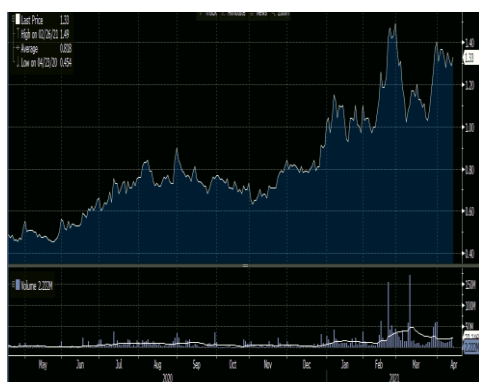


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Target Price	HK\$ 2.00
Current Price	HK\$ 1.17
Upside Potential	71%
Rating	BUY

Market Cap.	HK\$14.75 bn US\$1.9 bn
Shares Outstanding	12,609.9 mn
Free Float (FF)	2,816 mn
52 Week Range (HK\$)	1.61 / 0.63
Avg. Daily Value	HK\$31 mn US\$4 mn
HANG SENG Index Level	27,345
Public Holding %	22.35%



Risk: Above Average

Forecasting and Valuations

(US\$ mn except ratio)	FY 2020	FY 2021E
Revenue	665	1035
Net Income	32	60
EPS (US cents)	0.24	0.45
EPS Growth	282%	90%
PE	70	33
P/S	2.8	1.8
P/B	2.22	2.08

Analyst :

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Jinchuan Group International Resources Co Ltd. (2362_HK)
 Initiation Report

Industry : Metals and Mining

Stock at a Multiyear Inflection Point, Strong Revenue and EPS Growth Expected

Based on our model estimates, revenues should increase from US\$665 mn in FY2020 to US\$1345 mn in FY2022 at a CAGR of 42% while earnings should increase from a profit of US\$31.5 mn in FY2020 to a profit of US\$81 mn in FY2022 at a CAGR of 60%. Similarly, the EPS is expected to increase at a CAGR of 60% from US0.24 cents in FY2020 to US0.61 cents in FY2022. We have a 12-month price target of HK\$2.00 on the stock, suggesting an upside of 71% from the current levels. (More details below)

FY2020 Results: Stellar Rise in Gross and Net Profit, Tight Cost Control, Revenues Resilient Amidst pandemic

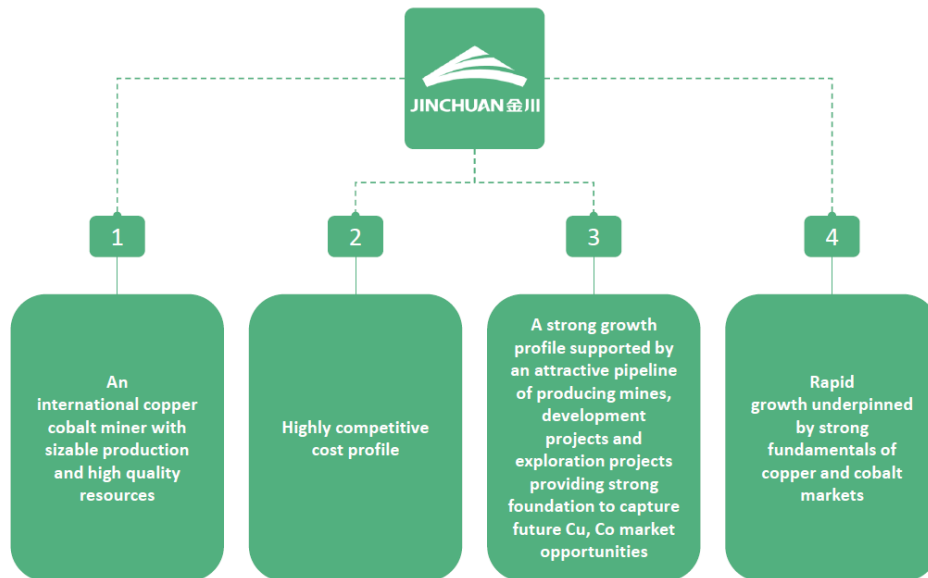
The gross profit has increased by a whopping 65% from US\$53 million in 2019 to US\$87.3 million in 2020. Also the company recorded a consolidated net profit of US\$42.5 million in FY2020, a growth of 225% as compared to US\$13.1 million in FY2019 due to the combined effect of rebound in prices of copper and cobalt, strict cost control measures implemented during the year and reversal in the impairment loss. The company just reported solid, above-expectations FY2020 results with strong margins, please see detailed analysis on page number 4.

Favorable Supply-Demand Situation; Perennial Demand for Copper and Cobalt

Due to the inherent nature of the properties of Copper and Cobalt, the metals are extensively used in different applications across varied industries. As a result, the global demand for them is expected to remain on the boil for a long time to come. The prices are therefore expected to remain firm (as in the current scenario) going forward to ultimately benefit the mining companies for a long time to come. (More details below)

Large Base of High-Quality Resources and Reserves

The company operates two mines in the Central African Copperbelt, namely, the Ruashi copper and cobalt mine and the Kinsenda copper mine in the Democratic Republic of Congo. The company has high quality mineral resources of 4,640 kilo tons of contained copper and 447 kilo tons of contained cobalt at the end of December 2020. The company has mineral reserves of 1,137 kilo tons of contained copper and 200 kilo tons of contained cobalt at the end of December 2020, enough to support 10 years of mining activity with additional ore resources that could extend the mine life to 20 years and beyond. (More details below)



Strong Revenue & EPS Growth, Prime Commodity Price Rally Beneficiary

Jinchuan Group International Resources is a supplier of copper and cobalt operating mines located in Africa. The company operates two mines in the Central African Copperbelt, namely, the Ruashi copper and cobalt mine and the Kinsenda copper mine in the Democratic Republic of Congo (DRC). The company has high quality mineral resources of 4,640 kilo tons of contained copper and 447 kilo tons of contained cobalt at the end of December 2020. The company has mineral reserves of 1,137 kilo tons of contained copper and 200 kilo tons of contained cobalt at the end of December 2020, enough to support 10 years of mining activity with additional ore resources that could extend the mine life to 20 years and beyond. Jinchuan International aims to become a world-class mineral corporation. In addition to the organic growth of the existing operations in Africa, the Company is actively exploring investment opportunities around the globe in strategic projects with great potential in copper, cobalt and nickel. These commodities have high potential created by the rapid development of EV industry and further acquisitions will further enhance the Company's resources base. With ambitious medium and long-term goals set by the company, any further progress towards commercial production would only add to the revenue growth for the company and help sustain growth momentum in the medium to long-term.

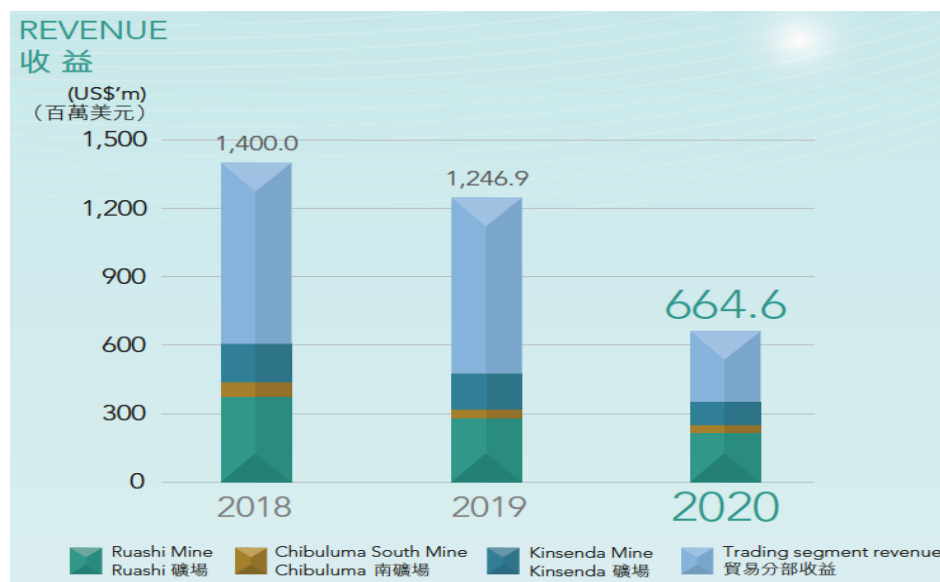
The company as a part of its strategy also engages in international trading of selected raw materials such as copper concentrates, copper blister, cobalt and other related raw materials. The company has been decently profitable till now; however the emergence of several key catalysts suggests that the stock is at an inflection point with much higher expected profitability along with increased sales growth in the next few years.

Furthermore, the company also has an option to expand the mine's annual capacity with additional ore resources that could extend the mine life to 20 years and beyond. With an expectation of rapidly increasing sales volume, a sustained higher pricing premium for copper and cobalt and reducing costs,

the company's revenues and earnings should grow at an above average pace in the next 3 years. In addition to all these revenue tailwinds, the strategic cost reduction due to operational efficiencies will enhance the gross and operating profit margins, thus leading to positive EPS leverage.

Based on our model estimates, revenues should increase from US\$665 mn in FY2020 to US\$1345 mn in FY2022 at a CAGR of 42% while earnings should increase from a profit of US\$31.5 mn in FY2020 to a profit of US\$81 mn in FY2022 at a CAGR of 60%. Similarly, the EPS is expected to increase at a CAGR of 60% from US0.24 cents in FY2020 to US0.61 cents in FY2022. With minimal future CAPX requirements, we forecast a FCF of US\$116 mn and US\$104 mn in FY2021 and FY2022. We would also like to point out that, in our calculations, we take into consideration only the existing resources at company's operating mines and ignore any potential upside from projects under exploration (project under development stage expected to commence commercial production in 2023 is taken into consideration).

We have a 12-month price target of HK\$2.00 on the stock, suggesting an upside of 71% from the current levels. Currently, the stock is trading at a P/E of 33x and 23x on our FY2021 and FY2022 earnings estimates. Similarly, on a P/B basis, the stock is trading at 2.22x and we believe valuations for Jinchuan International Group stock would remain at a premium on account of robust demand for copper and cobalt due to varied usage across multiple industries. Also, the supply-demand dynamics have turned favorable for companies that are mining metals such as copper and cobalt due to increased demand for electronic and electrical components used across multiple industries and structurally constrained supply (more details below).



Stellar Growth in Gross and Net Profit, Sales Growth Resilient at +7%: Tight Cost Control Amidst Pandemic

Jinchuan International Resources reported resilient revenue growth along with robust operating and financial performance for the year ended December 2020, much ahead of our expectations. The company's revenues from its mining operations increased by 7% YoY for FY2020 to US\$498 mn, in comparison to US\$465 mn for FY2019. Higher average price per ton of copper and cobalt along with higher volume of cobalt were the primary reasons for a resilient growth witnessed during FY2020. The average price during 2020 of copper was US\$ 5,721 per ton and cobalt at US\$ 20,031 per ton which was higher by 12% and 24% respectively as compared to 2019. The revenue from sales of copper in 2020 was marginally higher as compared to 2019 but sales from cobalt witnessed a robust growth of 41% in the same time period. We expect the revenue growth momentum to continue for cobalt in the year 2021 and beyond, while copper sales should witness a sharp rise in 2021 as prices continue to rise sharply due to the favorable supply-demand situation as compared to the same time period last year (during the start of the pandemic).

The revenue growth has been resilient for this company in the year 2020 as the drastic fall in the financial performance in the first half more than compensated for the sharp recovery witnessed in the second half of 2020 to ultimately report a positive growth in mining revenues. The revenue from trading of metal and mineral products however witnessed a drastic fall of 79% to US\$167 million in 2020 from US\$782 million in 2019 as a result of economic headwinds due to the Covid-19 pandemic. As an overall effect the total revenues decreased by 47% in 2020 as compared to 2019. The revenue from trading of metal and mineral products is expected to gradually recover in 2021 and beyond to ultimately contribute in much higher proportion as compared to this year's performance.

The gross profit has increased by a whopping 65% from US\$53 million in 2019 to US\$87.3 million in 2020. As copper and cobalt prices recovered in the second half of 2020, the gross profit margin improved to 22.7% in the second half of 2020 as compared to 4.4% in 2020. The company was able to reduce the overall mining costs as it was able to reduce costs in its operations. For example, the plan to sell copper blister from the Kinsenda mine led to an increase in gross profit in the second half of 2020. The gross profit margin increased from 4.3% in 2019 to 13.1% in 2020, in-line with the increase in overall revenue from mining operations.

Net finance costs have decreased by 32.7% from US\$19 million in 2019 to US\$12.8 million in 2020 due to significant reduction in bank loan interest rates, which are mainly floating and valued based on LIBOR. Also, the company has gradually repaid its bank loan using robust cashflows it generated from its business especially from the Kinsenda mine, leading to a decrease in the principal outstanding. With interest rates expected to remain low due to the ongoing pandemic the finance costs would remain stable in the near future. As a result of the above reduction in costs combined with robust operational performance, the company recorded a consolidated net profit of US\$42.5 million in FY2020, a growth of 225% as compared to US\$13.1 million in FY2019 due to the combined effect of rebound in prices of copper and

cobalt, strict cost control measures implemented during the year and reversal in the impairment loss. The company's mining operations recorded a reversal of impairment loss to the tune of US\$27 million in FY2020, as compared to US\$9.7 million in FY2019. Even if we exclude the reversal of impairment loss of US\$27 million in FY2020 the net profit increased by 18% YoY amidst adverse economic conditions due to the pandemic. The company has reviewed the updated life of mine model of the two operating mines incorporating revised minable reserves and new commodity prices assumptions.

