Q4 2019 Operational Update

Marketing Communication (Connected Research)

Central Asia Metals#

BBG Ticker: CAML LN *Price: 230p* *Mkt Cap: £404m* **BUY**

Year to December	Revenue (US$'000)	EBITDA (US$'000)	Net Income (US$'000)	EPS (US$)	DPS (GBp)	EV/Sales (x)	EV/EBITDA (x)	P/E (x)	Div Yield (%)
2017A	102,123	66,485	36,315	0.30	16.50	5.0	8.8	13.9	4.6%
2018A	192,334	125,308	48,024	0.31	14.50	2.6	4.6	10.5	7.8%
2019F	167,353	109,935	51,113	0.29	14.50	3.0	5.3	9.9	6.3%
2020F	172,273	103,477	50,002	0.28	14.50	2.9	5.6	10.1	6.3%

***SOURCE**: Company Data, VSA Capital Research.*

Q4 2019 Operations Update

Full Year Copper and Zinc Beat Estimates

Central Asia Metals (CAML LN) announced strong full year production numbers beating our estimates on full year copper and zinc production while lead production was in line with our estimates. Q4 2019 copper production of 3.1kt was down 7% YoY and 22% QoQ following a strong Q3 2019 resulting in full year output of 13.8kt, down 2% YoY with Kounrad now in its new operational phase. Zinc output of 5.7kt was down 2% YoY and 8% QoQ as zinc grades were modestly lower at 3.23% versus a full year average of 3.29% offsetting increased throughput. However, given a strong 9mo19 performance full year zinc output of 22.98kt was up 2% YoY and 2% ahead of our estimate at the top of the guidance range. Q4 2019 lead output of 7.48kt was up 1% YoY and 2% QoQ owing to stronger grades and recoveries resulting in full year output of 29.2kt which was in line with our forecast.

Sasa Mine Life Review Provides New Catalyst

The announcement of the results of the Sasa "Life of Mine Review" provides CAML with a new series of catalysts independent of commodity price performance that we believe will unlock value in the asset over the coming years. The initial impact in 2020F will be an increase in throughput to 850ktpa through the year, up from 818kt in 2019 driving a 1% and 5% YoY increase in zinc and lead output to 23.6kt and 30.8kt respectively. Subsequently a change in mining method to cut and fill will drive higher metal output as more selective mining reduces dilution, enhances recovered grades and ultimately operating margins. We also note the reduced requirement for tailings storage which will also reduce CAML's social and environmental impact at Sasa over the LoM.

Recommendation and Target Price

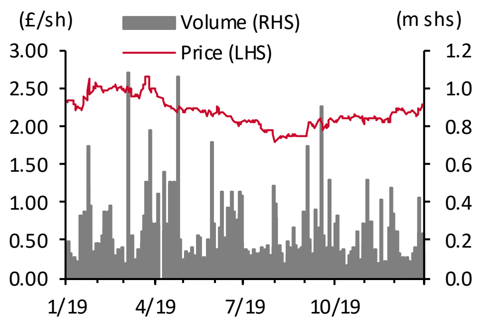
Trading in line with peers on a 2019F EV/EBITDA multiple of 5.3x we continue to believe that the consistent operational performance, low cost base and leading dividend yield of 6% indicate that CAML justifies a premium rating. With additional value due to be realised at Sasa following the LoM review we believe that there are now new catalysts to drive a rerating.

We reiterate our Buy recommendation and target price to 292p which implies 27% upside and 33% on a total return basis.

Company Description

Central Asia Metals is a London listed base metals mining company with primary operations in Kazakhstan and Macedonia

One Year Price Performance



Price % chg	1mn	3mn	12mn
	4.3%	11.4%	-1.3%
12mn high/low			267p/180p

***SOURCE**: FactSet, as of 14 January 2020 close.*

Market:	LSE AIM
Target price:	292p
Shares in issue	176m
Free float:	95%
Net Debt (Dec 2019F):	£61.1m
Enterprise value:	£468m

Major shareholders	
JO Hambro Capital Mgt	10.22%
Blackrock Inc	9.27%
Orion Resource Partners	8.67%

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Q4 2019 Operational Update

Central Asia Metals (CAML LN)# announced solid performance for Q4 2019 resulting in strong full year 2019 production beating our copper and zinc production estimates and in line with our lead production figures. The overall impact on our 2019F earnings forecasts is minimal as the gains in production are offset by slight decreases in our commodity price forecasts which are marked to market by -1.5% for copper and -2% for lead. With our 2019F figures largely unchanged and revenue of US$168m forecast and EBITDA of US$109m this implies continued strong free cash flow generation and we anticipate that CAML will be able to maintain the full year dividend of 14.5p/sh.

Robust performance has enabled the company to significantly deleverage with further repayments of US$36.1m through the year meaning gross debt at year end of US$109m and a cash position of US$32.4m. The company has highlighted in previous periods that it is looking to grow beyond the current asset base and with a strong balance sheet and further deleveraging expected at the same pace in 2020 the company is well positioned with significant flexibility.

Production highlights

Metal Production, Tonnes	Q4 2019	Q4 2018	Q3 2019	% Chg, YoY	% Chg, QoQ	2019	2018	% Chg, YoY	VSA 2019F
Copper	3,138	3,363	4,039	-7%	-22%	13,771	14,049	-2%	13,400
Zinc	5,666	5,769	6,186	-2%	-8%	23,369	22,532	4%	22,981
Lead	7,483	7,401	7,362	1%	2%	29,201	29,388	-1%	29,240

SOURCE: *Company Data, VSA Capital Research.*

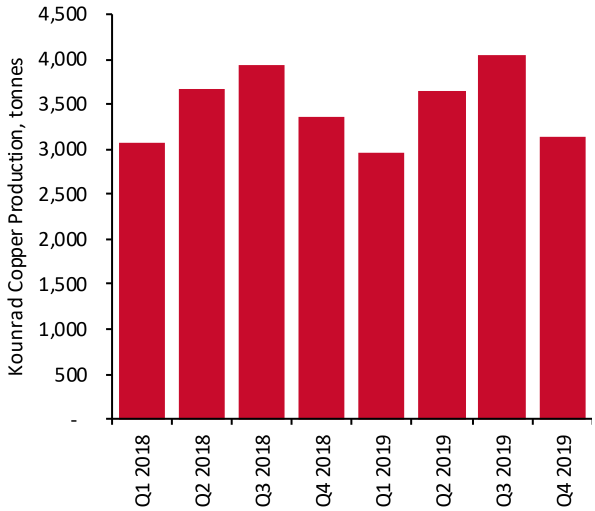
Kounrad

CAML delivering another small beat against guidance for full year copper production at 13.7kt. The top end of the guidance range was reduced for 2019 from 14kt to 13.5kt as part of the managed transition to production from the Western Dumps. 68% of full year production came from this area of the resource and in 2020 around 75% of production is expected to come from the Western Dumps. With the transition largely complete we therefore expect stable operational performance to continue and we maintain our conservative production estimates of 13.4kt copper output going forward which is at the top end of 2020 guidance of 12.5-13.5kt. Sales of 3.5kt in Q4 2019 resulted in full year sales of 13.6kt meaning that despite the beat in production the earnings impact for 2019 is lessened. We expect this timing discrepancy to be made up in early 2020.

