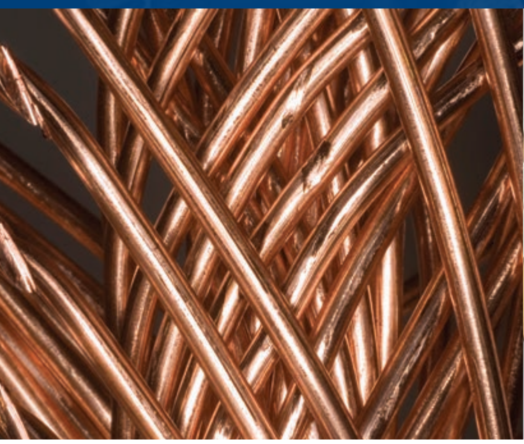
Quarterly
Metals Report

Sucden Financial
Established 1973

August 2019

Analysis and Forecasts for
Base Metals, Precious Metals, Iron Ore & Steel



Q3 2019

Contents

Published by Sucden Financial Limited on Tuesday 6th August 2019

Authors:

Geordie Wilkes
Head of Research

With contributions by:

Daria Efanova
Research Analyst

Research Desk
research@sucfin.com

Press Enquiries
press@sucfin.com

Industrial Commodities
+44 (0)20 3207 5430
industrials@sucfin.com

Summary	2
Market Overview	3
Aluminium	6
Copper	8
Lead	10
Nickel	12
Tin	14
Zinc	16
Iron Ore & Steel	18
Gold	20
Silver	22
Palladium	24
Platinum	25
Appendix	26

Summary

Global economic conditions continue to moderate, as advanced economies struggle to gain momentum. This is most clear in Europe, China and the U.S. We expect the theme for H2 2019 to be monetary easing from Central Banks but we question the impact this will have on underlying data. Political uncertainty continues to constrain economic progress; clarity surrounding Brexit and the trade war would inject positive sentiment into markets. The intensification of the trade war has caused markets to push lower and despite some bullish fundamentals, we do not anticipate the metals market to sustain rallies.

Aluminium – Primary aluminium output fell to 5.246m tonnes in June, Chinese production fell to 2.956m tonnes in the same period. Demand conditions are soft; however the aluminium market is still in a significant deficit in 2019. Alumina prices outside China are expected to fall further. Despite a weak consumption basis, we expect aluminium to start building a platform between $1,750/t - $1,900/t to move higher in H2 2019 and 2020.

Copper - China's refined copper output grew 5.8% y/y in H1 2019 but TCs continue to decline. Yangshan copper premiums have strengthened in recent weeks and local government expenditure filters into the economy. Smelter bottlenecks in China support the premise of supply shortages but sentiment remains downbeat. LME inventories have started to grow which may cap prices. We expect copper to remain range bound between $5,500/t-$6,000/t in Q3.

Lead - Inventories continue to fall as limited concentrate availability curtails refined output. We expect demand for autos to remain weak in Q3 but the hot temperatures in Europe and the U.S. may increase demand for batteries due to failures, causing some tightness in the secondary market. The Fed embarking on a monetary loosening cycle could provide support for metals, through dollar weakness. Assuming there is no trade deal, we expect prices to trade between $1,850/t-$2,150/t.

Nickel - China refined nickel production declined 8.4%m/m in June. We expect stainless steel production to start to tail off in H2 2019 as steel margins fall. Tsingshan continue to find new destinations for their stainless steel, with S.E. Asia and India seeing more material. We still look closely at what stainless steel is produced (200,300,400 series). Nickel ore replacing iron ore in the steel making process is not necessarily viable. Range: $13,000/t-$15,000/t.

Tin – Semiconductor sales continue to fall declining five consecutive months on a year-on-year basis, however May sales were slightly higher versus April. Tin concentrate and ore imports into China have declined 18% y/y, in keeping with the recent VAT increase. Production continues to trend lower in the longer term as the shortage of concentrate inhibits smelters' ability to produce material.

Zinc – Chinese refined production has been trending higher in recent months as imports have started to decline. As production in China increases, we anticipate prices to remain on the back foot, especially given the weak demand outlook. The spot import ratio for China has started to narrow but imports may continue to fall as Chinese output increases. Range: $2,200/t-$2,500/t.

Iron Ore & Steel - China's steel production continues at an alarming rate; however, margins have narrowed, and this could cause crude steel and stainless-steel output to fall. Some producers may look to use nickel ore instead of iron ore but this comes with complications. Port stocks have been declining which will continue to support prices in the long run despite Vale production starting to recover. Range: $90/t-$130/t.