Key Financial Indicators	2018	2019	2020
Copper Production(Tonne)	61,624	73,057	72,477
Cobalt Production(Tonne)	4,752	5,070	4,158
Revenue From Mining Operation(US\$M)	606	465	498
EBITDA(US\$M)	214	116	140
Profit for the year(US\$M)	95	13	42
C1 Cash Cost Per Tonne Of Copper(US\$/t)	1,598	3,068	2,948

Robust EBITDA Growth, Healthy Balance Sheet and Comfortable Gearing Ratio

The company reported cash of US\$108.3 million in FY2020 as compared to US\$45.2 million in FY2019, a strong increase of 140%. The total bank borrowings were US\$209.7 million in FY2020 as compared to US\$238.3 million in FY2019, a reduction of 12%. The effective fixed interest rate for the remaining loan term ranges from 2.5% to 3.9%. The gearing ratio was 23.4% in FY2020 as compared to 33.0% in FY2019. The decrease in the gearing ratio was due to the decrease in bank borrowings and increase in cash in FY2020. The gearing ratio of 23.4% suggests that the company's capital structure is in a comfortable position and even if the need arises for borrowing in the near future due to any possible acquisitions or mergers then it would still have the flexibility to borrow further.

33x/23x FY2021/FY2022 P/E; 2.08x/1.91x FY2021/FY2022 P/B; 1.82x/1.40x FY2021/FY2022 P/S

Jinchuan's largest Ruashi mine became operational in FY2012 and is operating at 100% capacity. In FY2020, taking into account the satisfactory performance of the Ruashi and Kinsenda mines and favorable copper and cobalt prices, the company also reversed prior impairment charges to the tune of US\$27 mn.

As such, we believe that the stock is currently at a multiyear inflection point and expect earnings to increase significantly in FY2021 supported by continuously rising copper and cobalt prices. Based on our model forecasts,

the stock is trading at a P/E of just 33x and 23x on FY2021 and FY2022 earnings. Similarly, on a P/B basis, the stock is trading at 2.22x and the current book value of the company is low due to large levels of impairments taken in the last few years. We believe that with record high levels of copper and cobalt prices and strong sales results in 2020 and beyond, there will be substantial impairment reversal in the coming year, suggesting an even lower P/B multiple. Given that the stock is trading at attractive valuations with multiple catalysts in place, we believe that the stock offers a compelling growth potential for investors.

Free Cash Flow to Increase Rapidly Going Forward: 5.4% FY2022 FCF Yield

The company had been generating large negative free cash flows in 2016 and 2017 due to lower profit margins of the then operational mines and high CAPX requirements for the development of the mines. However, in FY2018, when the scale of the operations increased, the company generated FCF of US\$79.6 mn, a yield of 4% on the stock price. After incurring a total of approximately US\$116 mn CAPX during 2017-2019, the company's CAPX requirement has come down [FY2018 CAPX was US\$33 mn].

During our conversation, management mentioned that the company will only incur minimal maintenance CAPX in the next few years, mainly CAPX related to Kinsenda mine which will increase the life to over 20 years. As such, we expect FCF yield to increase further in the coming years. Our model suggests that the company can generate FCF of US\$107 mn in FY2022 suggesting a yield of 5.4% on the current stock price. We believe that majority of this cash will be utilized to pay down debt which will help reduce earnings volatility and increase investor confidence in the stock. For any fresh capital expenditure the company may also borrow further as the debt to equity ratio remains in a comfortable range.

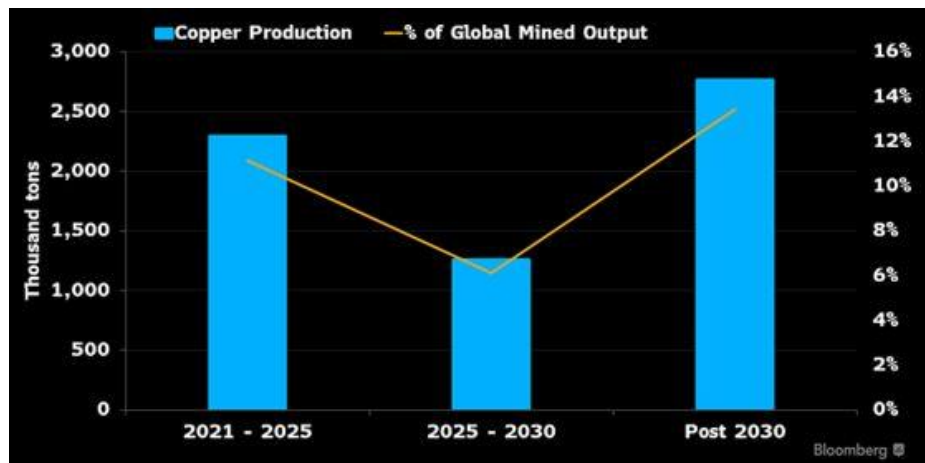
9.2x/7.1x FY2021/2022 EV/EBITDA

In FY2018 and FY2019, Jinchuan generated EBITDA of US\$214.2 mn and US\$116.2 mn respectively. With rapidly increasing capacity utilization at the Ruashi and Kinsenda and economies of scale kicking in, we expect EBITDA to increase further going forward. For FY2021 and FY2022, we forecast EBITDA of US\$228 mn and US\$296 mn, respectively. Based on our model estimates, the stock is trading at FY2021 EV/EBITDA of 9.2x and FY2022 EV/EBITDA of 7.1x. For mining companies EBITDA is the appropriate measure to evaluate their financial performance which can otherwise seem distorted if the impact of items that are non-recurring in nature is to be taken into consideration. The impairment loss and fair value gains are non-recurring in nature and are not relevant to core business operations. We believe that EBITDA reflects the true nature of the company's financial performance and is a better indicator of its expected performance in the future.



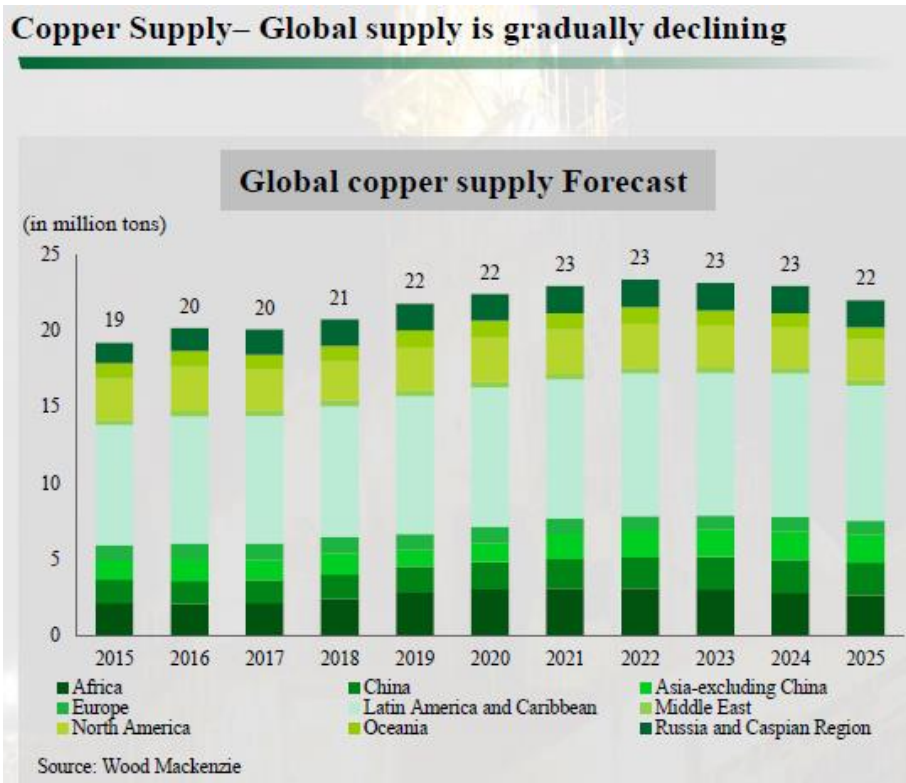
Perennial Demand and Varied Applications for Copper and Cobalt: Prices expected to remain firm in the Long-term

Due to the inherent nature of the properties of Copper and Cobalt, the metals are extensively used in different applications across varied industries. As a result, the global demand for them is expected to remain on the boil for a long time to come. The prices are therefore expected to remain firm (as in the current scenario) going forward to ultimately benefit the mining companies for a long time to come. Copper is a kind of non-ferrous metal which has long been intricately connected to the uses across varied applications and industries. Not only are there abundant resources in nature, but copper also possesses excellent properties. Therefore, it is widely used in electrical power, electronics, energy, petrochemicals, transportation, machinery, metallurgy, light and other new industries and some high-tech fields. The demand for copper has been on the rise and is expected to increase further with top copper consumer China, getting back to business on optimism of a stronger global economic recovery in view of COVID-19 vaccine roll-outs.



Supply Side Constraints to Keep Copper and Cobalt Prices on the Boil

According to Bloomberg, within a decade, the world may face a massive shortfall of what is arguably the most critical metal for global economies, i.e. copper. The copper industry needs to spend upwards of \$100 billion in what could be an annual supply deficit of 4.7 million metric tons by 2030 as the clean power and transport sectors grow rapidly, according to estimates from CRU Group (seen in the chart below). Copper production is expected to increase by 1 million tons by 2023 but under the increase in demand, the Commodity Research Unit (CRU Group) forecasts a shortfall in supply and demand from 2021 and will reach 270,000 tons by 2023.

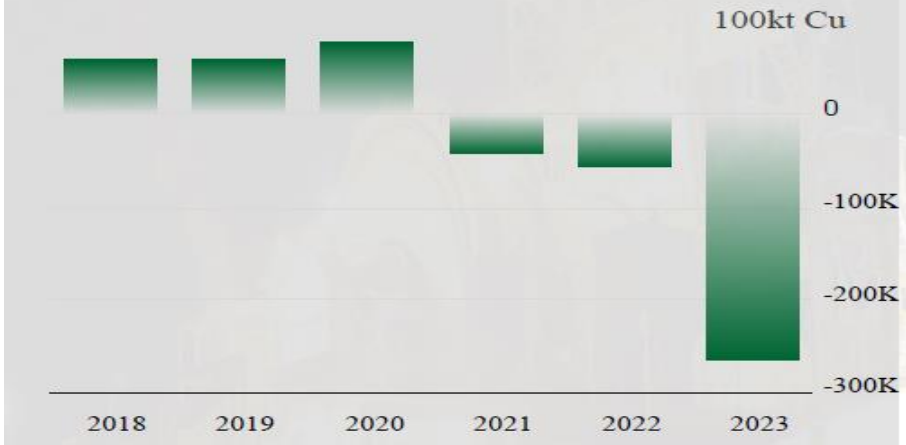


Gradually declining on global copper inventory (in ton)



Source: Galaxy Futures, Wind

A shortage of demand in global Cu market is predicted



The prospect of a gap between supply and demand is able to support the current market price of copper. Industry analysts are generally optimistic about the future increase in copper prices, especially copper concentrates that are regarded as key indicators of the copper mine market. Market supply and demand may be tight for at least five years to come. Due to the shrinking of fixed assets in copper mining, global copper production is declining year by year with a constant decline in inventory levels. Unstable effects on the global copper supply are caused by collective bargaining of multiple mines, and there is no large-scale exploration of new mineral veins currently, causing the overall copper mining and brownfield development to lag behind copper demand.

Copper Demand – The increase of global electric vehicle penetration rate and the implementation of 5G will continue to boost demand for copper

Apart from China's role and vaccination drives across the world, what is also adding to the demand for copper is the decarbonisation efforts by various governments to reduce dependency on fossil fuels. Copper is an important element in the renewable energy system, and the world's gradual transition to renewable energy and electric vehicles will see the metal being used much more than earlier. Global electric vehicle sales volume is expected to reach 3 million/4.2 million in 2020/2021 and is expected to reach 16 million in 2025 with the penetration rate of 25%. According to Markline's forecast, the production and sales volume of NEV in Europe will reach 4.567 million in 2025, with an annual growth rate of more than 40%. Germany has legislated subsidies on its domestic electric vehicle. The subsidies for pure electric vehicles priced below 40,000 euros have been increased from 4,000 euros to 6,000 euros. Auto companies have increased their investment, and Volkswagen has increased the planning production volume to the year 2030 from 15 million to 22 million. In April 2019, EU released Regulation (EU) 2019/631, the most stringent carbon emission standard in history, and the average emissions of passenger cars need to be reduced to 95g/km in 2021, and to 80.75g/km in 2025. Norway, Netherlands, UK, France and Portugal set bans on the sales of fuel vehicle in 2025, 2030, 2040, 2040 and 2040 respectively. The Development of NEV is the only option and this is an opportunity for copper mining companies all over the world for its supply. Benefit from the expected growth of copper demand driven by the rapid growth of NEV production, the prospect for the copper industry's demand for the next decade is quite optimistic, as the copper used in electric vehicles can reach twice that of traditional cars.