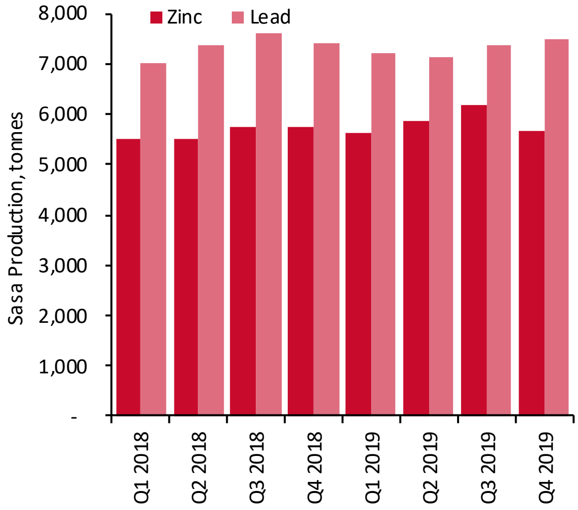
The life of operation plan indicates a managed decline in production, which has been clearly flagged, from the peak to around 12ktpa before the operation winds down in 2032. Given CAML's track record of meeting the top end of guidance we anticipate that the company will maintain production at the upper end of this guidance range over the medium term.

Following the depreciation of the USDKZT through 2018 the currency stabilised in a relatively narrow range of 370-390 which has likely had a significant offsetting impact on the higher cost of pumping solution from the Western Dumps to the plant. The USDKZT averaged 383 broadly in line with our estimate of 380 and consequently our unit costs for 2019 are unchanged at US$0.53/lb. We do note, however, that US dollar weakness in the early part of 2020 has already resulted in a retracement to 376, in line with our view that the selloff had overreached and a reversal was overdue. We forecast an average of 370 for 2020. Despite the expectation for a stronger currency we continue to expect leading margins and free cashflow generation from Kounrad and with a stronger copper price outlook for 2020 FCF is likely to remain strong with group levered FCF of US$68m in 2020F.

Kounrad Quarterly Production



Sasa Quarterly Production



SOURCE: *Company data, VSA Capital Research.*

Sasa

In Q4 2019, plant feed was down 2% QoQ, following a particularly strong Q3, and unchanged YoY at 205.7kt while the full year of 820kt was up 2% YoY. With only a modest variation in quarterly throughput the most significant impact on quarterly lead and zinc output were the variations in grades which again were modest and well within the recent past range. Zinc output of 5.7kt was down 8% QoQ and 2% YoY resulting in full year zinc output of 23.4kt which was up 4% YoY and 2% ahead of our estimates of 22.9kt. in Q4 2019 zinc grades and recoveries declined following strong Q3 performance. Grades of 3.23% Zn were at the bottom of the range for the past 18 months following some of the highest zinc grades achieved at Sasa of 3.37% in Q3 2019. Recoveries pulled back from record highs under CAML's tenure of 87.3% to 85.2% QoQ which remain significantly higher than those under prior ownership. Lead performance in the period was stronger with grades up from 3.71% to 3.83% and recoveries flat at 71.9% resulting in production of 7.5kt in Q4 2019 and full year production of 29.2kt marginally lower YoY by 1% and in line with our full year forecasts.

The results of the Life of Mine Review look to be having a positive impact already given the increase in throughput and recoveries in 2019, however, the longer term benefits appear to have significant further upside potential. The proposed change of mining method could significantly reduce dilution enhancing head grades and metal output over the life of mine. This would therefore likely result in CAML unlocking value from the Sasa asset and realising strengthened margins.

Sasa Operating Highlights

	Q4 2019	Q3 2019	% Chg, QoQ	Q4 2018	% Chg, YoY	2019	2018	% Chg, YoY
Plant Feed	205,714	207,016	-1%	205,130	0%	820,491	804,749	2%
Lead grade, %	3.83	3.71	3%	3.86	-1%	3.77	3.90	-3%
Zinc grade, %	3.23	3.37	-4%	3.31	-2%	3.29	3.31	-1%
Lead concentrate	10,401	10,245	2%	10,151	2%	40,366	40,317	0%
Recovery, %	94.9	94.4	1%	93.4	2%	94.5	93.6	1%
Grade, %	71.9	71.9	0%	72.9	-1%	72.3	72.9	-1%
Contained Lead	7,483	7,362	2%	7,401	1%	29,201	29,388	-1%
Zinc Concentrate	11,414	12,385	-8%	11,846	-4%	47,104	46,128	2%
Recovery, %	85.2	87.3	-2%	85.0	0%	86.5	84.6	2%
Grade, %	49.6	50.0	-1%	48.7	2%	49.6	48.9	1%
Contained zinc	5,666	6,186	-8%	5,769	-2%	23,369	22,532	4%

SOURCE: *Company Data, VSA Capital Research.*

CAML has considered all aspects of the mine for optimisation including operating practices, mining methods, additional resource drilling as well as process plant optimisation. Much of the low hanging fruit in terms of changes to operating practices such as optimising shift work has been implemented and are already delivering positive operational benefits.

In the latest announcement CAML has also highlighted further areas where near term changes have or are due to be made. We had highlighted previously that we believed CAML's aim was to optimise the asset so that it would operate at the full plant capacity of 850ktpa which it has not done for more than a decade. Currently the shaft is operating at 70% capacity and with annual plant feed at 820kt in 2019 there is considerable room for additional throughput. In order to achieve this, CAML installed a tertiary crusher to the processing circuit and with commissioning underway this will be the key driver for higher throughput in 2020 to 850ktpa. The other two near term solutions that have been highlighted have been the replacement of the mining fleet which will occur in 2020, the main driver for an increase in our capex forecast of US$3.9m to US$13.5m, as well as the installation of a wireless underground network which will allow for increased monitoring and communication of machines as well as the roll out of data analytics to monitor availability and utilisation resulting in more efficient operational performance.

However, the major change which was flagged on our site visit earlier this year is the change in the mining method from sub level caving to cut and fill. The cost benefit analysis has been shown to favour the transition and we believe that in the medium term the reduced dilution will result in higher grades and metal output which will ultimately benefit operating margins and cashflow. Longer term, CAML has highlighted that continuing the sub level caving approach at depth would require additional ore to be left-in situ as pillars to support the rock above thus reducing recoverable ore. Cut and fill therefore means that maximum ore can be extracted with the paste fill providing future support.

Dilution is reported to be in the range of 18-22%, although we noted previously that recent extension drilling has consistently intercepted stronger down dip ore grades. Therefore, there is a possibility that dilution has been consistently running at a higher rate and switching to this more selective method would potentially have a significantly positive impact on head grades. However, as yet the quantitative benefits of the transition are yet to be fully detailed.

