brownfield expansion experiences growing pains (a +14% discount rate) or runs smoothly (a sub 10% discount).



Source: BMO, Metal Bulletin, Massif Capital

The challenging input is cobalt price, although we have inflation-adjusted pricing dating back to 1938 (see chart left), cobalt has a limited trading history only going back to 2010 on the LME and is currently at a transition point given the potential impact of what amounts to an entirely new industry for the metals use.⁹ Furthermore, as the chart suggests, it is a very volatile commodity.

With the use of Monte Carlo simulations, it is important to understand that our goal is not to predict what will happen in the future, but rather to see what the value of an asset might look like under different stressed scenarios. In order to understand how the Voisey Bay Cobalt Stream value is impacted by a volatile cobalt price, we utilized a historical price series dating back to 1986 and fit the data to a lognormal distribution with a heavy skew to the \$10 to \$20 dollar per pound range and underestimated the probability of high-priced scenarios. 90% of the prices within this distribution fell within the \$12 to \$40-dollar range with a median value¹⁰ of \$20.45 and a standard deviation of 11.43. This resulted in a median valuation of \$201 million at a median discount rate of 11.8% or CAD 3.13 a share.

This downside scenario has several limitations resulting from its historical basis. Although we do not believe that the past represents an appropriate price scenario for cobalt price going forward, we do believe the volatility in the historical price of cobalt is a structural likely to continue in the future. From a structural standpoint, because cobalt is always a byproduct of mining other metals, the supply is driven as much by the demand for copper and nickel as it is for the demand of cobalt itself. As a result of the

⁸ Production was modeled with a normal distribution curve with a mean of 5.8 million lbs and a std. deviation of 0.3 million pounds, this returns a curve where 90% of scenarios fall between 4.47 million lbs. per year and 6.12 million lbs. per year. The discount rate was modeled with a log-normal distribution, a mean of 12% and a standard deviation of 2%, these assumptions returned a curve where 90% of scenarios utilized a discount rate between 8.04% discount rate and 14.56% discount rate. In qualitative terms, it's important to recognize that both the operating assets cost of capital and the markets implied discount to the asset may change considerably in the future. The cobalt price was modeled as a time series using the Palisades @Risk plug in, the same software utilized for the Monte Carlo simulations.

⁹ Cobalt has been used in batteries for a long time but the growth in battery volume and the limited volume need historically means that for all practical purposes it is a new industry.

¹⁰ We quote the median value instead of the mean because of the skew.

supply of cobalt being highly disconnected from the actual demand for cobalt, the price of the commodity experiences exaggerated swings in the price.

The primary reason we believe that the above scenario is not appropriate for a base case valuation is the fundamental change in sources of demand for cobalt combined with the inherently tight supply due to the geological nature of the deposits which mostly preclude cobalt only mines. As a result, our base case scenario assumes historical volatility in cobalt prices over the last ten years but also assumes an exit price of \$37 per pound in 2034 and evolution of the price according to the Roskill price curve.¹¹ The result is a value of \$251 million or CAD of 3.91 a share, roughly the current price of KBLT on the open market.

In both our base case and our downside scenario it appears to us that KBLT management overpaid for the Voisey Bay cobalt stream. This is unfortunate, but investors today can acquire interests in the asset on the open market at a steep discount to a reasonable valuation. If the market is valuing the stream at the current \$124 million, we have proposed above, it is undervaluing the asset by anywhere from 62% to 102%.

Ramu Nickel Mine

The Ramu Nickel mine is a producing, open-pit laterite nickel-cobalt mine located in the Madang Province of Papua New Guinea. Ramu was commissioned in 2012 and has economically feasible resources to produce for another 30 years. In 2018, Ramu produced 35,355 tons of nickel and 3,275 tons of cobalt. In May of 2019, KBLT acquired 100% of Highlands Pacific¹²; an ASX listed battery metals producer and developer, whose principal asset at the time was an 8.56% joint venture interest in Ramu. Ramu was financed, constructed and is now operated by the Metallurgical Corporation of China who owns roughly 85% of the asset. Rounding out the ownership, the Papua New Guinea government and local landowners own close to 7% of the asset. The KBLT acquisition implies an attributable production of roughly 600,000 lbs. of cobalt and 2,900 tons of nickel to the firm every year.

As part of the joint venture agreement, KBLT can pay off the balance of the \$115 million loan held by the mine and thus increase their interest in the mine to 11.3%. The distribution of future value return scenarios for the Ramu asset is tighter than that of the Voisey Bay stream as we are now in year seven of production, placing far greater confidence in the annual production profile. The valuation of Ramu is much more straightforward than Voisey Bay as the asset is so profitable. At the current time assuming cobalt remains at around the current spot price of \$13.83 per lbs and nickel remains at roughly \$7.28 per lbs, Cobalt 27's 8.56% interest in the mine at a 12% discount rate is worth CAD 3.52 or 7.79x the current price implied value we outlined above. The upside from any appreciation in the cobalt or nickel price is clearly significant.