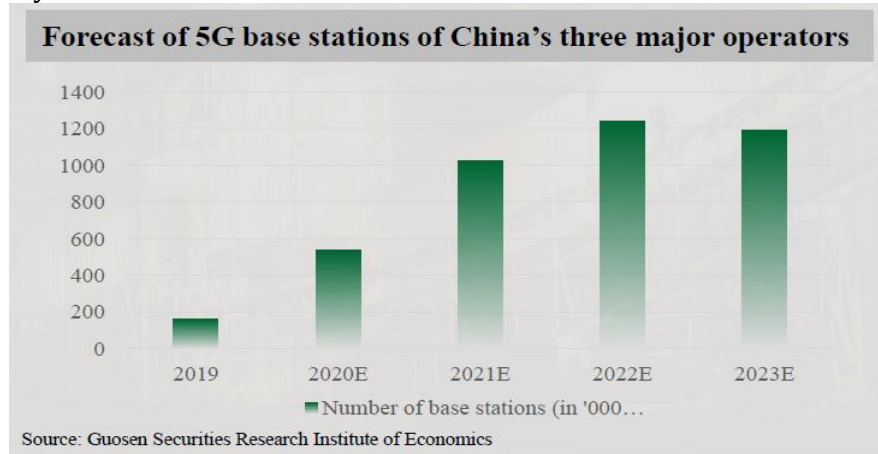


As the new era of 5G construction, the number of 5G macro cells will be 1.2 to 1.5 times than 4G in 2019, and it is expected to reach its peak around 2021 to 2023. There will be more than 1 million new 5G base stations every

year, and the investment on base-station alone will reach RMB 200-300 billion.

■ Copper-consuming industry related to 5G: macro cell site, small cell site, urban data server room and electronic products, etc.

■ The consumption of copper clad laminate required for 5G base stations in 2020 is around 20,000 tons, which is almost negligible compared with China's annual total demand of more than 10 million tons. However, the demand for copper will increase significantly as 5G base stations' increase each year.



Cobalt occurs typically in nature in cobaltite, smaltite, and erythrite minerals. It is mined along with nickel, silver, lead, copper, and iron ore and is often obtained as a by-product. Cobalt has been used in many industrial, commercial, and military applications.

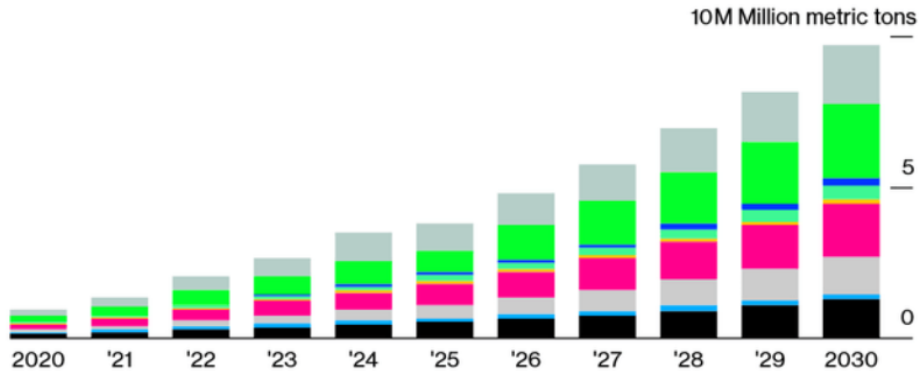
China's demand for electric cars has driven cobalt prices to highest level in two years. Cobalt prices have soared by about a quarter since the start of the year, driven by the push for electric cars in China and the European Union, as well as Chinese stockpiling. The cobalt market is expected to fall into a slight deficit, with supply at 147,000 tons and demand rising to 148,000 tons - but by 2025 this deficit is expected to widen, with supply at 211,000 tons and demand at 238,000 tons.

Cobalt market is set to be in deficit due to which the prices have risen by more than 40% since December with China being one of the primary drivers in strength. Other key drivers include very strong electric vehicle demand in general, buying by the Chinese State Reserves Bureau, and coronavirus-related supply chain disruption. Demand for use in consumer electronics was also stronger than expected in the second half of 2020 as working from home became the norm and the roll out of 5G began. As a result of all this, hydroxide inventories at Chinese refineries are low. As a consequence of all this the market expects the cobalt market to be in deficit for the next ten years.

Battery Boom

Rising EV demand supercharges demand forecasts for a group of metals

■ Lithium ■ Cobalt ■ Nickel ■ Graphite ■ Manganese ■ Iron ■ Phosphorus
■ Aluminum ■ Copper



BloombergNEF

All metals expressed in metric tons of contained metal, except lithium is in lithium carbonate equivalent.

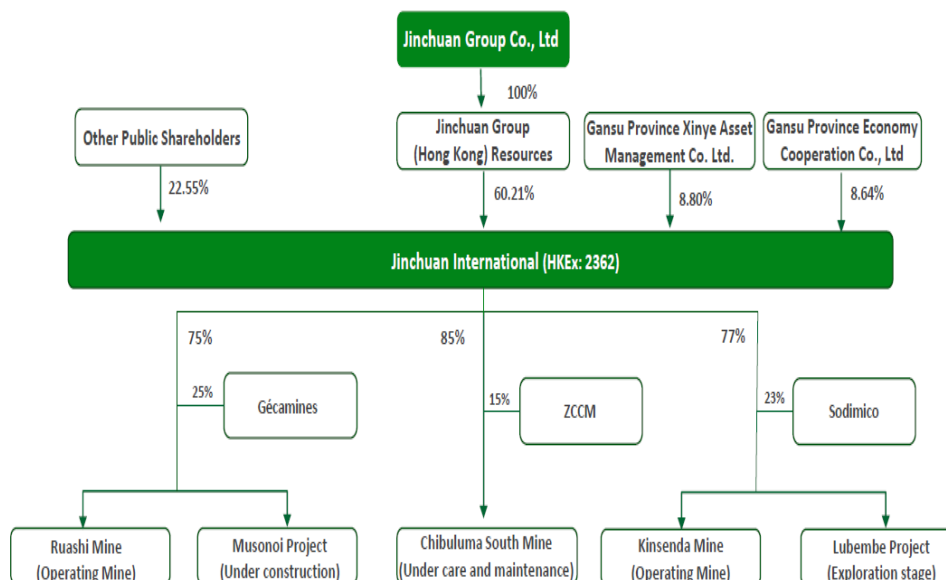
Source: BloombergNEF

Business Strategy to Focus on New Investment Opportunities through Mergers and Acquisitions

The company's goal is to be a world-class mineral corporation. Along with the existing operations in Africa, the company seeks new investment opportunities which can provide them with growth and synergies while strictly complying with the regional regulations. The company is always looking out for new investment opportunities in mineral resource projects to become a large scale and high-quality international mining company specialized in non-ferrous metal mineral products. Focusing mainly on Jinchuan Group's traditional core business areas of nickel, copper, and cobalt, the company is continuously looking to pursue acquisitions and cooperation in regions with attractive resources and favourable investment environment, including Africa, Australia, North and South America and Asia.

The company leverages the strengths of its parent company, Jinchuan Group, in areas such as technology, capital, resources, and global operation networks. The parent company relies on its principles such as resource reliability, technical feasibility, adequate development conditions, risk control and achieving attractive returns before undertaking any business activity which help them in achieving optimum business performance. The company aims to participate in the development of mineral resources around the world through mergers and acquisitions, joint ventures, product underwriting, trade cooperation and other ways. The minerals that the company focuses on, but are not limited to, include, nickel, copper, cobalt, platinum metals and titanium metals.

Corporate Structure



Leveraging on the Strengths of the Parent Group with Majority Shareholding

Jinchuan Group, the ultimate holding company of Jinchuan International, is a state-owned Chinese enterprise, founded in 1958, with its majority equity interest held by the Peoples Government of Gansu Province. Boasting some of the world's best-known mines of nickel sulfides associated with cobalt sulfides, Jinchuan Group is a leading nickel and cobalt producer in the world, as well as one of the main producers of copper and platinum group metals in China. The Jinchuan Group was the third largest nickel manufacturer and the fourth largest cobalt manufacturer in the world, and the third largest copper manufacturer in China as well as the largest platinum group metal manufacturer in Asia.

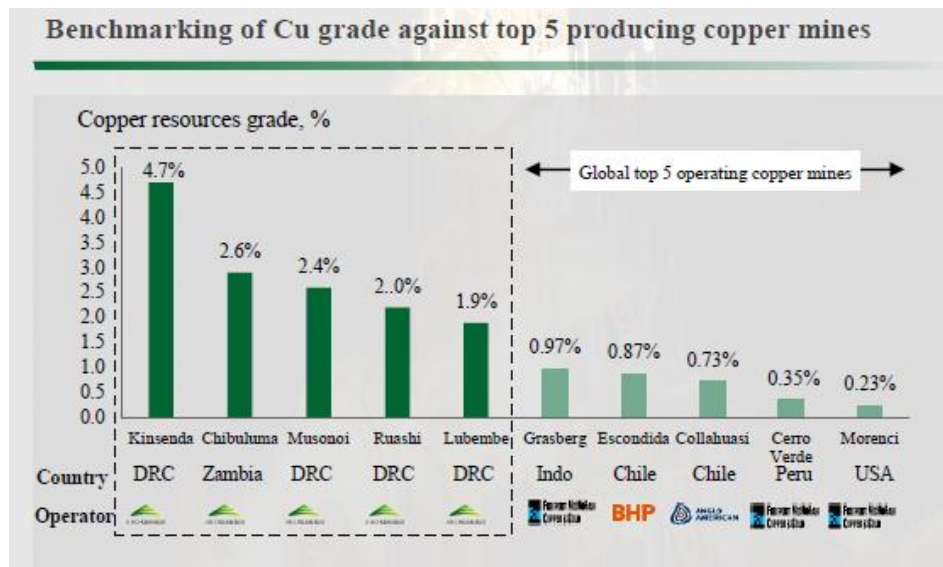
Jinchuan Group is a large-scale nonferrous mining conglomerate with an international presence, primarily engaged in mining, milling, smelting, chemical processing and further downstream processing. It also engages in trading of mineral and metal products which complements its mining operations. The Group owns world's 3rd largest Cu Ni sulfide deposit and has state of the art facilities technologies, including world's first oxygen enriched top blown nickel smelter, world's first copper flash smelter, and Asia's first nickel flash smelter. The Group offers more than 110 products across 15 categories, including nickel copper cobalt series, precious metals, high purity metals, nickel-based alloys, wires and cables, mechanical products, secondary batteries and battery materials, metal powder materials and carbonyl-based products.

Strong Portfolio of Assets for Future Development- Large Base of High-Quality Resources and Reserves

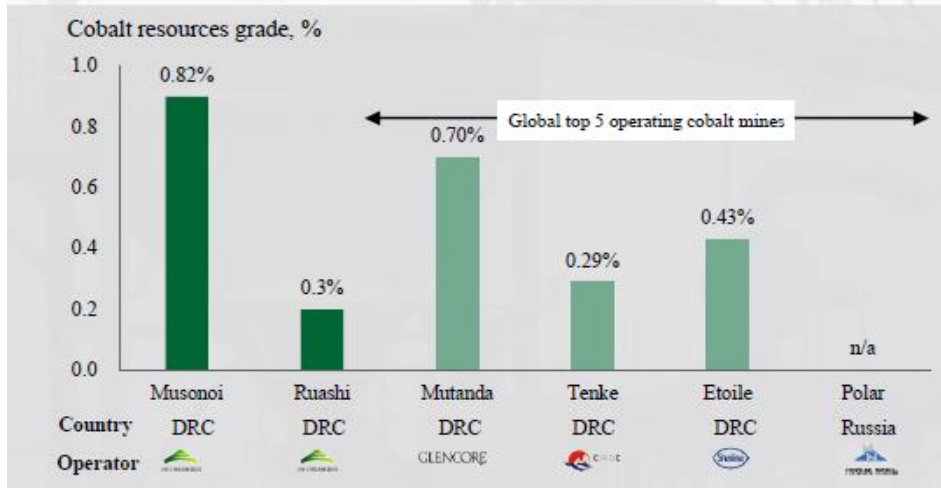
Summary of Reserves and Resources (As at 31 Dec 2020 and compiled by 100%)

	Ore	Grade		Contained Metal	
	Mt	%	%	Kt	Kt
Copper & Cobalt		Copper	Cobalt	Copper	Cobalt
Proved	11.5	3.2	0.9	366	103
Probable	20.5	2.3	0.5	470	97
Total reserves	32.0	2.6	0.6	836	200
Measured	17.6	2.8	0.8	489	149
Indicated	40.9	2.1	0.4	840	179
Inferred	19.0	2.1	0.6	393	119
Total resources	77.5	2.2	0.6	1,722	447
Copper Only					
Proved	0	4.5	-	2	-
Probable	5.4	5.6	-	298	-
Total reserves	5.4	5.5	-	300	-
Measured	0.7	4.4	-	31	-
Indicated	69.0	2.4	-	1,662	-
Inferred	49.0	2.5	-	1,225	-
Total resources	118.7	2.5	-	2,918	-
Jinchuan International Summary					
Total reserves	37.4			1,137	200
Total resources	196.2			4,640	447