The change in mining method will have a capex impact also, but largely a reallocation of capital rather than an incremental impact as the cost of the construction of a paste plant will likely be offset by the reduction in spending required for future Tailings Storage given that over 60% of tailings would be placed underground as part of the "fill". While the recent construction of TSF 4 will give CAML an additional six to seven years of storage based on the current mining method; the reduced surface impact of CAML's mining activity is as well as a financial decision informed by the potential positive environmental and social impacts. We highlight that the company created a dedicated team at Sasa to focus on environmental monitoring to maintain the company's strong track record in North Macedonia.

Earnings Changes

Our 2019F figures are broadly unchanged with minimal adjustments to commodity prices and production and sales figures for the final quarter. This means that we continue to expect a strong earnings performance in 2019 with strong EBITDA margins of around 65% and levered free cash flow of US$66m. We believe that with level FCF generation the company will be able to support the dividend of 14.5p/sh. in line with the prior year payout. Our forecasts for Kounrad are largely unchanged.

However, our moderated commodity price forecasts, particularly for lead and zinc combined with an increase in our 2020F estimates for lead and zinc TCRCs of around 36% and 9% respectively to US$150/t and US$300/t means that the impact on our outlook beyond 2019F has been tempered. However, the impact on CAML is limited by the fact that it has such a strong cost position to absorb this challenging point in the lead and zinc cycle and we therefore believe that the company will be able to continue to generate sufficient cashflow to support the dividend at the 2018 level.

That said the spike in TCRCs is not consistent with previous cycles when the rise in treatment charges has coincided with cyclically high refined metal prices. This is not the case currently and the marginal producers of concentrate are already being impacted with 72ktpa of capacity taken offline in 2019 and more than 600ktpa of new supply delayed or deferred. We anticipate that further delays will arise in 2020 due to the impact of TCRCs while new smelter capacity and falling inventories of mine concentrate will ease the smelter bottleneck that has pushed up costs. Indeed, the last spike to these levels held above US$300/t for a quarter or so.

The financial impact of the implementation of the Sasa Life of Mine Review does offset some of this impact although the main potential benefits and changes to the cost structure are yet to be fully quantified. The commissioning of the crusher is underway currently and we anticipate that the company will be able to process around 835kt in 2020 rising to 845kt thereafter. We forecast a recovery in lead grades to 3.9% in line with the previous mine plan which in combination with higher throughput results in 30.8kt of lead, in the middle of the 30-32kt guidance range while with zinc grades expected to remain at the lower end of the recent range in 2020 at 3.26% we anticipate zinc production of 23.6kt.

The replacement of the mining fleet will have an impact on capex with our 2020F estimate group estimate rising from US$9.6m to US$13.5m. Despite this we expect annual levered FCF from which the dividend is paid to remain above US$65m in the short to medium term supporting the dividend at the 14.5p/sh. level.

Earnings Changes Highlights

	Revenue			EBITDA			Net Income			Capex		
	Old	**New**	**% Chg**	**Old**	**New**	**% Chg**	**Old**	**New**	**% Chg**	**Old**	**New**	**% Chg**
2019F	167,694	167,353	0%	111,077	109,935	-1%	52,708	51,113	-3%	(11,100)	(12,000)	8%
2020F	179,002	172,273	-4%	120,567	103,477	-14%	60,982	50,002	-18%	(9,600)	(13,500)	41%
2021F	187,109	179,746	-4%	127,169	109,147	-14%	68,122	56,214	-17%	(7,600)	(7,600)	0%

SOURCE: *Company Data, VSA Capital Research.*

CAML Operational and Financial Highlights

	2017A	2018A	2019F	2020F	2021F
Copper Production, t	14,103	14,049	13,771	13,400	13,400
Lead Production, t	4,951	29,388	29,201	30,774	31,142
Zinc Production, t	3,625	22,532	23,369	23,546	23,828
C1 Cash Cost, Copper, USD/lb	0.52	0.54	0.53	0.54	0.54
C1 Cash Cost Zinc, USD/lb	0.44	0.46	0.51	0.59	0.57
Revenue, USD’000	102,123	192,334	167,353	172,273	179,746
EBITDA, USD’000	66,485	125,308	109,935	103,477	109,147
Operating Profit, USD’000	46,510	87,416	77,171	73,354	78,736
Net Income, USD’000	36,315	48,024	51,113	50,002	56,214
EPS, USD/sh.	0.29	0.31	0.29	0.28	0.32
P/E, x	13.9x	10.5x	9.9x	10.1x	9.0x
EV/EBITDA, x	8.8x	4.6x	5.3x	5.6x	5.3x
Net Debt/EBITDA, x	2.1x	0.9x	0.7x	0.4x	(0.1x)
Capex, USD’000	(4,082)	(14,755)	(12,000)	(13,500)	(7,600)
Unlevered FCF	48,846	93,094	75,921	75,899	83,287
Unlevered FCF Yield, %	9%	18%	15%	15%	16%
Levered FCF	45,080	73,362	65,863	68,258	78,436
Levered FCF Yield, %	9%	14%	13%	13%	15%
Dividend Yield, %	5%	8%	6%	6%	6%
Dividend Per Share, GBP	16.50	14.50	14.50	14.50	14.58

SOURCE: *Company Data, VSA Capital Research.*

Valuation Update

Commodity Price Changes and Macro Assumptions

With a "phase one deal" agreed only late in 2019 base metal pricing performance continued to be muted with lead and zinc pulling back to early 2019 lows although zinc is up 4% in January so far. Copper, however, demonstrated a late recovery towards the end of the year with short covering driving the price above US$6,000/t for the first time since July 2019. The US-China agreement is somewhat narrow in its remit although it means that further tariff hikes have been cancelled and the US has reduced tariffs by up to 50% on Chinese goods while China has committed to make significant agricultural purchases from the US. This represents some progress on trade which should support the global economy in the near term, however, many of the fundamental areas of disagreement such as mistrust over technology have not been resolved so the potential for future volatility remains. However, with stronger demand we expect current deficits in base metal markets to be maintained and maintain a constructive view on base metal pricing.

Changes to Commodity Price Forecasts

		2018A	2019F	2020F	2021F	2022F	LT
Copper	Old	6,544	6,100	6,500	7,000	6,750	6,750
	New	**6,544**	**6,014**	**6,450**	**6,750**	**7,000**	**6,750**
Lead	Old	2,248	2,050	2,150	2,100	2,100	2,100
	New	**2,248**	**2,010**	**2,075**	**2,100**	**2,100**	**2,100**
Zinc	Old	2,892	2,500	2,800	2,950	2,750	2,500
	New	**2,892**	**2,514**	**2,550**	**2,600**	**2,750**	**2,500**

SOURCE: *Company data, VSA Capital Research.*

The EURUSD rate has been fairly stable through the balance of 2019 averaging 1.12 for the full year. We highlighted that our USDKZT forecast appeared conservative at the last operational update and whilst that has proven to be the case the currency has strengthened in the latter part of the year averaging 382 versus our estimate of 380 the spot rate is currently 378.