Gold - Central banks continue to increase their bullion reserves at an alarming rate which should support prices. Lower interest rates should stimulate financial markets but as earnings disappoint, appetite for safe havens may grow. U.S. bond yields have sold off and other sovereign bonds are negative, this should aid demand for gold. We are anxious about the long term health of the global economy, with over stimulated equity markets and rising central bank balance sheets. Range: $1,380-$1,522/oz.

Silver – Rising ETF holdings and the COMEX non-commercial net length has increased, outlining investor appetite for silver. The Fed cutting interest rates would help support silver demand, however if the Fed only cut rates once speculator demand for silver may wane. Industrial demand for silver has accounted for more than half of the metal's consumption in the last five years and Chinese solar installations could improve in H2 2019 after the feed-in tariff has been approved.

Palladium - We maintain our constructive view on palladium for Q3, due to consumption maintaining its strength in the near term. Nornickel expect mine supply to increase 300,000/oz in 2019, Russia is the largest producer but palladium is mined as a by-product to nickel and the recent sanctions from the U.S. on Russia have kept credit in the country tight. Range: $1,350/oz -1,650/oz.

Platinum - The Association of Mineworkers and Construction Union has requested a 48% wage increase for workers, as higher palladium and rhodium prices boost earnings for Anglo American Platinum Ltd, Impala Platinum Holdings Ltd and Sibanye Gold Ltd. Known ETF holdings continue to trend higher, suggesting speculative demand which may support prices. Range: $800/oz-$950/oz

Market Overview

Global Outlook: The intensification of trade tensions and higher energy prices injected some volatility into financial markets in Q2'19. The global volatility index picked up and major equity markets responded with the S&P 500, NASDAQ and Shanghai Composite gaining 4.52%, 4.12% and 0.44% respectively, in Q2. The IMF downgraded its outlook for global economic growth to 3.3% in April from 3.5% and 3.7% in January and October 2018 respectively, largely due to an escalation of trade relations. Central Banks have followed a similar pattern with the European Central Bank slashing its 2019 forecast in the Eurozone to 1.1% from 1.7%, which has led to the a more accommodative stance on monetary policy. In China, officials have increased spending, cut the reserve ratio requirements and lowered taxes in an attempt to boost the economy, but to no avail, we anticipate another round of stimulus.

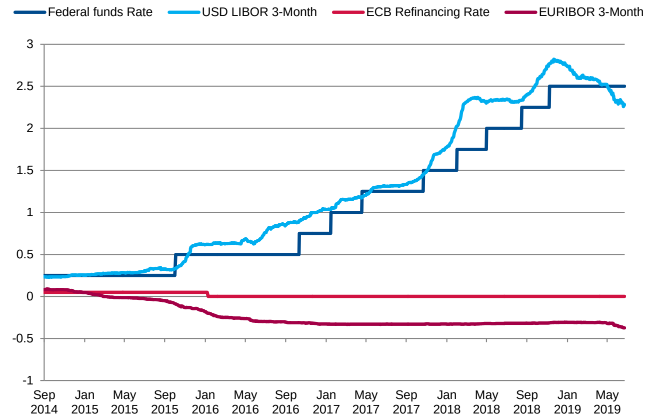
With low inflation and global risks skewed to the downside, central banks seem set to cut interest rates to cushion falling economic growth. The Fed is assumed to have reached its peak and currently, 3 more quarter cuts have been priced in by the market in 2019, we believe this is too aggressive. An insurance cut may not support inflation; however in our opinion the economic benefits for a rate cut are limited. Emerging markets struggle with currency stability and political unrest; however, U.S.-Sino trade tensions will weigh more on those slowing economies that are vulnerable to shocks, especially the exporting economies. Another growing concern is the ever-increasing national debt along with used up government ammunition needed to resolve its consequences on the economy. However, if the U.S. reduce the fed funds rate, this may weaken the dollar helping to reduce stress on emerging markets who hold large amounts of dollar denominated debt.

Oil prices have renewed their strength as geo-political tensions in the Middle East have escalated. The decision by the U.S. not to renew waivers that let countries buy Iranian oil without facing U.S. sanctions. Oil prices corrected to the downside following demand fears as U.S. inventories jumped by 22m barrels, the biggest shift since 1990. Consequently, market fears were intensified as U.S.-Sino and U.S.-Mexico trade tensions escalated heightening fears of a recession in 2020. Tensions in the Middle East following attacks on two oil tankers in the Strait of Hormuz boosted oil prices. Market sentiment favours the upside, especially after OPEC+ agreed to continue their oil cuts into H2 2019 to help mitigate rising U.S. shale production and a soft demand outlook. From the production side, the U.S. saw higher imports from Asia, as well as record domestic production (baker Hughes rig count). However, recent issues in the refining process in America have compounded tailwinds to energy markets.