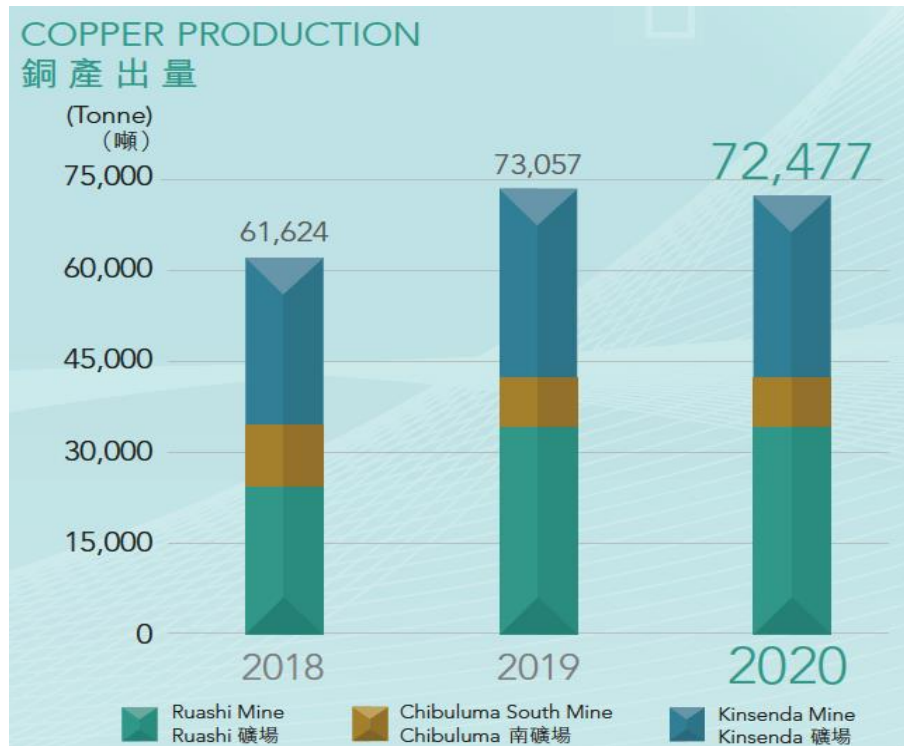
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Benchmarking of Co grade against top 5 producing copper mines



Also, with one project at development stage (Musonoi Project) and one under exploration (Lubembe Project) the revenue growth momentum would continue for the company in the years to come after these projects start commercial production. Also, one of the mine is under financial lease (Chibuluma South Mine including Chifupu Deposit) which gives the company a stable cash inflow that includes the fixed lease amount and a further floating royalty payment for the total lease period.



COBALT PRODUCTION

鈷產出量

(Tonne)
(噸)



Ruashi Mine: 10 Years Mine Life, Copper and Cobalt

The company's 75%-owned Ruashi mine started commercial production in early FY2012. Details of the Ruashi Mine:

Mine type: open-cast oxide copper and cobalt mine with sulphide potential underneath

- Location: Lubumbashi, Katanga Province, the DRC
- Ownership: JCI (75%), Gécamines SA (25%)
- Processing: leach SX-EW processing
- Products: cathode copper, cobalt hydroxide
- LoM: 10 years
- Resources#: 637kt Cu, 85kt Co
- Reserves#: 243kt Cu, 27kt Co



Ruashi's main mining licence (PE578) was renewed for a period of 15 years, and will expire in September 2036. The capital expenditure of Ruashi Mine in 2020 was US\$14.8 mn and included US\$12.6 mn for pit 3 waste stripping. In the second half of 2020, Ruashi commenced the construction of a 600kt per annum floatation and magnetic separation plant which is targeted to treat low grade oxide and sulphide material via magnetic separation and the successful construction of the floatation and magnetic separation plant will further increase the mine life of Ruashi.

Kinsenda Mine: 20 Years Mine Life- Copper

The company's 77%-owned Kinsenda mine started commercial production in early FY2018. Kinsenda Mine ranks one of the world's highest grade copper deposits and has good access to infrastructure, with a single-lane road connecting the mine to the regional highway 20 km to the west of the site. Current mine life is more than 10 years and there exists substantial additional ore resources that could extend the mine life to 20 years and beyond.

Mine type: underground copper mine

- Location: Haut-Katanga Province, the DRC
- Ownership: JCI (77%), Sodimico (23%)
- Product: copper concentrates, copper blister
- LoM: >10 years
- Resources#: 1,052kt Cu
- Reserves#: 294kt Cu.

Kinsenda Mine

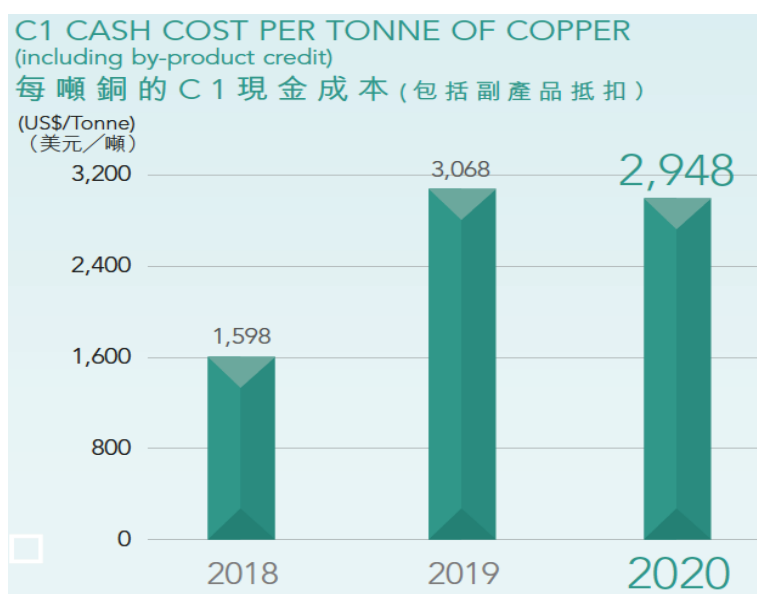
Kinsenda礦場



The company in the year 2020 decided to send copper concentrate produced by Kinsenda Mine to a local smelter for processing into copper blister starting from March 2020 which in the long run would enhance the copper products of Kinsenda and the company will be benefited from the increased sales prices. Kinsenda has started selling copper blister to international market since May 2020. Kinsenda's main mining licence (PE101) was renewed for a period of 15 years, and will expire in October 2036. Capital expenditure at Kinsenda Mine for year ended 31 December 2020 was US\$17.3 mn, primarily spent on underground development and new generator system for underground dewatering. Kinsenda Mine is developing a second ramp decline from 209m level as a capital development project to open up the East Mine resource.

Reducing Cash Costs as Ruashi and Kinsenda Mines Ramps up to 100% Capacity

The Ruashi and Kinsenda mine facility operated at approximately 100% capacity in FY2020. The higher capacity utilization was a result of the company encountering very minor production disruptions despite the global pandemic situation in 2020. However, the company is looking forward for recovery in sales volume along with further increase in prices of copper and cobalt and is expected to bring new capacity for commercial production in 2023. C1 cash cost is a common performance measure in the copper industry and includes all mining and processing costs, mine site overheads, realisation costs through to refined metal and off-site costs. The C1 cash cost is one of the lowest in the industry for Jinchuan Group International Resources with US\$ 4,216 per ton (excluding by-product credit) and US\$ 2,948 per ton (including by-product credit) for copper. One advantage for the mines is that the plant and the mine are located in the same place resulting in an elimination of the cost to transport to plant.



Comfortable Liquidity Position, Adequate Financial Resources and Robust Capital Structure

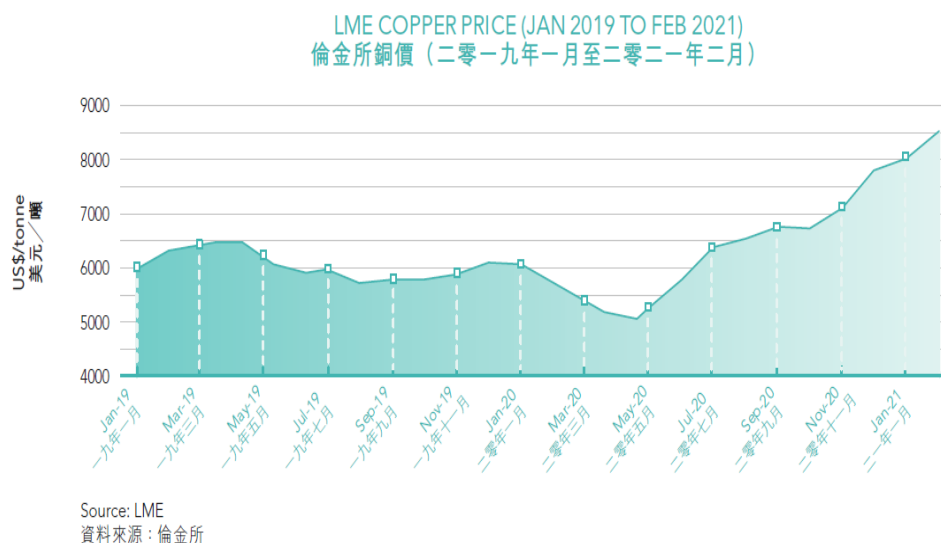
The company reported cash of US\$108.3 million in FY2020 as compared to US\$45.2 million in FY2019 a solid increase of 140%. The total bank borrowings were US\$209.7 million in FY2020 as compared to US\$238.3 million in FY2019, a reduction of 12%. The effective fixed interest rate for the remaining loan term ranges from 2.5% to 3.9%. The gearing ratio was 23.4% in FY2020 as compared to 33.0% in FY2019. The decrease in the gearing ratio was due to the decrease in bank borrowings and increase in cash in FY2020. The gearing ratio of 23.4% suggests that the company's capital structure is in a comfortable position and even if the need arises for borrowing in the near future due to any possible acquisitions or mergers then it would still have the flexibility to borrow further.

Industry Analysis – Pricing Dynamics for the Copper and Cobalt Industry, Premium Pricing for Copper and Cobalt to Remain

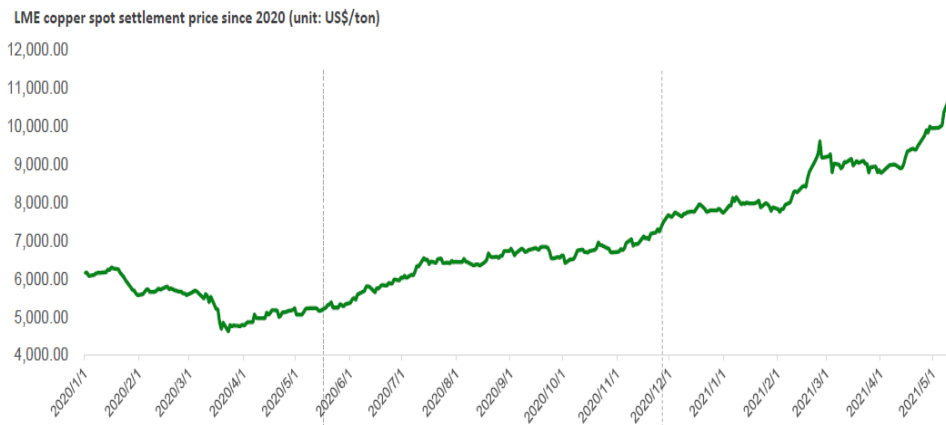
Global mining industry underwent severe challenges in the past fifteen months caused by the disruption due to COVID-19 and the on-going trade war between China and the US, the two largest economies in the world. Commodity prices have been on a roller coaster ride in 2020 and likely to remain volatile in the near term. Copper price is highly susceptible to swings in global policy and economic uncertainty.

The widespread of COVID-19 in China had affected global logistics arrangement and had delayed the resumption of production in China after the 2020 Chinese New Year, which dragged down short-term copper price in February and March 2020. LME copper price reached a bottom of US\$4,617.5 per ton in March 2020.

Following the drop in new COVID-19 cases in China, China has gradually reopened its economy and businesses have resumed operations and the demand for copper has increased. Copper refineries have commenced operations and the demand for copper concentrate has increased since then. LME copper price rebounded to US\$6,000 per ton level by the end of June 2020, the highest level since January 2020. LME copper price remained above US\$6,000 per ton throughout the second half of 2020 and has reached a six year high of US\$7,964 per ton in December 2020. The rebound continued after year end and LME copper price has reached a nine and a half year high of US\$9,614.5 per ton in February 2021, representing a gain of 24% compared to its price at the end of 2020.