Changes to Macro Assumptions

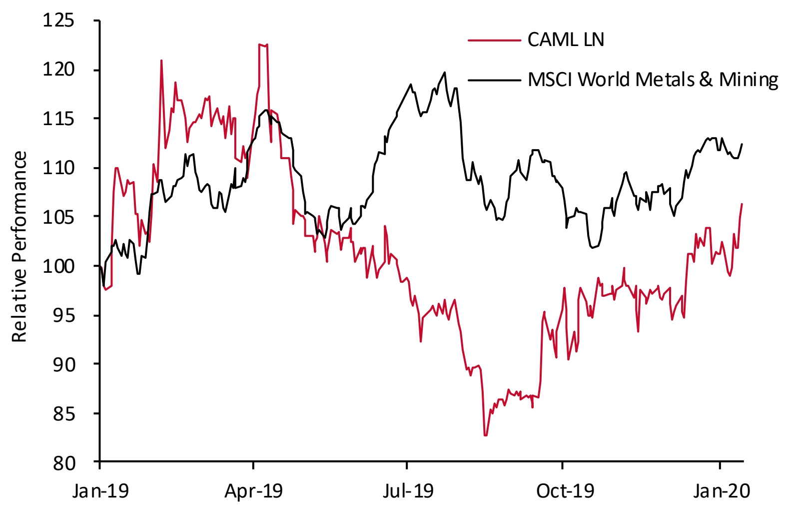
		2018A	2019F	2020F	2021F	2022F	LT
USDKZT	Old	345	380	370	360	360	360
	New	**345**	**382**	**370**	**360**	**360**	**360**
EURUSD	Old	**1.18**	**1.13**	**1.12**	**1.13**	**1.13**	**1.13**
	New	**1.18**	**1.12**	**1.12**	**1.13**	**1.13**	**1.13**

SOURCE: *Company data, VSA Capital Research.*

Valuation Update

Our valuation of **Central Asia Metals (CAML LN)** is based on a 50/50 blend of NAV and a peer based 12-month EV/EBITDA multiple. With the recent short covering rally in copper, the peer group valuation has increased since the interim results from 4.7x to 5.3x and CAML is now trading broadly in line with the peer group for 2019.

CAML Outperformed Global Mining Sector in H2 2019



***SOURCE:** Company data, VSA Capital Research.*

We previously highlighted that the underperformance of the shares in Q2 and Q3 2019 versus the global mining sector which took CAML's shares to multi year lows of GBP1.80/sh. offered a significant mispricing opportunity. As this corrected following strong interim results the shares have outperformed the global index by 22.8% since the August lows.

We continue to believe that given the company's position on the cost curve and track record of stable operational performance and dividend payments that it warrants a premium rating. With the Sasa life of mine review now beginning to be implemented we believe that this provides a welcome catalyst which is independent of commodity price performance and should enable the company to unlock value and outperform, this will initially be driven by the increase in plant throughput and over the next few years the change in mining method that is due to strengthen margins. The modest decrease in near term earnings from our reduced commodity price profile is offset by the stronger target multiple meaning that our target price remains unchanged at 292p/sh.

Our sum of the parts target price for CAML is unchanged at 292p/sh. which implies 27% upside potential and 33% on a total return basis.

Central Asia Metals NAV Valuation

Division	Division NAV (US$'000)	Share, %	Attributable NAV, USD'000	P/NAV	Fair Equity Value (US$m)	Fair Equity Value (£m)
Kounrad	324,185	100%	324,185	1.00	324,185	259,348
Sasa	425,464	100%	425,464	1.00	425,464	340,371
Consolidated Net Debt					76,427	61,141
Total Equity Value					**699,593**	**538,577**

SOURCE: *Company data, VSA Capital Research.*

Valuation Summary

	USD'000	£'000
2019F EBITDA, VSA Capital	109,935	86,849
Sector 12-mo forward EV/EBITDA	5.3x	5.3x
Target 12-mo forward EV/EBITDA	6.4x	6.4x
Fair EV	703,874	556,061
Net Debt	76,427	60,377
Total Fair Equity Value	**627,477**	**495,683**
No. of Shares, m		176
Per Share Fair Value		282
NAV fair target price		302
Blended 12-mo Target Price, /sh.		**292**
Current Price, /sh.		230
Upside, %		27%

SOURCE: *Company data, VSA Capital Research.*

Risks

- **Commodity Prices**. The company is primarily exposed to base metal price (copper, zinc and lead) and unexpected changes to commodity prices are likely to affect our valuation.
- **Political Risk.** Changes to the political regime and mining code in Kazakhstan and/or Macedonia would potentially alter the risk profile.
- **Macro Risk.** Unexpected moves in the KZT or EUR and higher than expected inflationary pressure might significantly impact the company's earnings.
- **Operational Risk.** The potential for delays and operating issues are an inherent industry risk.

Commodity Markets Update

The closing part of 2019 saw a sharp short covering rally which has continued into early 2020 following the announcement by the US and China that an initial trade deal had been agreed albeit not signed. Whilst the scope of the deal appears narrow, markets were buoyed by the fact this meant that the next round of tariffs by China have been avoided along with a reduction in existing tariffs by up to 50%. In return China has agreed to significantly increase its purchases of US products, notably agricultural imports. The agreed value of US$40-50bn in sales of agricultural products to China per year is remarkable considering that peak Chinese agricultural imports from the US in 2012 were US$26bn. Although setting value led targets irrespective of market conditions has deep flaws, in our view, the rationale may be driven by the impact of African Swine flu which has impacted more than 25% of global pork supply. China has been forced to cull a significant portion of the herd and will therefore need to import a higher proportion of its pork much of it from the US; the offsetting impact of this, however, may be lower demand for soybeans.

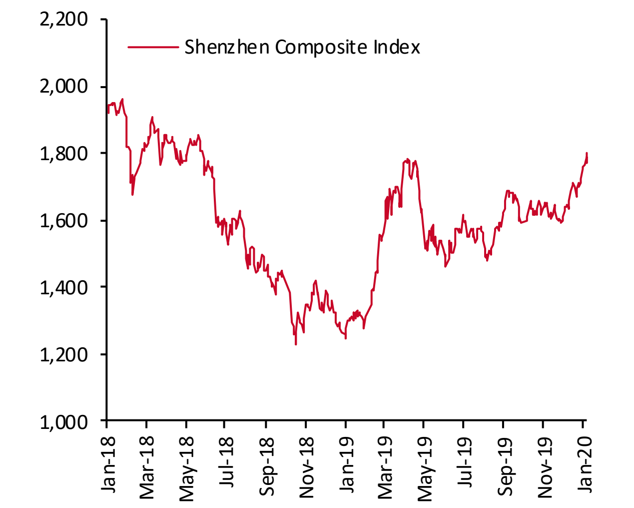
We continue to believe that Trump's re-election campaign is his key motivator for securing a deal in the near term which will likely reduce sabre rattling ahead of the election. However, China's global role is now a more bipartisan issue in US politics a Democrat in the White House would not necessarily result in a definitive end to the Trade War.

That said copper's fundamentals have strengthened over the latter part of 2019 with multi year lows in inventory and an uptick in Chinese imports suggesting a widening deficit. Therefore with a background of stronger sentiment and strengthening fundamentals this suggests stronger pricing in 2020.