US: The U.S. has entered the 11th year of a business cycle and does not show apparent signs of late-cycle characteristics such as tightening credit and high inflation rates. Personal consumption has maintained its strength at 4.3% y/y; however, we believe this can only be sustained in the short-term. In our opinion growth will hold at 2.0% as trade tensions weigh on the economy, despite Fed's approach to easing the credit market. The 3yr-10yr yield inversion has signalled a recession and the U.S. 10-year slid as much as five basis points to 1.9719% after the Federal Reserve signalled it was ready to cut interest rates using the most up to date of this economic data, spending was anemic at 0.3% m/m, in comparison to 1.1% in March but income was the strongest so far in 2019 at 0.5% m/m. Lower growth is not indicative of the economy entering a recessionary territory, at least in the case of the U.S. economy: the indicators remain solid however, the Fed believes 'cross currents' in the U.S economy will prompt economic indicators to slow. Inflation fails to gather steam and is below the 2% target rate at 1.6% y/y in June.

Western Economy Interest Rates

We expect the spread between E.U. & U.S. rates to narrow.

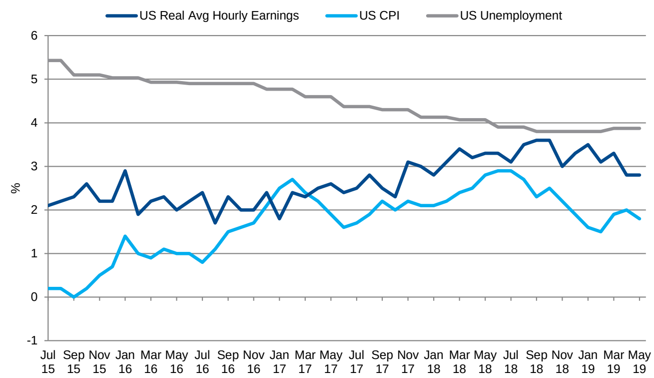


Source: Bloomberg

US section - Recent economic data shows that U.S. growth performance outpaced market beliefs and came to 3.1% in Q1, in line with Trump's growth goal. However, growth was aided by a build-up in inventories and a decline in imports, the trends that are likely to reverse in H2 2019 as daunting fears of trade wars weigh on market sentiment. Almost a third of Q1 GDP gain came from net exports; however, signals are indicating a drag, given trade relationship between China and the U.S. However, despite a higher rate of GDP growth, the composition of growth suggested the headline may be masking some underlying weakness. Despite trade negotiations between the U.S. and China restarting following a successful G20 meeting, we remain doubtful that both parties can come to an agreement. The intensification of the trade war has triggered financial markets to weaken. China has retaliated to the most recent round of tariffs from President Trump by letting the yuan fall below 7 and asking companies to stop importing agricultural products from the U.S., the chances of a deal are a long way off.

US CPI vs Unemployment vs Real Hourly Earnings

Lacklustre inflation has caused the Fed to reassess interest rates.



Source: Bloomberg

The labour market remains tight; however, the unemployment rate has eased, and employment rose at the slowest pace since March 2018. In comparison to 263k jobs added in April, 218k claims came through in May, and the unemployment rate eased from 3.2% in April to 3.6% in May. Nonfarm payrolls came through weak in May at 75k which disappointed the public, given 175k was estimated for that month. In June, jobless claims have eased to 216k from 222k a week prior. Weekly work hours, which is a better indicator of employment, has been kept low at 41.6h over Q2, down from 42h a year before. Slow rising employment levels, despite quite tight labour market, might not be enough to generate the sort-of wage-driven inflation that the Fed is seeking, according to Powell. Lower employment and lower payrolls might be the result of careful hiring in the private sector by those who fear the effects of the trade war the most.

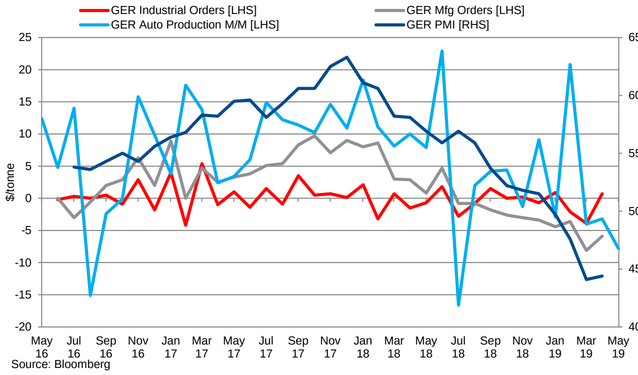
Interest rate expectations significantly shifted since the May FOMC meeting, as Powell cited the weight of Trump's trade war along with weaker inflation on the economy may cause the Fed to cut rates. At the time of writing the implied probability for a 25bp cut by the end of the Q3 stands at 100% comparing to 40.8% at the beginning of June, nearly three 25bp rate cuts for 2019 have been priced in. The news was well received by the market, with both equities and bonds rallying. While the outlook is believed to be favourable, further trade war intensification will weigh on U.S. economic performance in 2019. Accommodative monetary policy has failed to support inflation in recent years, why is now different? We believe a rate cut will stimulate financial markets and reduce the tool kit available to the Fed in the future. The ramifications of political policies are what are causing the U.S. economy to weaken, manufacturing PMI 50.6 in June and Core PCE Q/Q in 1.2% Q1. The removal of uncertainty from the trade war will help the U.S. economy regather steam.