Copper price review: since 2020, copper prices have experienced a deep V shape rebound, which is mainly divided into three stages

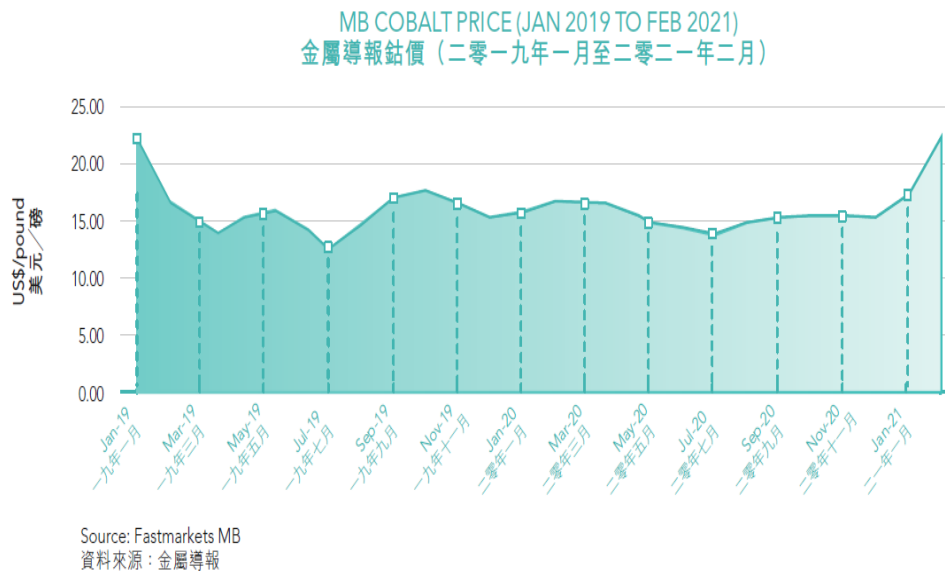


Copper demand from China started to turn strong since June 2020. Import of copper concentrate into China was 1.59 million tons in June 2020 according to Chinese Custom figures, which being the lowest monthly total since September 2019. The copper concentrate import figure has reached 1.89 million tons in December 2020. Strong growth was also seen in the import of copper blister and scrap into China. With COVID-19 still causing disruption in copper producing countries in South America including the two largest copper producing countries Peru and Chile, and the interruption of Australia's supply of copper concentrate to China since the final quarter of 2020, copper smelters in China are struggling to secure enough concentrates from the world and LME inventories have fallen to lowest level since 2008. Copper market is forecasted to remain tight in the short-term future. While the precise timing of COVID-19 to be contained is still unknown, copper fundamental factors are still strong, and its price is expected to stay strong after COVID-19 is contained. As the new US President took office in 2021 and a new US\$1.9 trillion pandemic relief bill was passed, in addition to the availability of COVID-19 vaccine, copper, as a critical commodity used in construction and infrastructure, will definitely benefit from the economic recovery. Global commodities trader Trafigura sees a significant deficit in the region of ten million tons of copper by 2030 and will require building eight projects the size of Escondida, the world's largest copper mine, to close the gap. Since September 2020, nations around the globe have initiated the strategic target to become carbon neutral. Copper, as the most commonly used conductible material, will be used more frequently in areas including solar, wind, power storage, new energy.

According to market research, electric vehicle industry worldwide will need 250% more copper in 2030 for charging stations compared to 2019, and each EV consumes quadruple copper as compared to conventional internal combustion engine-powered vehicles, copper will benefit from the modest growth of the electric vehicle industry in the long-term. Growth in EV industry was mostly witnessed in Europe in 2020 where approximately 1.367 million EV were sold, a 142% growth compared to last year. Europe exceeded China in EV market share for the first time where its market share increased from 3% in 2019 to 11% in 2020. Traditional car makers have transitioned quickly

from traditional models to new EV models and a total of 65 new EV models were launched in Europe in 2020. Cobalt prices retreated by more than 70% from an all-time high of US\$43.7 per pound recorded in April 2018 to US\$12.1 per pound by the end of July 2019 as a result of the rising supplies produced by artisanal miners in the DRC, and a surplus in supply of cobalt chemicals for the production of rechargeable batteries for EV in China.

In August 2019, one of the largest cobalt mine in the DRC announced a temporary suspension of production for an expected two years' time limiting the global cobalt supply in the near future, cobalt price has since rebounded to US\$15.1 per pound by the end of 2019 and reached US\$17.0 per pound by the end of February 2020. Cobalt price stayed relatively stable in 2020 and benchmark MB cobalt price has reached a year low of US\$13.75 per pound in July 2020 and has since rebounded to US\$15.25 per pound level. Cobalt price has been in the range of US\$13.75 per pound to US\$17.0 per pound in 2020 while it was between US\$12.1 per pound to US\$26.5 per pound in 2019.



With cobalt demand recovered from COVID-19 the price increased to US\$25 per pound in early 2021, a level last seen in January 2019. The major cobalt mine in the DRC supplied over 18% of the global cobalt market and with the mine under care and maintenance scheduled for two years, global cobalt supply will remain shorthanded in the short-term future. At the same time, the DRC Government has placed stricter control on the source of cobalt and has initiated plan to regulate artisanal and illegal cobalt mining in the DRC. Together with the pressure from international organization to limit the supply of minerals from mine with child labour, and stricter logistics requirement for transporting cobalt material, cobalt supply will remain tight in the near future. On the demand side of cobalt, the two main uses of cobalt are for the manufacturing of alloy and industrial chemicals and for the manufacturing of batteries. According to a recent cobalt research, in 2020, around 53% of cobalt usage was for manufacturing of batteries in which approximately 73% of the battery demand is for non-EV purpose, including telecommunication equipment, computers and laptops, while the remaining 26% is for manufacturing EV batteries.

Analysts predicts that the increase in EV battery demand is estimated to be at a 24.3% cagr from 2020 to 2025. The long-term demand for cobalt will grow from 143,000 tons in 2020, of which the EV battery sector accounts for 14.6%, to 230,000 tons in 2025, of which the EV battery sector would account for 27%. Together with the increase in non-EV battery the demand is expected to increase by 9.8% cagr from 56,000 tons in 2020 to a predicted 88,800 tons in 2025. We also anticipate that as manufacturers and traders drain their stock, the yearlong downward trend of cobalt price will come to an end, and healthier and more sustainable demand for it will lead to the gradual recovery of cobalt price.

Varied Applications and Uses of Cobalt

Cobalt occurs typically in nature in cobaltite, smaltite, and erythrite minerals. It is mined along with nickel, silver, lead, copper, and iron ore and is often obtained as a by-product. Cobalt has been used in many industrial, commercial, and military applications. Below are some of its common applications:

Alloys

1. Superalloys

Cobalt-based superalloys form high-temperature resistant parts for gas turbine aircraft engines, space vehicles, rocket motors, and other aerospace applications. Cobalt-based superalloys have a higher melting point than iron or nickel and have excellent resistance to hot corrosion and thermal fatigue. The weldability of this superalloy is also better than nickel superalloys. Altogether, cobalt-based superalloys perform exceptionally in applications with low stress and elevated temperature environments.

Cobalt-based-Superalloys

2. High-speed steel alloys

Cobalt steel is a variation of high-speed steel with common grades M-35 and M-42. It is an ideal cutting tool for its high red hardness that in turn provides high heat resistance. The cobaltic high-speed steel is able to run and withstand high feed rates and faster speed.

3. Magnetic Alloys

Cobalt is used widely as one of the metals needed to create hard permanent magnets with high coercivity, such as the aluminium-nickel-cobalt (Al-Ni-Co) alloy series. Alnico magnets are used in motors, hard disk drives, and sensors. Magnetic resonance imaging is an example of an application for these magnetic alloys.

Electronics

Cobalt oxide, hydroxide, and metals are used in many electrochemical devices that convert chemical energy to electrical energy, such as rechargeable batteries. Portable devices such as mobile phones, laptops, and other consumer electronic devices right up to electric vehicles, all utilise

rechargeable batteries. Cobalt acts as a raw material in the cathode technology which is essential for recharging batteries.

Catalysts

Cobalt is used as a catalyst for many industrial applications such as removing sulphur moieties from petroleum and natural gas products. Desulphurisation of diesel, petrol, kerosene and other fuel oils contributes to reducing emissions. The element as a catalyst, not only reduces emissions, but also activates the energy required for industrial processes, such as recycling plastics.

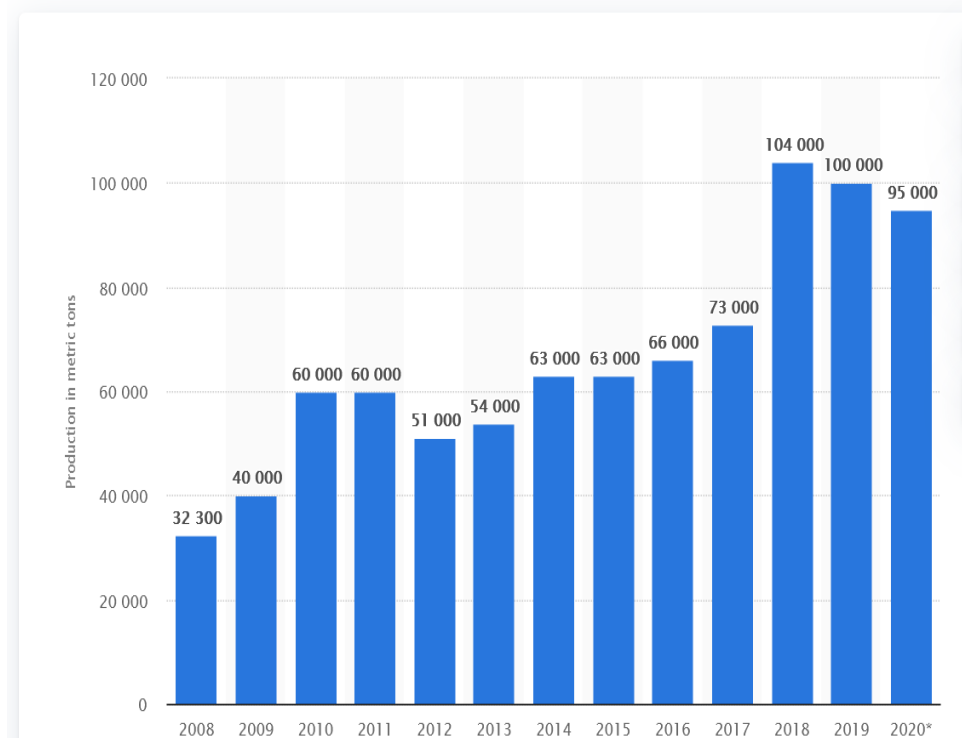
Cobalt blue

Inks and Pigments

Cobalt pigments are used to decorate ceramics and can also be added to glass as a colourant or decolouriser to create specific tints. Glass, porcelain, paints and inks, and enamelware use it in order to achieve a vivid blue colour. Cobalt has been found irreplaceable as a colouring agent in these applications, due to its unique properties in solubility, stability, and colouring effect.

Mine production of cobalt in DR Congo from 2008 to 2020

(in metric tons)



In 2020, mine production of cobalt in the DR Congo totalled some 95,000 metric tons. In recent years, the global production of cobalt has exceeded consumption, which has led to decreased prices of the mineral. DRC is the world's largest producer of cobalt from mines.

Cobalt from the DRC

Cobalt is a silver-grey, hard and lustrous metal that is only found in the Earth's crust in chemically combined form. Cobalt is therefore primarily mined as a by-product of nickel and copper mining. From there, cobalt is produced by reductive smelting. It is primarily used in lithium-ion batteries, which are needed for electric devices such as laptops and electric cars. Since the 1960s, the world's cobalt mine production has been focused in the Democratic Republic of the Congo. Today, about 60 percent of the global cobalt resources come from the DRC.

Varied applications and Uses of Copper

Copper is a kind of non-ferrous metal which has long been closely connected to human beings. Not only are there abundant resources in nature, but copper also possesses excellent properties. Therefore, it is widely used in electrical power, electronics, energy, petrochemicals, transportation, machinery, metallurgy, light and other new industries and some high-tech fields.

A. Applications in electrical power industry

Electric power transmission, such as wire and cable, transformers, switches, plug components and connectors, etc.; motor manufacturing, for instance as a stator, rotor, shaft head and hollow wire, etc.; communication cables and residential electrical circuits also need to use a large quantity of copper wires.

B. Applications in electronics industry

Vacuum electronic devices such as high frequency and ultra high frequency tubes, crossing the catheter, magnetron, etc. Copper printed circuits require a lot of copper foil and copper base brazing material. In integrated circuits, copper replaces aluminium in silicon chips for interconnection and lead frames.

C. Applications in energy and petrochemical industries

Main condenser tubes and plates are made from brass, bronze and cupronickel in coal-fired power stations within the energy industry. Solar heaters are also often made of copper tube. Different kinds of containers for holding corrosive mediums, pipe systems, filters, pumps and valves, all sorts of evaporators and condensers, while heat exchangers are made from copper and copper alloy in the petrochemical industry. For its corrosion resistance and as soluble copper ions in water it has an antiseptic effect which could protect marine organisms from being polluted; copper and its alloys have been widely used in desalinators and offshore drilling platforms and other undersea installations.

D. Applications in transportation industry

Copper alloy is used in the shipping industry — including aluminium bronze, manganese bronze, aluminium, brass, gun metal (bronze), tin, zinc, copper and nickel copper alloy (monel), which are all standard materials in shipbuilding. Copper and copper alloy in warships and commercial ships are used commonly to make aluminium bronze propellers, bolts, rivets, condenser pipes, copper coated paint, etc. Copper and copper alloy in the

automotive industry are mainly used for radiators, braking systems, hydraulic equipment, gears, bearings, brake linings, power distribution and power systems, gaskets and all kinds of joints, fittings and accessories, etc. On trains, the motors, rectifiers and controls, brakes, electrics and signal systems also rely on copper and its alloys. In addition, railway electrification is a big source of demand for copper and its alloys. The wiring, hydraulic pneumatics and cooling systems of planes all need to use copper. Bearing retainers and gear bearings utilise aluminium bronze pipe, and navigation instruments are made from diamagnetic copper alloy.