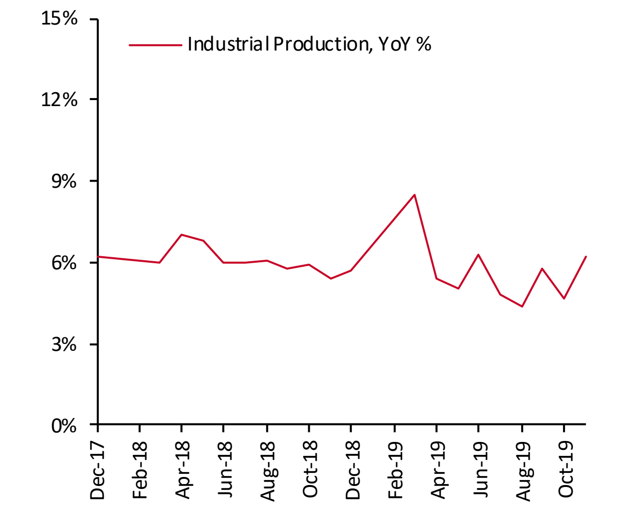
China Indicators

The latest data indicates a modest improvement in the Chinese economy and we highlight the bounce in industrial to 6.2% in November, only the third reading above 6% since August 2018, results for December will likely to point more clearly to a change in the trend. With an early Chinese New Year in 2020 January is likely to be impacted accordingly meaning this is the last clear reading until seasonal impact is over. Sentiment as indicated by the Shenzhen composite remains buoyant, up 21% from August lows and close to retesting April 2019 highs. A 0.5% cut to the Reserve Requirement Ratio in early 2020 is set to improve liquidity by around US$115bn although the direct impact of this as stimulus is contested and is thought largely to be in anticipation of cash withdrawals ahead of Chinese New Year. Overall the latest data points appear to be trending towards a stronger 2020.

Stockmarket Rebound

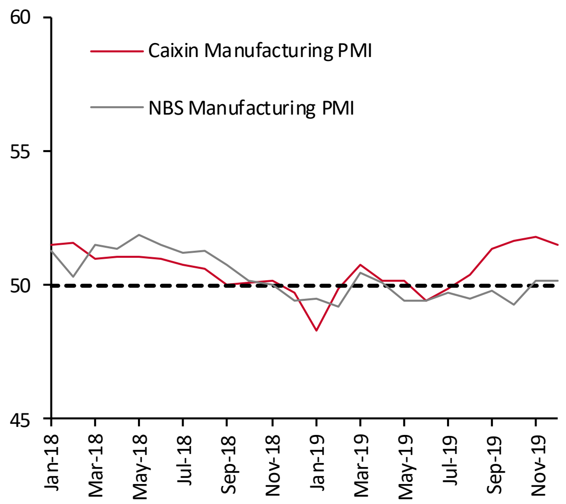


Industrial Output Surprise Weakness

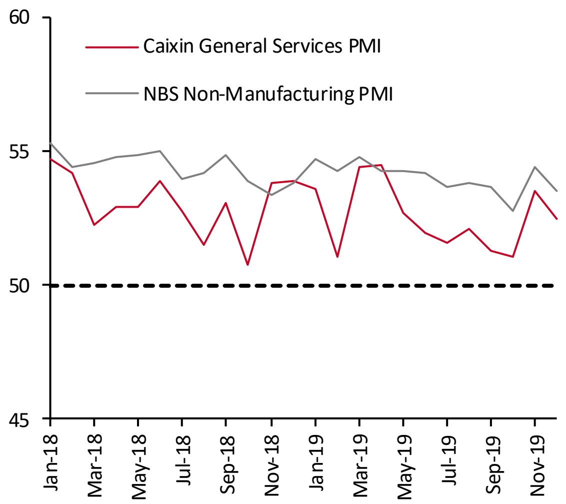


SOURCE: *Bloomberg, VSA Capital Research.*

China Manufacturing PMI



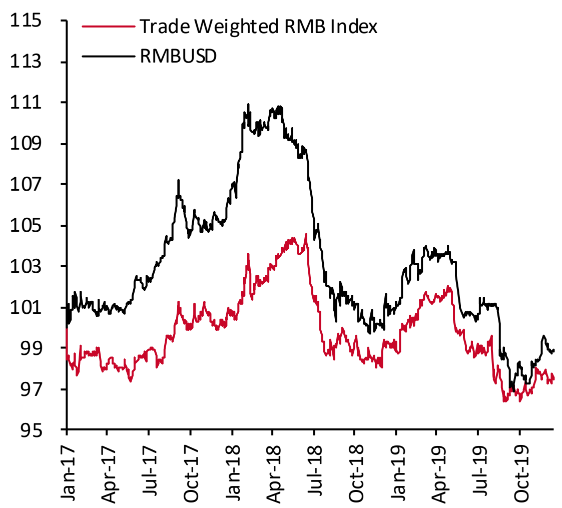
China Non-Manufacturing PMI



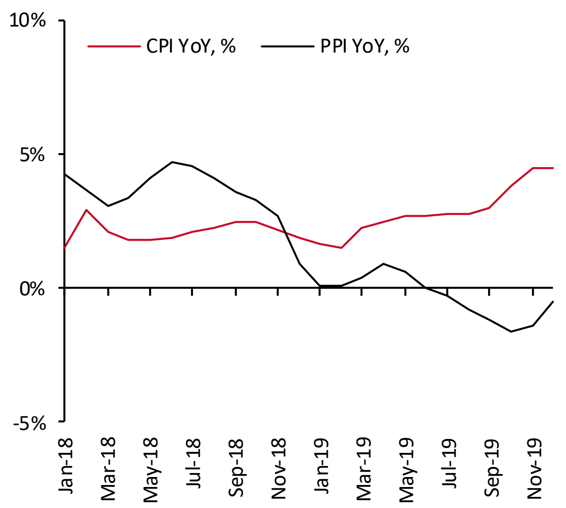
SOURCE: *Bloomberg, VSA Capital Research*.

Sentiment according to PMI readings appears to be stable for the manufacturing SOEs, represented by the NBS survey, at 50.2 in the latest December reading. However, we note the significant bounce during recent months in sentiment amongst POEs represented by the Caixin survey rising from 49.4 in June to 51.8 in November, down slightly to 51.5 in December. The fact that both services the unofficial services and manufacturing PMIs were rising during the latter part of 2019 suggests a more broad-based improvement in sentiment and general economic performance. The recent recovery in the RMBUSD will also likely result in sentiment being supported.

USDRMB Recovery



Spike in CPI to Multi Year Highs



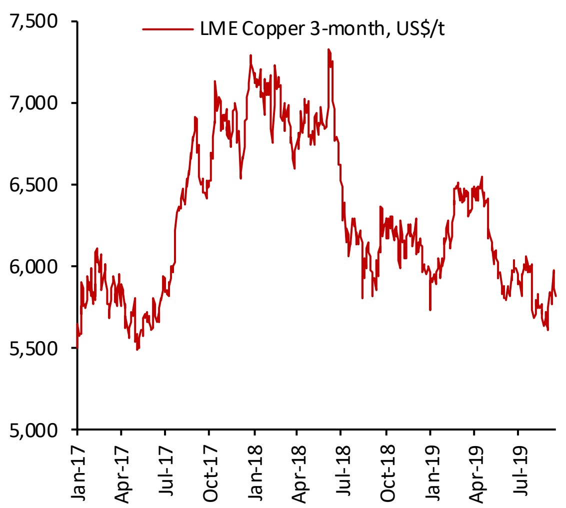
SOURCE: *Bloomberg, VSA Capital Research.*

One other area which is having an impact on the consumer aspect of China's economy is African Swine Flu, which has necessitated the culling of a significant portion of the country's pig stock, some estimates suggest that over 25% of global pork supply has been impacted. Pork is the country's primary source of protein and the consequent impact of diminished pork supply on pricing is almost exclusively behind the spike in inflation to multi year highs. Indeed, the need for pork is one of the reasons behind China committing to significantly higher US agricultural purchases.