Royalty Streams

Finally, KBLT has acquired a number of royalty streams of pre-production mines across Canada and Australia. Of note is the Dumont Project which has 2P reserves¹³ of roughly 6,100 million lbs. of nickel and

¹¹ Roskill research and consulting firm that is focused on commodities with a specialty in energy metals and what one might term secondary industrial metals, for example Talc, Zirconium Oxide, Iodine, etc.

¹² Total transaction value of US\$70 million.

¹³ 1P is typically used to denote proved reserves, 2P is the sum of proved and probable reserves and 3P the sum of proved, probable and possible reserves.

278 million lbs. of cobalt. The Dumont Project is one of the largest, shovel ready undeveloped nickel and cobalt reserves globally with an estimated 33-year mine life. Once up and running, the mine will be one of the top five nickel sulfide deposits in the world measured by annual production. Power, rail and road infrastructure is already established at the mine site, and an updated feasibility study is forthcoming.

Ownership of the future, potentially tier 1, mines that are supplying critical metals into a growing industry is a compelling investment proposition. We have valued the collection of royalty interests at their current carrying value of US\$23.1 million dollars. While future production is still years away, and value today must be heavily discounted, the royalty portfolio of KBLT represents tremendous upside optionality.

Sum of Parts

Based on the valuation analysis above the sum of parts value of the firm is as follows:

	Price Implied Value	Massif Capital Valuation	Difference
Physical Cobalt	\$92 Mil (122 Mil CAD)	\$92 Mil (122 Mil CAD)	0%
Voisey Bay Stream	\$124 Mil (164 Mil CAD)	\$251 Mil (333 Mil CAD)	102%
Ramu Nickel Mine	\$29 Mil (38 Mil CAD)	\$226 Mil (300 Mil CAD)	679%
Royalties and Streams	\$0 Mil (0 Mil CAD)	\$23 Mil (30 Mil CAD)	
Total Value	\$245 Mil (338 Mil CAD)	\$592 Mil (785 Mil CAD)	105%
<i>Plus: Total Cash</i>	<i>\$34 Mil (45 Mil CAD)</i>	<i>\$34 Mil (45 Mil CAD)</i>	
<i>Less: Total Debt</i>	<i>\$0 Mil (\$0 CAD)</i>	<i>\$0 Mil (\$0 CAD)</i>	
Per Share Value	\$3.27 (4.35 CAD)	\$7.36 (9.80 CAD)	

The Cobalt and Nickel Market: Why We Care about these Metals

Note: We have written two white papers, [Tempering Expectations](#) and [Risks and Opportunities in the Battery Supply Chain](#) that cover the Cobalt and Nickel Market in great details. What follows is an abbreviated review of the discussion from those white papers.

The transition to EVs and an electrical grid increasingly powered by intermittent renewable sources depends on a portfolio of energy minerals, of which lithium, nickel, cobalt, and copper are the most widely known. Other essential metals include manganese, graphite, and numerous niche metals that are usually only mined as a byproduct of mines focused on other metals. As electric vehicles (EVs) begin to replace the internal combustion engine (ICE), the strain on the battery metals industry will be pronounced. Indeed, within the next two years, metal and mineral demand from the EV industry will grow to twice the size of consumer electronics demand and more than 15 times the size of the stationary energy storage market.¹⁴

The upstream mine supply for most of these metals is ill-equipped to handle this explosion of growth. Since 2015, an estimated \$400 billion has been committed to various stages of the electric vehicle supply chain, but only 5% has been committed to lithium and cobalt mining projects and even less to cathode

¹⁴ Non-lithium variants may come to control the stationary storage market, but lithium technologies continue to be the primary chemical catalyst in batteries for both the EV and the consumer electronics market.

production facilities.¹⁵ With over 75% of the investment thus far coming from auto OEM's, a significant risk exists that manufacturers will find themselves uncomfortably short on supply of several of the essential ingredients necessary to build EVs.¹⁶

The capital flows into the battery 'mega factories' overshadows this uncomfortable fact. In 2017 there were 17 lithium-ion battery mega-factories under construction globally. Today, there are 70 under construction across 4 continents. 46 of them are in China. Since the fall of 2017, planned lithium-ion battery expansion between 2019-2028 has risen from 289 GWh to 1,549 GWh. That expansion is equivalent to roughly 23 million sedan size EVs.¹⁷

If every battery manufacturing facility under construction today is built and operates at 100% capacity¹⁸, then the next ten years will see an 8x increase in demand for lithium, a 7x increase in graphite anodes, a 19x increase in nickel and a 4x increase in cobalt.¹⁹ While some mines have the headroom to increase the production of metals such as nickel or copper, it's quite clear that capital will have to flow into mining in order to fund the necessary expansions and exploration projects to meet the expected demand profile for many energy metals.