E. Applications in mechanism and metallurgy industries

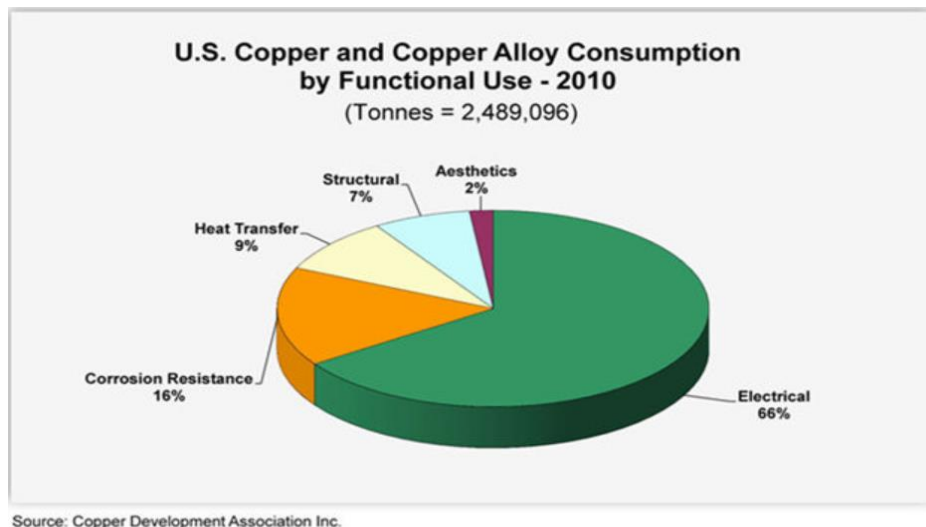
All kinds of transmission parts and fixed parts, such as cylinder liners, gears, fittings, fasteners, twisting, etc., need to use copper or copper alloy for antifriction and lubrication. Also, a key part of metallurgical equipment in continuous casting technology – crystallizer is mostly made of chromium copper and silver copper or other copper alloys, which have high strength and conductivity. And electric vacuum arc furnaces in metallurgy and electroslag furnace water-cooled crucibles are made of copper pipe, while all kinds of induction coil are made of copper or copper winding. Alloy additive copper is an important additive element in steel and aluminium alloy. By adding a small amount of copper to low alloy structural steel, the hardness of steel and its corrosion resistance in air and water can be improved. The addition of copper in corrosion resistant cast iron and stainless steel means their corrosion resistance can be further improved.

F. Applications in light industry

Heat exchangers in air conditioners, clock movements, gridding cloth of paper machines, copper plate printing, fermentation tank lining, distillation pots and architectural decoration components, etc. are all manufactured by using copper and its alloys.

G. Applications in new industries and high-tech fields

Uses such as coating of superconducting alloys, containers and pipelines of cryogenic medium, cooling linings of rocket engines and magnet windings in high-energy accelerators, etc.



Risks

Commodity Price Risk

Most of the operating costs such as mining, processing, transportation costs etc. are independent of the final selling price of the company's products. This creates a significant level of operating leverage and a small change in the commodity's selling price can have a relatively higher impact on the company's operating profits. A substantial fall in commodity prices can have a material adverse impact on the company's revenues, profitability and debt repayment ability.

Political and Country Specific risk

Political instability is a big risk when investing in companies operating in Africa. Risks include corruption, possibility of restriction on investment, capital, or trade etc.

Risk of Chinese Slowdown

The company sells almost all its products to customers in China. Globally, China is the largest consumer of cobalt and copper. Any slowdown in the growth of the Chinese economy, especially the construction and infrastructure sectors, will have a sizeable impact on demand as well as prices of products.

Foreign Exchange Risk

The reporting currency of the company is US\$ and the functional currencies of subsidiaries of the Group are mainly US\$ and RMB. It is also exposed to currency change in HK\$, ZAR, CDF and ZMW. Given the exchange rate peg between HK\$ and US\$, it is not exposed to significant exchange rate risk of HK\$. Mainly the assets are located in the DRC, Zambia, South Africa and China and is exposed to fluctuation in CDF, ZMW, ZAR and RMB. However, the company monitors its exposure to foreign currency exchange risk on an on-going basis.

Company Description

Jinchuan International is Jinchuan Group's flagship for undertaking overseas mining and mineral resources operations. This includes Metorex (Proprietary) Limited ("Metorex"), a mid-tier South African mining company with operating mines and active development projects located in Zambia and the DRC. Formerly listed on the Johannesburg and London Stock Exchange, Metorex was acquired by Jinchuan Group in January 2012, and became part of Jinchuan International in November 2013. Jinchuan International is actively engaged in mineral and metal products trading (particularly copper, cobalt and nickel) with traders. Jinchuan International actively explores possible acquisitions of mining and mineral resources assets which will enhance value to Jinchuan International and its shareholders.

Mineral & Metal Trading

As part of its strategy to expand business in the mining and minerals sector, Jinchuan International engages in international trading of selected raw materials such as copper concentrates, copper blister, cobalt and other related raw materials.

The minerals products that are produced in the DRC are mainly sold to Jinchuan Group under arm's length commercial contracts. To diversify the client base of the company, one of the wholly owned subsidiaries of Jinchuan International has set up a joint venture with strategic partner in China which aims to create extra synergies to the company's development. This move has helped in augmenting and consolidating company's revenue base along with increased accessibility and presence in the international metals and mining market. In the future, the company expects to continuously grow their business volume and diversify into new products and new markets as conditions permit.

Mining Operations

Jinchuan Group International Resources Co Ltd. and its subsidiaries are principally engaged in (i) the mining of metals, primarily copper and cobalt, in the DRC and Zambia; and (ii) the trading of mineral and metal products in China and Hong Kong. The company has majority control over two operating mines in Africa which are Ruashi Mine, a copper and cobalt mine located in Lubumbashi, the DRC and Kinsenda Mine, a copper mine located in Katanga Province, the DRC and one mine under financial lease which is Chibuluma South Mine (including Chifupu Deposit), a copper mine located in Zambia.

Jinchuan International also owns one constructing project (Musonoi project) and one exploration project (Lubembe project) in the DRC, which serve as reliable resource protection for the company's continued developments in the future.

Mine under financial lease - Chibuluma South Mine (including Chifupu Deposit)

With the Group's assets located in Zambia approaching end of mine life, the further decline in ore grade and plant recovery rate in the first half of 2020 has led to the Group's revisit of the mine's operation and the Group decided to suspend the operations at Chibuluma and place the mine in care and maintenance from July 2020. In the second half of 2020, the Group evaluated the options available for realising the long term value of the mine. With international copper price recovered to pre-pandemic level in the fourth quarter of 2020, the Group opted to lease out to an independent third party for a 5-year term lease in respect of Chifupu Deposit and the plant and equipment in order to realise the remaining value of the Chibuluma mining assets. The total lease payment payable under the lease is US\$6,200,000, payable in instalments over a two year period starting from the date of signing of the lease agreement. In addition to the lease payment, the Group will also be entitled to a monthly royalty payment calculated based on the volume of copper ore extracted and sold from Chifupu Deposit and the prevailing market copper price. The lessee has the priority to renew upon the expiry of the lease agreement. The transaction could provide an opportunity for the Group to generate a stable rental income and minimise the Group's exposure to extra capital expenditure and operating costs and risk associated therewith.

Chibuluma South Mine (including Chifupu Deposit)

Chibuluma南礦場(包括Chifupu礦床)



Development Project

Musonoi Project

- Location: North of Kolwezi town, Lualaba Province, the DRC
- Ownership: JCI (75%), Gécamines SA (25%)
- Progress: Construction stage
- LoM: 19 years according to ENFI Feasibility Study (2018)
- Resources#: 1,085kt Cu, 363kt Co
- Reserves#: 594kt Cu, 174kt Co#figures as of 31 December 2020.

Musonoi Project is a brownfield copper and cobalt project, located on the northern outskirts of Kolwezi, approximately 360 kms Northwest of Lubumbashi city, capital of Haut-Katanga Province of the DRC. In 2018, the ENFI Feasibility Study on optimization studies and detailed engineering works was completed and first reserves were declared for Musonoi Project. Musonoi Project has high grade of cobalt content with reserve ore grade of 0.9%. Gécamines SA approved the ENFI Feasibility Study 2018 in May 2019. A detailed evaluation of the orebody indicates that the mineral resources are SAMREC Code compliant, with sufficient size to support a mining project. The studies indicated that the orebody occurs on the eastern end of the Dilala Syncline and is a blind deposit with high-grade mineralization starting at between 50m and 100m below surface. The orebody has a strike length of 600m to 700m and is open ended at depth below 600m from surface and will be mined from underground using a long hole stopping mining method and a cut and fill with post pillars mining method. The project is now in the construction phase. The main shaft construction commenced in December 2019 and the main ramp construction (0m level to 140m level) commenced in January 2020. The Front-End Engineering Design (FEED) is in progress by ENFI and the Jinchuan R&E will review and supervise the work. Works on the Ventilation Shafts 1, 2 and 3 commenced in May 2020. Contractors were appointed for the construction of office buildings, living camp, warehouse and core shed, and works commenced in May 2020. The surface explosive magazine was completed during the period. The electricity supply feasibility study was completed in May 2020 and was approved by SNEL in October 2020. Up till 31st December 2020, a total of 126 diamond drill holes have been drilled on the Musonoi Project area totalling 35,876m in length, of which 100 drill holes covering 31,112m have been drilled in the Dilala East area while 26 drill holes covering 4,754m in the Dilala West area.

DEVELOPMENT PROJECT
Musonoi Project

開發項目
Musonoi項目



Exploration Project

Lubembe Project

- Location: Haut-Katanga Province, the DRC
- Ownership: JCI (77%), Sodimico (23%)
- Progress: mining license renewed in 2016 and extended for a further 15 years to 2032. A pre-feasibility study was completed in 2018 and is currently under review.
- Resources#: 1,800kt Cu

The company started an infill drilling program at Lubembe to provide further information to be incorporated with the prefeasibility study for the evaluation of possible processing methodologies. Hydrogeological and engineering geology study will commence in 2021 to enhance geological understanding at Lubembe.



Management Bio

Mr. Zhang Youda - Chairman

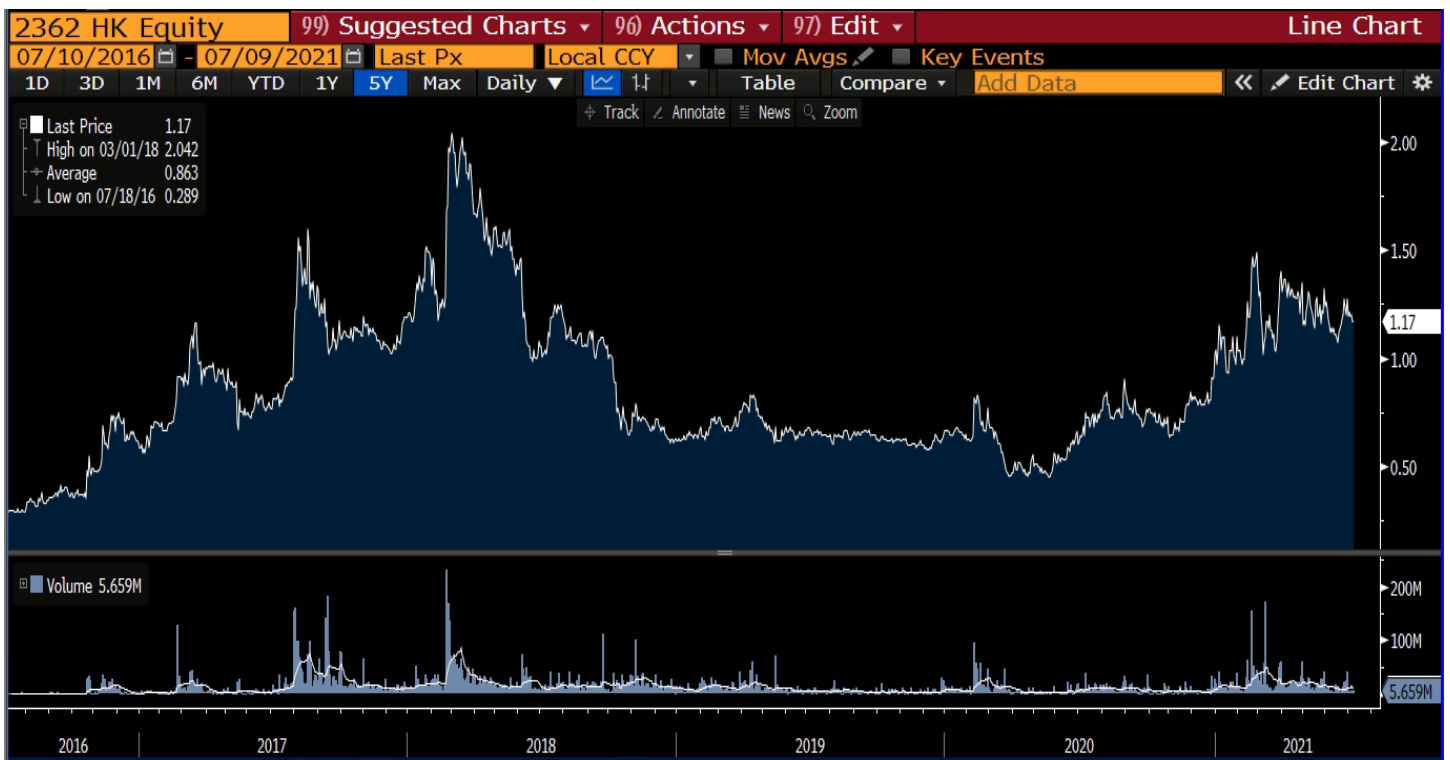
Mr. Zhang Youda, aged 47, has been the non-executive Director since August 2017.