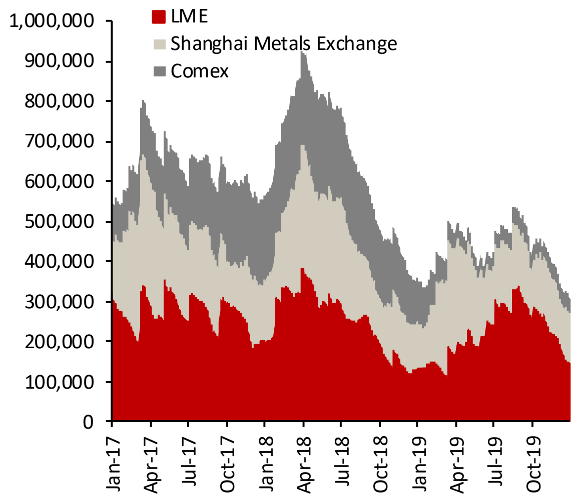
Copper Update

Copper's fundamentals have continued to strengthen over the past quarter with demand improving as demonstrated by rising Chinese imports and a sharp decline inventories to five year lows. This combined with the announcement of a phase one deal for US China trade has improved sentiment and copper prices rallied 4.9% during December finishing the year at US$6,174/t, having averaged US$5,794/t during August through November. Support for pricing has continued into 2020 and was primarily driven by short covering with Comex non-commercial shorts down 8.3% in December. Overall speculative positions have flipped into net long positions and we expect new buying to drive prices higher still. The final months of 2019 saw a rebound in copper imports by China with October and November figures of 431kt and 483kt the only months to show higher YoY imports of 3% and 5% respectively in 2019. Indeed, November experienced the highest monthly import volume since September 2018. The YoY change demonstrates positive performance through 2019 and with this trend now unbroken into positive territory it suggests a stronger outlook for 2020 demand.

Copper Price, US$/t



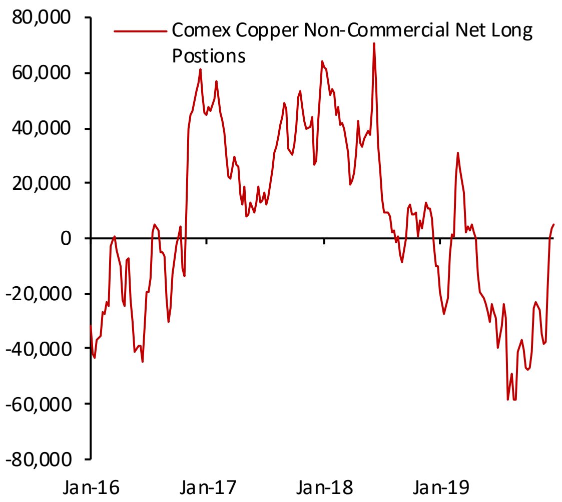
Copper Inventories



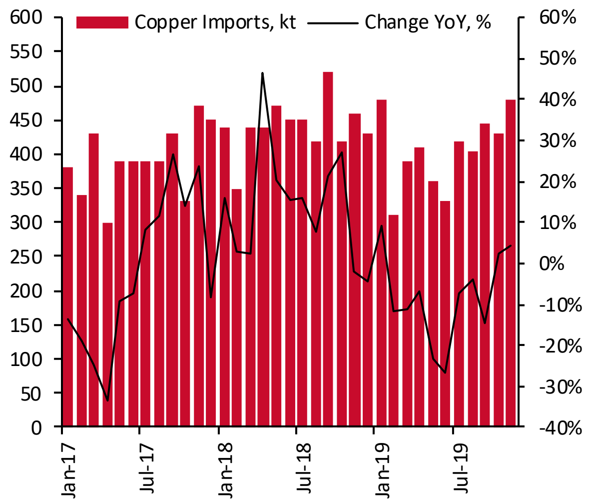
***SOURCE:** Bloomberg, VSA Capital Research.*

Global inventories fell 15% through 2019, as demand has strengthened in H2 2019. Inventories are now at the lowest level in five years indicating the increasingly tight state of the market. Indeed, this suggests a stronger fundamental backdrop than the first 9mo19 where global demand was flat in 9mo19 according to the ICSG. Supply was broadly unchanged meaning that the deficit of 393kt persisted through the first three quarters of the year and given the stronger demand in late 2019 and low inventory position this is likely to have widened as we enter 2020. Furthermore, supply in late 2019 has also been disrupted with road blocks, protests and port blockades in Chile causing a 7.1% reduction in mining activity in November. Although the corresponding prior period was particularly strong, we note that **Antofagasta (ANTO LN)** have highlighted the disruptive impact on output caused by the strikes of around 15kt with the top end of guidance reduced from 790kt to 770kt for 2019.

Speculators Net Long



China Copper Imports, mnt

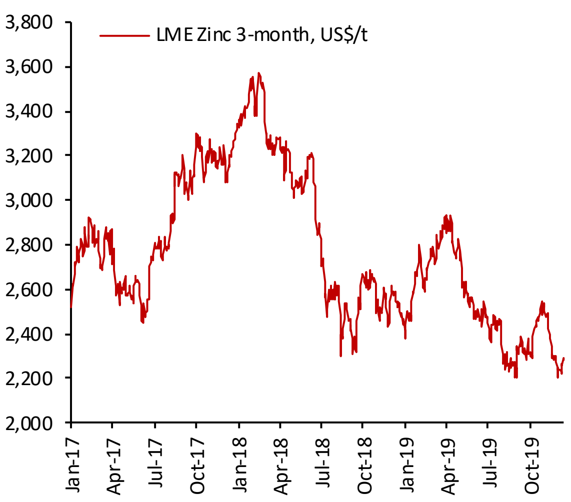


SOURCE: *Bloomberg, VSA Capital Research.*

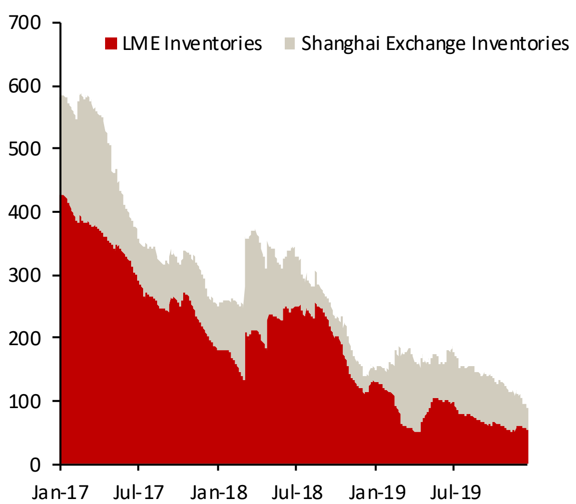
Zinc Update

Prices during Q4 2019 continued within the trading range despite a rally of 15% during late Q3 and early Q4 2019 to above US$2,500/t before easing back to the bottom of the range in the late part of the year closing 2019 at US$2,272/t. Disruption to supply combined with planned maintenance prevented as significant a rise in refined metal supply as forecasted by consenus. That said, in 10mo19 close to 11.2mnt were produced up 2.1% YoY although not sufficient to push the market into surplus as widely forecast. Indeed, the ILZSG data points to a market deficit over the same period of around 152kt. This ongoing market tightness has been further highlighted by inventory data which showed that global refined zinc inventories continued to fall now at 88kt, down 41% through 2019.