The cobalt and nickel supply chains face different sets of issues when compared to lithium, the most discussed of the battery metals, but in some regards, the least problematic in terms of upstream capacity. For starters, cobalt has no primary supply; it is almost always a byproduct of nickel and copper mines.²⁰ Furthermore, production is centered on the DRC, an issue previously discussed, and production outside the DRC is declining; the combined output from Australia, Russia, and Zambia is 28% lower than it was a decade ago.²¹

Our conversations with battery procurement specialists at major consumer electronics companies and cobalt focused mining firms suggest that cobalt out of the DRC is untouchable due to potential risks associated with the conflict minerals laws and to brand reputational risks. Complicating the cobalt DRC story is the role China plays in refining. Currently, China is responsible for more than 80% of all refined cobalt.²² According to our research, the only significant refining to occur outside China occurs at a recently sold cobalt refinery in Kokkola Finland, which refines ~17% of global cobalt. That plant was sold to Umicore for \$150 million by Freeport McMoRan.²³

China's role in refining complicates the cobalt story because it makes many western consumers of Chinese batteries nervous about the source of the cobalt in the batteries they are buying. Unfortunately,

¹⁵ Benchmark Mineral Intelligence.

¹⁶ For a deeper look into the lack of investment flowing into upstream mining, please see the Appendix.

¹⁷ Written Testimony of Simon Moores to the US Senate Committee on Energy and Natural Resources Committee, February 2019.

¹⁸ We recognize this is not a likely scenario but provides a useful 'upper limit'. A strong case can be made that this is indeed still conservative as we do not include any future manufacturing expansion. If the period between 2017 and 2018 is indicative of the pace of growth, our estimate is far too low.

¹⁹ The cobalt and nickel projections include the gradual transition from NMC532 to NMC811.

²⁰ This is distinctly different than lithium where more than 95% of the lithium supply comes from a lithium focused mine.

²¹ Cobalt: Solving for a Supply Constrained Market, BMO Capital Markets

²² Cobalt: Solving for a Supply Constrained Market, BMO Capital Markets

²³ Freeport-McMoRan Announces Agreement to Sell Portion of Cobalt Business, FCX Press Release, May 2019

even benign scenarios for battery growth suggest a need for cobalt production to double between now and 2025.

Returning to the mining of cobalt, because the metal is principally a byproduct of nickel and copper mining the supply is bifurcated between those two metal markets. A little less than half of the cobalt production comes from leaching of nickel-bearing laterite ores and the smelting of nickel sulfide ores. Laterite ores usually contain 1.3-2.5% nickel and 0.05-0.15% cobalt. The value of nickel coming out of a nickel-cobalt mine is usually the economic driver of the mine. Take for example Ramu, at current spot prices the nickel mined from Ramu is worth 5.5x the value of the cobalt. Given the economics, if the demand for nickel were to drop, it would be reasonable to expect that cobalt production would experience a reduction as well. The reverse holds true for cobalt extraction at copper mines (in some cases). For example, the Mutanda mine in the DRC produced 250,000 tons of copper and 25,000 tons of cobalt in 2016. Considering the copper and cobalt prices at the time, roughly 40% of the mine's revenue came from the value of cobalt while contributing only 9% of the total weight of mined material. Nevertheless, as we have already noted, low copper prices have prompted Glencore to put the Mutanda mine into care and maintenance.

Nickel is also a concern. Class 1 nickel is required for batteries and is principally found in nickel sulfite deposits. Sulfite deposits represent a fraction of the total nickel reserves globally and are distinctly different from the laterite ores, which are more common, and the type of deposits in which cobalt is typically found. Considering the EV OEM push towards an NMC811 cathode architecture, addressing a potential 19x increase in the quantity of nickel demanded over the next decade may prove problematic. Importantly, even though roughly half of the cobalt production comes from nickel mining, the expansion of the cobalt and class 1 nickel supply chains are not synchronous because of the different deposit sources. If cobalt needs a 4x expansion over the next decade, the volume of laterite nickel mined alongside it may result in significant erosion in the economics of laterite nickel mining as the supply will swamp the demand from the stainless-steel industry depressing prices. If the nickel mined at nickel-cobalt mines is uneconomic, it is unlikely that the mine will have a sustainable business model on the cobalt alone.