Mr. Zhang obtained a bachelor's degree from Lanzhou University of Technology in Gansu province, the People's Republic of China (the "PRC") in July 2004, majoring in accounting, and a master's degree from Lanzhou University in Gansu Province, China in June 2010, majoring in business administration. He is a senior accountant, senior economist, leading talent in accounting both in Gansu province and in China at large, expert consultant of the Internal Standards-Controlling Committee of China's Ministry of Finance, an associate member of The Association of International Accountants (AIA) and a Chartered Global Management Accountant (CGMA). He is currently the vice president and chief financial officer of Jinchuan Group, the controlling shareholder of the Company, and a director of Gansu Province Materials & Industry Group. He was the finance manager and the cost branch manager of financial departments of several business units, the finance manager of construction site of the Pakistan 35km Highway Project, and the deputy general manager and general manager of finance department of Jinchuan Group. He is a finance professional with extensive operational management experience in financial management. He currently serves as a non-executive director of Bank of Gansu Co., Ltd., a company listed on the main board of the Stock Exchange (Stock Code: 2139).

Gao Tianpeng - Chief Executive Officer

Mr. Gao, aged 49, BEng and EMBA, is the general manager of International Department of Resources Capital of Jinchuan Group and vice general manager of China Jinchuan Investment Holding Limited. During his 23-year career in Jinchuan, he has been working as the non-executive Director of the Company for the period from 30 November 2010 to 21 March 2014, and overseeing various matters including cost management, financial management, international trading management, risk management, foreign exchange business, capital 4 operation and equity division reform of Jinchuan Group and daily affairs of the board of directors. He was also a manager of the Cost Branch of Financial Department of Jinchuan Group, manager of Financial Department of International Trading, general manager of Risk Management Department, general manager of Capital Operation Department, director of Metorex successively. He has extensive experience in financial cost management, risk management and asset management.

5-year Price Chart



Income Statement (US\$ million)	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E	CAGR(2020-25)
Revenue	470.7	364.8	549.2	1,400.0	1,246.9	664.6	1,034.6	1,344.5	2,376.2	2,642.6	2,941.5	34.6%
<i>y/y</i>		-22.5%	50.5%	154.9%	-10.9%	-46.7%	55.7%	30.0%	76.7%	11.2%	11.3%	
Cost of Sales	-462.6	-362.5	-433.0	-1,201.1	-1,157.8	-577.3	-900.1	-1,169.8	-2,043.5	-2,272.6	-2,529.7	34.4%
<i>as a % of sales</i>	98.3%	99.4%	78.8%	85.8%	92.9%	86.9%	87.0%	87.0%	86.0%	86.0%	86.0%	
Gross Profit	8.1	2.4	116.2	198.8	89.1	87.3	134.5	174.8	332.7	370.0	411.8	
<i>Gross Profit Margin</i>	1.71%	0.65%	21.15%	14.20%	7.14%	13.14%	13.00%	13.00%	14.00%	14.00%	14.00%	
EBITDA	6.28	13.58	102.24	214.20	116.2	140.4	227.6	295.8	522.8	581.4	647.1	
<i>EBITDA Margin</i>	1.3%	3.7%	18.6%	15.3%	9.3%	21.1%	22.0%	22.0%	22.0%	22.0%	22.0%	
Administrative selling and distribution costs	-55.4	-44.4	-51.8	-79.8	-73.1	-31.2	-51.7	-67.2	-142.6	-158.6	-176.5	
<i>as a % of sales</i>	11.8%	12.2%	9.4%	5.7%	5.9%	4.7%	5.0%	5.0%	6.0%	6.0%	6.0%	
Operating Income	-47.3	-42.0	64.3	119.1	16.0	56.1	82.8	107.6	190.1	211.4	235.3	
<i>y/y</i>		-11.2%	-253.1%	85.1%	-86.6%	251.5%	47.5%	30.0%	76.7%	11.2%	11.3%	
<i>Operating margin (%)</i>	-10.0%	-11.5%	11.7%	8.5%	1.3%	8.4%	8.0%	8.0%	8.0%	8.0%	8.0%	
Finance Costs	-6.6	-6.8	-8.7	-24.1	-20.7	-14.1	-13.6	-14.7	-15.7	-16.8	-16.8	
Finance Income	0.4	0.7	1.0	2.0	1.8	1.3	1.1	2.5	4.6	6.0	8.8	
<i>interest rate</i>		1%	1%	3%	2%	1%	1%	2%	2%	2%	2%	
Equity in (losses)/income of affiliates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other recurring (expenses)/income	-3.9	-2.3	-12.5	-1.1	-0.2	-5.2	0.0	0.0	0.0	0.0	0.0	
Amortization of intangibles	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Impairment Loss(-)/Reversal (+)	-312.3	53.7	17.1	53.5	9.7	27.0	0.0	0.0	0.0	0.0	0.0	
Other non recurring (expenses) income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Pretax Income (reported)	-369.6	3.3	61.2	149.4	6.4	64.2	70.2	95.4	179.0	200.6	227.4	28.8%
<i>y/y</i>		-100.9%	1735.5%	144.2%	-95.7%	896.4%	9.3%	35.9%	87.6%	12.1%	13.3%	
Pretax Income (adjusted)	-57.4	-50.4	44.1	95.9	-3.2	38.2	70.2	95.4	179.0	200.6	227.4	42.9%
<i>y/y</i>		-12.1%	-187.5%	117.5%	-103.3%	-1299.2%	84.0%	35.9%	87.6%	12.1%	13.4%	
- Income Tax Expense	13.8	3.0	-7.8	-54.8	6.7	-22.4	-10.5	-14.3	-26.8	-30.1	-34.1	
<i>effective tax rate (%)</i>	3.7%	-89.8%	12.7%	36.7%	-103.9%	34.8%	15.0%	15.0%	15.0%	15.0%	15.0%	
- Minority Interests	64.049	-2.033	11.811	27.2	4.4	12.6	0.0	0.0	0.0	0.0	0.0	
Income Before XO Items	-291.8	8.4	41.6	94.6	13.1	41.9	59.7	81.1	152.2	170.5	193.3	
<i>y/y</i>		-102.9%	398.0%	127.3%	-86.1%	218.7%	42.4%	36.0%	87.6%	12.1%	13.3%	
- Extraordinary Loss Net of Tax	0.0	0.3	0.0	-1.3	-0.5	2.8	0.0	0.0	0.0	0.0	0.0	
Net Income (reported)	-291.7	8.6	41.6	66.2	8.2	31.5	59.7	81.1	152.2	170.5	193.3	43.8%
<i>y/y</i>		-103.0%	382.4%	59.0%	-87.5%	282.0%	89.5%	36.0%	87.6%	12.1%	13.3%	
Exceptional (L)G	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Net Income (adjusted)	20.5	-93.8	46.7	14.0	7.9	28.4	59.7	81.1	152.1	170.5	193.3	46.8%
<i>y/y</i>		-557.5%	-149.8%	-70.1%	-43.4%	259.3%	110.4%	36.0%	87.6%	12.1%	13.4%	
Basic EPS (reported)	-0.0671	0.0020	0.0089	0.0071	0.0007	0.0025	0.0047	0.0064	0.0121	0.0135	0.0153	43.8%
Basic EPS (adjusted)	0.0047	-0.0216	0.0100	0.0015	0.0006	0.0022	0.0047	0.0064	0.0121	0.0135	0.0153	46.8%
Basic Weighted Avg Shares	4,350.75	4,350.75	4,682.90	9,286.38	12,609.87	12,609.87	12,609.87	12,609.87	12,609.87	12,609.87	12,609.87	
Diluted EPS (reported)	-0.0671	0.0007	0.0032	0.0050	0.0006	0.0024	0.0045	0.0061	0.0114	0.0128	0.0145	43.8%
<i>y/y</i>		-101.0%	370.2%	57.2%	-87.5%	282.0%	89.5%	36.0%	87.6%	12.1%	13.3%	
Diluted EPS (adjusted)	0.0047	-0.0073	0.0036	0.0010	0.0006	0.0021	0.0045	0.0061	0.0114	0.0128	0.0145	46.8%
<i>y/y</i>		-255.3%	-148.6%	-70.5%	-43.4%	259.3%	110.4%	36.0%	87.6%	12.1%	13.4%	
Diluted Weighted Avg Shares	4,350.75	12,816.87	13,149.02	13,299.87	13,299.87	13,299.87	13,299.87	13,299.87	13,299.87	13,299.87	13,299.87	

Balance Sheet (US\$ million)	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E
Assets											
+ Cash & Near Cash Items	52.7	96.6	75.2	78.9	45.2	108.3	276.0	382.3	452.1	598.3	771.2
+ Short-Term Investments	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Accounts & Notes Receivable	118.8	104.4	146.8	212.1	156.5	128.1	141.7	165.8	279.9	311.3	346.5
+ Inventories	103.0	109.1	172.1	186.1	202.0	191.4	127.6	147.3	247.4	275.1	306.2
+ Other Current Assets	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Total Current Assets	274.4	313.8	394.1	477.1	403.9	427.8	545.3	695.5	979.4	1,184.7	1,424.0
+ Mineral Rights	421.2	478.0	488.1	478.1	489.4	501.1	501.1	501.1	501.1	501.1	501.1
+ Gross Fixed Assets	1,086.3	1,131.4	1,157.828	1,262.3	1,296.7	1,351.5	1,392.8	1,433.2	1,480.7	1,533.6	1,577.7
- Accumulated Depreciation	-396.4	-443.3	-486.8	-519.5	-607.8	-697.5	-769.9	-837.1	-896.5	-956.0	-1,014.8
+ Net Fixed Assets	689.9	688.1	671.1	742.8	688.9	705.3	622.9	596.0	584.2	577.6	562.8
+ Exploration and Evaluation Assets	172.7	181.6	212.3	141.0	146.2	119.7	119.7	119.7	119.7	119.7	119.7
+ Other Long-Term Assets	22.2	18.6	16.6	14.2	16.1	14.4	14.4	14.4	14.4	14.4	14.4
+ Goodwill & other Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Long-Term Assets	1,306.0	1,366.3	1,388.1	1,376.1	1,340.5	1,340.5	1,258.2	1,231.3	1,219.4	1,212.8	1,198.1
Total Assets	1,580.4	1,680.1	1,782.1	1,853.2	1,744.4	1,768.3	1,803.4	1,926.7	2,198.8	2,397.5	2,622.1
Liabilities & Shareholders' Equity											
+ Accounts Payable	92.9	71.8	87.8	74.0	70.6	95.4	70.9	110.5	227.9	253.4	282.1
+ Short-Term Borrowings	16.4	83.3	133.9	165.5	28.4	30.7	30.7	30.7	30.7	30.7	30.7
+ Other Short-Term Liabilities	13.6	10.8	138.6	178.9	143.3	152.6	152.6	152.6	152.6	152.6	152.6
Total Current Liabilities	122.9	165.9	360.3	418.4	242.3	278.8	254.2	293.8	411.2	436.7	465.4
+ Long-Term Borrowings	257.0	311.2	231.4	123.8	209.0	179.0	179.0	179.0	179.0	179.0	179.0
+ Long Term Provisions	26.2	27.3	28.8	32.1	33.1	30.2	30.2	30.2	30.2	30.2	30.2
+ Amount Due to fellow subsidiary & intermediate holding company	120.0	120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Other Long-Term Liabilities	293.3	288.1	291.2	300.2	270.2	263.4	263.4	263.4	263.4	263.4	263.4
Total Liabilities	819.4	912.6	911.6	874.4	754.5	751.4	726.8	766.5	883.8	909.4	938.0
+ Perpetual subordinated convertible securities	1,089.1	1,089.1	1,089.1	88.5	88.5	88.5	88.5	88.5	88.5	88.5	88.5
+ Share Capital & APIC	5.6	5.6	6.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
+ Retained Earnings & Other Equity	-402.7	-394.1	-303.6	753.2	760.0	789.8	849.5	933.1	1,087.9	1,261.0	1,457.0
Total Shareholders' Equity	692.0	700.6	791.7	857.8	864.6	894.5	954.1	1,037.8	1,192.5	1,365.6	1,561.6
+ Minority Interest	69.0	67.0	78.8	121.0	125.2	122.5	122.5	122.5	122.5	122.5	122.5
Total Liabilities & Equity	1,580.4	1,680.1	1,782.1	1,853.2	1,744.4	1,768.3	1,803.4	1,926.7	2,198.8	2,397.5	2,622.1