Zinc Price, LME US$/t



Zinc Inventories, kt



SOURCE: *Bloomberg, VSA Capital Research.*

With a more positive outlook for global growth in 2019, we anticipate a recovery in zinc metal demand which was likely flat for 2019 based on data from the first nine months. Furthermore, core indicators for Chinese demand have been rising in 2019 (Jan-Jul) with air conditioner output up 8.7% YoY, refrigerator output up 4.2% YoY and other white goods up 7.3% YoY this should continue to offset weakness from the auto sector.

Mine supply is expected to rise around 2% YoY in 2019 and a further 4.7% in 2020 according to the ILZSG, however, this figure was reduced significantly through 2019 from an initial expectation of growth of 6.2% to the final figure with more than 600ktpa in mine capacity affected by delays and unplanned strikes. We are therefore cautious that the full 4.7% will be brought online during the year limiting the volume of new concentrate supply. Indeed, the combination of higher TCRCs and lower pricing in H2 2019 resulted in at least 70ktpa of mine capacity being shuttered. With demand set to be stronger in 2020 we therefore expect a similar picture to the past year with a finely balanced market. However, unlike in previous periods of stronger TCRCs refined zinc prices are not at their peak and we believe that the lower net price will result in marginal capacity being impacted more quickly than in previous cycles.

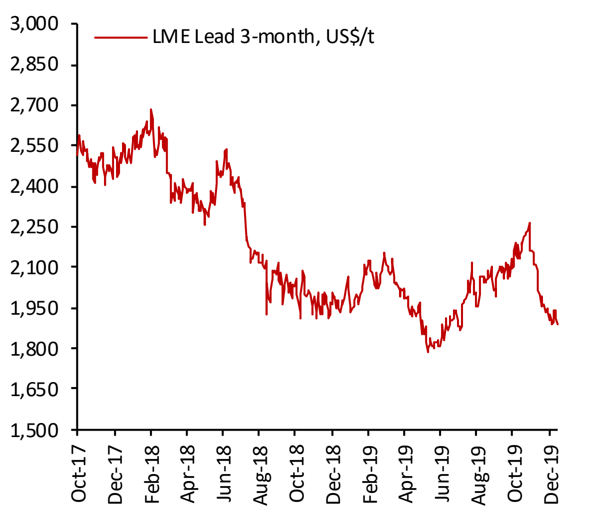
The sharp rise in TCRCs in late 2018 has rapidly swung China's smelting industry into profit incentivising shuttered and new smelting capacity to be brought online, in excess of the impact due to tighter environmental restrictions. Indeed, after temporary closures for environmental reasons, smelters in Hanzhong, Luoping and three in Western Hunan came back online during 2019. We believe that around net 430ktpa has been bought back online during the year in terms of smelting capacity and a further 250ktpa is due to be bought back in 2020. TCRCs appear to have stabilised at around US$300/t for spot concentrate, however, with additional smelting capacity coming online this is likely to improve the balance back in favour of miners. We note that the peak in 2007 for zinc TCRCs on a quarterly basis was around US$325/t and the sharp spike quickly receded as smelting capacity came online.

Lead Update

Lead price performance has been largely rangebound, although broke out briefly to the upside reaching US$2,235/t in October 2019, the highest level since July 2019, following the outage at Port Pirie. Although closely aligned to the zinc market the lead price has pulled back in the latter part of 2019. The lead market deficit according to the ILZSG has widened YoY to 81kt over 10mo19. Like zinc, lead demand over that period was also flat. However, on the supply side mine production was flat while refined metal production was marginally lower YoY.

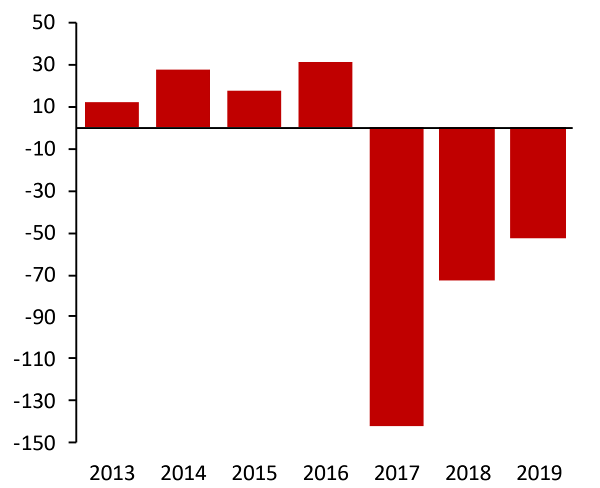
A surplus in refined metal failed to materialise yet again in 2019 as supply disappointed despite the fact that demand was weak. Given our view that zinc supply is likely to disappoint in 2020 this is likely to have a direct impact on lead supply growth meaning that the market will be finely balanced, however, with the current deficit less pronounced than that of zinc, the outlook for pricing is not as strong.

Lead Price, LME US$/t



SOURCE: *Bloomberg, VSA Capital Research.*

Refined Lead Market Balance, kt



SOURCE: *ILZSG, VSA Capital Research*

Appendix 1: Financial Statements

Profit and Loss (US$'000), December Year End

	2017A	2018A	2019F	2020F	2021F
Revenue	102,123	192,334	167,353	172,273	179,746
Cost of sales	(31,425)	(76,418)	(75,120)	(84,275)	(85,732)
Gross Profit	70,698	115,916	92,233	87,998	94,014
Administrative Expenses	-	-	-	-	-
Other (expense)/income	(15,202)	(23,950)	(15,062)	(14,643)	(15,278)
Foreign exchange gain / (loss)	(12,600)	(1,030)	-	-	-
Other (expense)/income	3,362	(3,879)	-	-	-
			-	-	-
EBIT	**46,510**	**87,416**	**77,171**	**73,354**	**78,736**
Net finance costs	3,278	(14,735)	(10,509)	(7,892)	(5,108)
Profit before taxation	49,788	72,681	66,662	65,463	73,628
Mining and income tax	(13,433)	(18,822)	(15,999)	(15,711)	(17,671)
Profit for the year	**36,355**	**53,859**	**50,663**	**49,752**	**55,957**
Profit/loss for the year from discontinued operations	(76)	(7,274)	400	200	200
Non-controlling interest	(36)	(1,439)	(50)	(50)	(56)
Attributable to equity holders of the company	**36,315**	**48,024**	**51,113**	**50,002**	**56,214**