The lack of capital flowing into upstream mineral production is not confined to just energy metals; it is common across a range of specialty and industrial metals. Total asset growth in mining has been in secular decline since 2008. Between 1998 and 2008, publicly-traded mining firms grew assets, on average, 23% per year. The subsequent ten years from 2009 to 2018, asset growth fell in half to just over 10% a year. The last five years have been particularly bleak. Since 2014, the mining industry has grown its asset base by just 0.4% per year.²⁴ Beginning in 2013, the ratio of a firm's CAPEX to depreciation and amortization (a rough heuristic to measure growth CAPEX vs. maintenance CAPEX) fell in half. In 2016 it went negative.

The dearth of investment by the mining industry, paired with the explosive growth in manufacturing requiring these inputs, suggests a problematic bottleneck in the future. One that will not be rectified quickly either, as mining remains a slow, deliberate and risky proposition. We believe that nickel and

²⁴ Market weighted averages. Analysis from Massif Capital. Data attributed to Thomson Reuters.

cobalt prices have a higher probability of appreciating than depreciating over the next decade against this backdrop.²⁵

Announced Transaction | Special Situation

On June 18th, 2019, Pala Investments, a private equity firm in Switzerland, announced their intent to acquire 100% of the Cobalt 27's outstanding shares for \$375 million (501 Mil CAD) a 40% discount to our valuation. To make matters worse, Cobalt 27 shareholders will receive 3.57 CAD in cash and the remainder to the transaction value in shares of a newly listed company, Nickel 28, with an implied value of 2.18 CAD per share. Nickel 28 would hold the portfolio of royalties and streams and the 8.6% interest in the Ramu nickel mine, worth roughly 3.86 CAD by our valuation. The market reacted to the news with mixed enthusiasm. The stock appreciated, but only to 4.12 CAD per share, implying a market valuation of the new entity, Nickel 28, of roughly 0.55 CAD.

We view the transaction as occurring at a steep discount to the true value of the assets. By our estimation, the Voisey Bay stream has a value of \$251 million at an average cobalt price over the life of the asset of \$23 per lbs yet is being purchased for roughly \$180 million. Furthermore, as Cobalt 27 highlights in their own marketing materials, royalty and streaming peers trade at a mean valuation of 1.4x NAV, implying that the Voisey Bay stream alone should have a relative market valuation of \$351 million.

Management's justification for the transaction is inconsistent with these valuation realities. The CEO and Chairmen of Cobalt 27, Anthony Milewski, a former Pala employee, has stated the following:

"We believe this is a highly compelling offer for Cobalt 27, as the transaction provides shareholders with a large upfront premium. It is also clear that nickel will be an increasingly critical component of the electric battery revolution, and the creation of Nickel 28 provides shareholders with significant incremental value and continued exposure to the strong fundamentals of battery metals."

The source of the "premium" claim is unclear, especially as every asset being sold was bought at a higher price than shareholders are currently receiving for the assets. It would be more accurate to say the offer is providing shareholders with a premium to the market price, and crystallization of significant mark to market losses on long-lived assets that have not been given time to develop and demonstrate to the market their true value. Unfortunately, the only real "premium" earned by anyone in this transaction is the management team. According to the information circular, the management team will earn a "change of control" benefit of \$15.3 million. A benefit equal to roughly 6% of the company's current market capitalization.

Furthermore, it is unclear how Cobalt 27, as currently constituted, does not provide shareholders a more robust source of incremental value and continued exposure to the strong fundamentals of the battery

²⁵ To ensure that reserve quantities do not become a future problem, metal substitution and recycling infrastructure will be key. We do not want to underestimate a decade trend of technology improvement that will likely see the efficiency per unit of mass increase and/or substitute metals replacing a potentially constrained nickel and cobalt market. We recognize that demand estimates today may be entirely inaccurate given these facts. As such, we place greater emphasis on the supply side of the story which still suggests that capital allocation to this sector is a compelling opportunity.

metals industry then Nickel 28 will. Not only does Cobalt 27 provide diversified metal exposure, but it also presents investors with direct exposure to cobalt metal price appreciation and a near term source of growth in the form of the Voisey Bay stream. Although the royalties and streams that will be bundled up into Nickel 28 are of value, they are unlikely to generate value for several years, as such the only incremental valuation creation in this collection of assets in the immediate term will be sold off at a discount to Pala.

Finally, although the assets of Nickel 28 are worth in excess of the transaction implied a valuation of \$2.18, the firm will be undersized and undercapitalized. Nickel 28 is being spun off with only \$5 million in working capital and, depending on how the Ramu assets pays out could have negative cash flow after corporate expenses. By reducing asset diversity and stripping the firm of its physical Cobalt, Pala and management are increasing the firm's cost of capital and creating a situation where the firm will almost certainly have to go to the market to raise additional funds, diluting existing shareholders. To top it off the same management team that is intent on destroying value via the sale Cobalt 27 will be in charge of Nickel 28.

Full Legal Disclaimer

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