Cash Flow (US\$ million)	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E
+ Profit before tax-Cash Tax Paid	-376.7	-0.5	58.6	139.0	-56.2	44.6	59.7	84.7	155.8	174.2	197.1
+ Depreciation & Amortization	57.5	57.9	50.5	96.2	100.4	89.7	72.4	67.2	59.4	59.5	58.8
+ Other Non-Cash Adjustments	324.7	-43.4	-6.4	-7.3	10.8	-8.3	0.0	0.0	0.0	0.0	0.0
+ Changes in Working Capital	17.1	-14.3	-80.9	-115.1	32.9	47.2	174.3	-4.2	-96.9	-33.6	-37.7
Cash From Operating Activities	22.6	-0.3	21.7	112.8	87.9	173.2	306.4	147.7	118.4	200.1	218.2
+ Disposal of Fixed Assets	0.022	0.365	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Capital Expenditures	-111.7	-55.5	-43.6	-33.1	-39.5	-54.8	-41.4	-40.3	-47.5	-52.9	-44.1
+ Increase in Investments	0	0	0.0	0.0	0.0	-34.5	0.0	0.0	0.0	0.0	0.0
+ Decrease in Investments	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Other Investing Activities	4.354	1.47	1.4	3.8	-9.6	1.3	0.0	0.0	0.0	0.0	0.0
Cash From Investing Activities	-107.3	-53.6	-42.2	-29.3	-49.1	-88.0	-41.4	-40.3	-47.5	-52.9	-44.1
+ Dividends Paid	0.0	0.0	0.0	0.0	-1.6	-1.6	0.0	0.0	0.0	0.0	0.0
+ Change in Short-Term Borrowings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Increase in Long-Term Borrowing	134.4	207.8	3.7	51.5	114.4	37.3	50.0	0.0	0.0	0.0	0.0
+ Decrease in Long-term Borrowing	-47.9	-82.8	-77.5	-115.8	-129.4	-64.9	-50.0	0.0	0.0	0.0	0.0
+ Increase in Capital Stocks	0.0	0.0	49.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Decrease in Capital Stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Other Financing Activities	-14.5	-22.0	23.6	-15.1	-56.4	-28.6	0.0	0.0	0.0	0.0	0.0
Cash from Financing Activities	72.0	102.9	-0.7	-79.4	-73.1	-57.9	0.0	0.0	0.0	0.0	0.0
Effect of Exchange Rate Changes	0.0	0.0	0.0	-0.3	-0.4	2.3	0.0	0.0	0.0	0.0	0.0
Net Changes in Cash	-12.7	49.0	-21.2	3.8	-34.6	29.6	265.0	107.4	70.8	147.3	174.1
Opening cash	60.1	47.4	96.4	75.2	78.9	44.3	73.8	338.9	446.3	517.1	664.4
Closing cash	47.4	96.4	75.2	78.9	44.3	73.8	338.9	446.3	517.1	664.4	838.5

Ratio Analysis	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E	
Growth Ratios %											
Revenue	-22.5%	50.5%	154.9%	-10.9%	-46.7%	55.7%	30.0%	76.7%	11.2%	11.3%	
EBITDA	116.2%	652.9%	109.5%	-45.8%	20.9%	62.1%	30.0%	76.7%	11.2%	11.3%	
Operating Income	-11.2%	-253.1%	85.1%	-86.6%	251.5%	47.5%	30.0%	76.7%	11.2%	11.3%	
Net income reported	-103.0%	382.4%	59.0%	-87.5%	282.0%	89.5%	42.0%	83.9%	11.8%	13.1%	
Net income adjusted	-557.5%	-149.8%	-70.1%	-43.4%	259.3%	110.4%	42.0%	83.9%	11.8%	13.1%	
Diluted EPS reported	-101.0%	370.2%	57.2%	-87.5%	282.0%	89.5%	42.0%	83.9%	11.8%	13.1%	
Diluted EPS adjusted	-255%	-149%	-70%	-43%	259%	110%	42%	84%	12%	13%	
Dividend per share	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Accounts Receivables	-12.1%	40.6%	44.5%	-26.2%	-18.2%	10.7%	17.0%	68.9%	11.2%	11.3%	
Inventory	5.9%	57.8%	8.1%	8.5%	-5.2%	-33.4%	15.5%	67.8%	11.2%	11.3%	
Fixed Assets	-0.3%	-2.5%	10.7%	-7.3%	2.4%	-11.7%	-4.3%	-2.0%	-1.1%	-2.5%	
Total Assets	6.3%	6.1%	4.0%	-5.9%	1.4%	5.5%	6.7%	13.7%	8.8%	9.2%	
Working Capital	13.5%	-29.3%	57.1%	-0.4%	-50.6%	-35.8%	9.1%	193.5%	22.9%	20.9%	
Accounts Payable	-22.8%	22.3%	-15.8%	-4.5%	35.1%	-25.8%	56.0%	106.2%	11.2%	11.3%	
Short Term Debt	407.0%	60.7%	23.6%	-82.9%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
Long Term Debt	21.1%	-25.6%	-46.5%	68.9%	-14.4%	0.0%	0.0%	0.0%	0.0%	0.0%	
Total Equity	1.2%	13.0%	8.4%	0.8%	3.5%	6.7%	8.9%	15.0%	14.6%	14.4%	
Cash From Operations	-101.4%	-6818.9%	419.6%	-22.0%	97.0%	76.9%	-51.8%	-19.9%	69.1%	9.1%	
Capital Expenditure	-50.3%	-21.3%	-24.1%	-19.4%	38.5%	-24.5%	-2.5%	17.8%	11.2%	-16.5%	
Free Cash Flow	-37.4%	-60.7%	-462.9%	-39.2%	144.7%	123.8%	-59.5%	-34.1%	107.9%	18.2%	
Per Share Data (US\$)	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E
Basic EPS (adjusted)	0.0047	-0.0216	0.0100	0.0015	0.0006	0.0022	0.0047	0.0067	0.0124	0.0138	0.0156
Diluted EPS (adjusted)	0.0047	-0.0073	0.0036	0.0010	0.0006	0.0021	0.0045	0.0064	0.0117	0.0131	0.0148
Dividend per share (DPS)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Book Value per share (BVPS)	0.1590	0.0547	0.0602	0.0645	0.0650	0.0673	0.0717	0.0781	0.0898	0.1029	0.1177
Margins (%)											
Operating Margin	-10.0%	-11.5%	11.7%	8.5%	1.3%	8.4%	8.0%	8.0%	8.0%	8.0%	
EBITDA Margin	1.3%	3.7%	18.6%	15.3%	9.3%	21.1%	22.0%	22.0%	22.0%	22.0%	
Pre-Tax Margin (adjusted)	-12.2%	-13.8%	8.0%	6.9%	-0.3%	5.7%	6.8%	7.4%	7.7%	7.8%	
Net Income Margin (adjusted)	4.4%	-25.7%	8.5%	1.0%	0.6%	4.3%	5.8%	6.3%	6.6%	6.6%	
Return Ratios											
Dupont ROE (%)	3.0%	-13.4%	5.9%	1.6%	0.9%	3.2%	6.3%	8.2%	13.0%	12.7%	12.6%
Margin (%)	4.4%	-25.7%	8.5%	1.0%	0.6%	4.3%	5.8%	6.3%	6.6%	6.6%	
Turnover (x)	0.3	0.2	0.3	0.8	0.7	0.4	0.6	0.7	1.0	1.1	
Leverage (x)	2.3	2.4	2.3	2.2	2.0	2.0	2.0	1.9	1.9	1.8	
Return on Assets	1.3%	-5.6%	2.6%	0.8%	0.5%	1.6%	3.2%	4.3%	6.9%	7.1%	
Return on Capital Employed	-3.2%	-2.8%	4.5%	8.3%	1.1%	3.8%	5.1%	6.3%	10.3%	10.4%	
Return on Invested Capital	2.1%	-8.6%	4.0%	1.2%	0.7%	2.6%	5.1%	6.8%	11.1%	11.0%	
FCF Calculation											
Op. cash (US\$)	22.6	-0.3	21.7	112.8	87.9	173.2	306.4	147.7	118.4	200.1	
capex	-111.7	-55.5	-43.6	-33.1	-39.5	-54.8	-41.4	-40.3	-47.5	-52.9	
FCF (US\$ million)	-89.1	-55.8	-21.9	79.6	48.4	118.4	265.0	107.4	70.8	147.3	
FCF margin (%)	-18.9%	-15.3%	-4.0%	5.7%	3.9%	17.8%	25.6%	8.0%	3.0%	5.6%	
FCF per share	-0.0205	-0.0044	-0.0017	0.0060	0.0036	0.0089	0.0199	0.0081	0.0053	0.0111	
Price/FCF per share	-7.28	-34.24	-89.34	24.90	40.97	16.74	7.48	18.46	27.99	13.46	
FCF Yield	-13.7%	-2.9%	-1.1%	4.0%	2.4%	6.0%	13.4%	5.4%	3.6%	7.4%	
Net Cash calculation											
Cash + short term investments	52.7	100.3	75.2	78.9	45.2	108.3	338.9	446.3	517.1	664.4	
Less: long term debt + ST debt	-273.4	-394.6	-365.3	-289.3	-237.4	-209.7	-209.7	-209.7	-209.7	-209.7	
Net Cash	-220.8	-294.2	-290.1	-210.4	-192.2	-101.4	129.1	236.5	307.4	454.6	
Net cash per share	-0.0507	-0.0230	-0.0221	-0.0158	-0.0144	-0.0076	0.0097	0.0178	0.0231	0.0342	

Valuation ratio's	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E
P/B	0.97	1.75	1.31	2.31	2.29	2.22	2.08	1.91	1.66	1.45	1.27
P/E	32.86	-13.05	22.14	142.08	251.20	69.92	33.23	23.40	12.72	11.38	10.06
P/S	1.43	1.14	0.67	1.34	1.51	2.83	1.82	1.40	0.79	0.71	0.64
EV/sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EV/EBITDA	0.00	51.92	7.14	8.38	11.53	9.35	9.24	7.11	4.02	3.62	3.25
EV/EBIT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EV/FCF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend Yield (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Div payout on FCF	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Working Capital Ratios	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021E	CY 2022E	CY 2023E	CY 2024E	CY 2025E
Receivable days (DSO)		112	83	47	54	78	50	45	43	43	43
Inventory days (DIO)		106	93	47	57	108	45	40	38	38	38
Payables days (DPO)		82	53	21	21	46	25	30	35	35	35
Current ratio	2.2	1.9	1.1	1.1	1.7	1.5	2.4	2.6	2.5	2.9	3.2
Quick ratio	1.4	1.2	0.6	0.7	0.8	0.8	1.9	2.1	1.9	2.2	2.5
Working capital	115	131	93	145	145	71	46	50	147	180	218
Cash conversion cycle		135	124	72	90	141	70	55	46	46	46

Leverage Ratios

Debt / equity	40%	56%	46%	34%	27%	23%	22%	20%	18%	15%	13%
Net cash (debt) / equity	-32%	-42%	-37%	-25%	-22%	-11%	14%	23%	26%	33%	40%
Net cash (debt) / mkt cap	-33%	-71%	-79%	-15%	-19%	-10%	7%	13%	16%	24%	33%
Net cash (debt) / capital	-23%	-27%	-25%	-18%	-17%	-9%	11%	19%	22%	29%	35%

Coverage Ratios

Interest coverage [EBIT]	-7.7	-6.8	8.4	5.4	0.8	4.4	6.6	13.6	27.9	32.8	67.4
Interest coverage [Opt. CF]	3.7	-0.1	2.8	5.1	4.6	13.6	24.4	18.7	17.4	31.1	62.5

Earnings Quality Ratios

Net operating assets/liab [NOA]	982	1062	1161	1189	1182	1118	1010	988	1073	1100	1123
Average NOA		1022	1111	1175	1186	1150	1064	999	1030	1086	1111
B/S accrual ratio		0.08	0.09	0.02	-0.01	-0.06	-0.10	-0.02	0.08	0.02	0.02
CF accrual ratio		-0.06	0.07	-0.01	-0.03	-0.09	-0.19	-0.01	0.08	-0.02	-0.02

Enterprise Value Calculation	CY 2015	CY 2016	CY 2017	CY 2018	CY 2019	Current
Market Cap.	415	368	1,426	1,009	996	1,880
+ Minority Interest	69	67	79	121	125	122
+Total Debt (ST & LT Debt)	273	395	365	289	237	210
- Cash & Equivalents	53	100	75	79	45	108
Enterprise Value	705	730	1,794	1,340	1,313	2,103

DCF model	2015	2016	2017	2018	2019	2020	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
(in US\$ million)																
EBIT	-47	-42	64	119	16	56	83	108	190	211	235	262	286	303	317	329
% growth	0%	-11%	-253%	85%	-87%	252%	48%	30%	77%	11%	11%	11%	9%	6%	5%	4%
Taxes @	3.7%	-89.8%	12.7%	36.7%	-103.9%	34.8%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%
EBIAT	-46	-80	56	75	33	37	70	91	162	180	200	222	243	257	269	279
% growth	0%	75%	-170%	34%	-57%	12%	92%	30%	77%	11%	11%	11%	9%	6%	5%	4%
+ D&A	57	58	50	96	100	90	72	67	59	59	59	63	66	68	70	72
- Capital expenditures	-112	-55	-44	-33	-40	-55	-41	-40	-48	-53	-44	-24	-25	-25	-25	-25
- Change in net WC	17	-14	-81	-115	33	47	174	-4	-97	-34	-38	-20	-17	-15	-13	-10
Free Cash Flow to Firm	-83	-92	-18	23	126	119	276	114	77	153	177	242	267	286	301	316
FCY y/y growth		11%	-80%	-230%	441%	-6%	132%	-59%	-33%	99%	16%	36%	11%	7%	5%	5%

Value per Share

Terminal Growth	Cost of capital				
	6.6%	7.6%	8.6%	9.6%	10.6%
2.5%	3.40	2.66	2.16	1.81	1.54
2.8%	3.62	2.78	2.24	1.86	1.58
3.0%	3.78	2.88	2.30	1.90	1.61
3.3%	4.06	3.03	2.39	1.96	1.65
3.5%	4.28	3.15	2.46	2.01	1.68

WACC	8.6%
PV of Free Cash Flow	1,365
PV of Terminal Value	2,553
Add: Net Cash	-101
Less: Non-Controlling Interest	-121
Total Equity Value	3,696
Shares outstanding	12,609.87
DCF value	2.30

USD to HKD 7.84

All Values are in mn US\$ except stock price which is in HK\$

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