SOURCE: *Company Data, VSA Capital Research.*

Balance Sheet (US$'000), December Year End

	2017A	2018A	2019F	2020F	2021F
Non-current Assets					
Property, plant and equipment	469,261	429,601	408,837	392,214	369,403
Intangible Assets	69,915	61,311	61,311	61,311	61,311
Other non-current receivables	2,519	2,120	2,120	2,120	2,120
Total non-current assets	**541,695**	**493,032**	**472,268**	**455,645**	**432,834**
Current assets					
Inventories	6,998	7,529	10,087	10,384	10,834
Trade and Other Receivables	19,705	10,078	11,142	11,469	11,967
Restricted Cash	2,812	4,376	4,376	4,376	4,376
Cash and bank balances	43,022	34,649	32,422	30,287	35,865
Assets of disposal group classified as held for sale	5,760	61	61	61	61
Total current assets	**78,297**	**56,693**	**58,088**	**56,577**	**63,102**
Total assets	**619,992**	**549,725**	**530,356**	**512,222**	**495,936**
Equity and liabilities					
Ordinary shares	1,765	1,765	1,765	1,765	1,765
Share Premium	191,184	191,184	191,184	191,184	191,184
Treasury Shares	(7,780)	(6,526)	(6,526)	(6,526)	(6,526)
Currency Translation Reserve	(79,166)	(89,454)	(89,454)	(89,454)	(89,454)
Retained Earnings	215,479	231,241	250,365	268,374	292,429
Profit for the year attributable to the owners	36,315	48,024	51,113	50,002	50,002
Other changes in retained earnings	(20,553)	(48,984)	(52,073)	(50,962)	(50,962)
Non-Controlling Interest	55	(1,384)	(1,384)	(1,384)	(1,384)
Total equity	**337,299**	**325,866**	**344,990**	**362,999**	**387,054**
Non-current liabilities					
Borrowings	141,839	106,549	70,449	32,049	-
Deferred revenue	25,711	22,905	22,905	22,905	22,905
Other non-current payables	8,000	-	-	-	-
Deferred income tax liability	31,196	27,670	27,670	27,670	27,670
Provisions for other liabilities and charges	5,319	5,069	5,069	5,069	5,069
Total non-current liabilities	**212,065**	**162,193**	**126,093**	**87,693**	**55,644**
Current liabilities					
Borrowings	40,075	38,400	38,400	38,400	29,749
Deferred Revenue	2,056	2,263	2,263	2,263	2,263
Provisions for other liabilities and charges	46	47	47	47	47
Liabilities of disposal group classified as held for sale	90	40	40	40	40
Trade and other payables	28,361	20,916	18,523	20,780	21,139
Total current liabilities	**70,628**	**61,666**	**59,273**	**61,530**	**53,238**
Total liabilities	**282,693**	**223,859**	**185,366**	**149,223**	**108,882**
Total equity and liabilities	**619,992**	**549,725**	**530,356**	**512,222**	**495,936**

SOURCE: *Company Data, VSA Capital Research.*

Statement of Cash Flows (US$'000), December Year End

	2017A	2018A	2019F	2020F	2021F
Cash flows from operating activities					
Net Income	36,315	48,024	51,113	50,002	56,214
Adjustments for:					
Depreciation & Amortisation	10,927	33,342	32,764	30,123	30,411
Amortisation of deferred revenue - received advances for silver delivery	(304)	(1,599)	-	-	-
Gain on Disposal of Property, Plant and Equipment	-	561	-	-	-
Foreign Currency Translation	(3,349)	3,879	-	-	-
Share based payments	2,823	4,904	-	-	-
Finance income	(5,597)	(264)	-	-	-
Finance costs	2,319	14,999	10,509	7,892	5,108
Other	-	6,770	-	-	-
Movements in working capital:					
Change in working capital	3,488	2,132	(6,015)	1,633	(589)
Interest paid	(2,127)	(14,510)	(10,509)	(7,892)	(5,108)
Taxes Paid	(12,294)	(31,833)	-	-	-
Net cash generated by operating activities	**45,687**	**83,788**	**77,863**	**81,758**	**86,036**
Cash flows from investing activities					
Acquisition of property, plant and equipment	(4,082)	(15,019)	(12,000)	(13,500)	(7,600)
Purchase of intangible assets	(2,025)	(907)	-	-	-
Proceeds from sale of PPE	-	3,300	-	-	-
Interest received	323	264	-	-	-
Acquisitions, net of cash acquired	(268,008)	-	-	-	-
Restricted cash decrease/ (increase)	(2,694)	(1,564)	-	-	-
Net cash (used in)/generated by investing activities	**(276,486)**	**(13,926)**	**(12,000)**	**(13,500)**	**(7,600)**
Cash flows from financing activities					
Proceeds from Issue of Share Capital	142,945	-	-	-	-
Gains on currency hedge	2,977	-	-	-	-
Proceeds from borrowings	120,000	60,809	-	-	-
Repayment of borrowings	(8,362)	(99,265)	(36,100)	(38,400)	(40,700)
Dividends Paid	(23,146)	(39,603)	(31,989)	(31,992)	(32,159)
Settlement on exercise of share options	(1,491)	(21)	-	-	-
Net cash used in financing activities	**232,923**	**(78,080)**	**(68,089)**	**(70,392)**	**(72,859)**
Net increase in cash and cash equivalents	**2,857**	**(8,466)**	**(2,227)**	**(2,135)**	**5,577**
Effects of exchange rate changes on the balance of cash held in foreign currencies	733	(248)	-	-	-
Cash and cash equivalents at the beginning of the year	**40,258**	**43,115**	**34,649**	**32,422**	**30,287**
Cash and cash equivalents at the end of the year	**43,115**	**34,649**	**32,422**	**30,287**	**35,865**

SOURCE: *Company Data, VSA Capital Research.*

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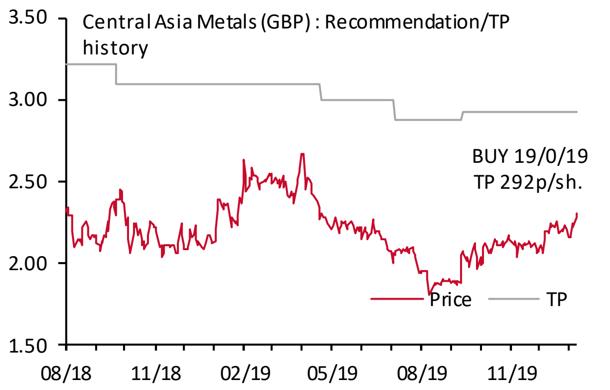
Recommendation and Target Price History



***SOURCE**: FactSet data, VSA Capital Research.*

Valuation basis

Our valuation for Central Asia Metals is based on a 50/50 blend of DCF analysis and EV/EBITDA peer based multiples.

Risks to that valuation

Commodity prices, political risk, execution risk.

This recommendation was first published on 2 August 2018.