Europe: In the Eurozone, manufacturing continues its weak performance, with the manufacturing PMI falling even lower to 47.6 in June. The European Central Bank is worried that a manufacturing slump that's taken hold in the euro area will spread to other parts of the economy, deepening the region's slowdown. New orders were weak as lower demand from abroad limits production. The unemployment rate fell slightly to 7.5% in May. The services PMI improved to 53.6 in June, and consumer confidence picked up to -6.5, which is higher than in the previous month (-7.23) but survey sees June confidence lower again to -7.2, as Mario Draghi announced a possibility of new stimulus measures as economy persists in declining. Pockets of Europe benefited from fading headwinds and recovered partly in Q2; however, we see trade war escalation dampening future growth. Exports in May grew 1.4% but we expect Q2 exports and GDP to still be weak; in our opinion this will further dampen business expansion plans.

Industrial production improved in May by 0.9%m/m, however declined 0.5% on a year-on-year basis. We expect that European industrial production will remain on the downside in June and contract once again for Q2. The weakness in European manufacturing and industrial production can be attributed to Germany's poor performance. Indeed, German manufacturing order and industrial production were -8.6% y/y and -3.7% y/y respectively in May. Headline inflation was 1.3% y/y in June, which is significantly below April's 1.7% y/y. Core inflation, marginally improved in June at 1.1% y/y up from 0.8% y/y In May. We attribute this to a rise in food prices and services. This dampened sentiment is expected to continue in Q3, despite monetary policy loosening from the ECB.

German Manufacturing and Industrial Market

German economic data remains weak as European struggles worsen.



Source: Bloomberg

At their June meeting, the ECB paved the way for additional stimulus as inflation remains invisible. Financial markets have priced in a 10bp cut in September, if the ECB were to restart quantitative easing this would send a powerful message. However, the limitations to sovereign bonds ownerships indicate that the bank may look to purchase corporate bonds. Outgoing ECB President Mario Draghi, who is set to be replaced by Christine Lagarde, may look to go out in style. Given the lack of inflation despite the prolonged and highly accommodative monetary policy in Europe, we see more economic benefit from the removal of political uncertainty or a fiscal based approach than additional loosening monetary policy. The period of anemic inflation has prompted the ECB to assess whether or not they should revamp their 2% inflation target.

MSCI Europe gained 1.15% over Q2; this doesn't tell the full story though. The index declined in May to 123.70, but recovered strongly in June to close the quarter at 129.7. Trade tensions and political uncertainty continue to dampen sentiment in Europe. The disagreement in Europe between Italy and the European commission has subsided after the commission said that Italy's stimulus package was 'material enough not to purpose to the council opening of an Excessive Deficit Procedure' for Italy's disregard to the debt ceiling rules. Consequently, the spread between the German and Italian 10yr yields has narrowed to 1.84% as of July 18th; it reached 2.88% in June.

Emerging Markets: The emerging markets staged a partial recovery in H1 2019 as the MSCI emerging market index gaining 9.19%. Q2 was more volatile; the MSCI EM index declined by 7.15%, as the trade war intensified, but investors were more optimistic in June as the index gained 7.23% to close at 1,053.46. A turbulent world economic environment was detrimental to emerging markets in 2018, specifically in Turkey. The political outlook for Turkey lacks clarity and we expect this to continue in Q3, especially following their acceptance of a Russian made defence system. Consequently, the U.S. has ruled out selling them F-35 stealth fighter jets. There is significant uncertainty surrounding Turkey on a political basis, its abandonment of the West is likely to heighten tensions. The lira remains weak and at 5.70 at the time of writing and with little clarity surrounding the situation, we do not rule out further weakening. One bright spot for Turkey is the current account deficit, which has narrowed significantly in the last year, from $57.9bn to $2.4bn according the Turkish Central Bank, we attribute this to the decline in imports due to the downturn in growth.

The Markit manufacturing PMI for the emerging markets was contractionary in June at 49.9, for the second time this year. The US-Sino trade relationship continues to cloud the manufacturing sector, however the composite and Services PMIs are still expansionary at 50.9 and 51.5 respectively. Emerging market currencies have benefited from the pause and now loosening of monetary policy. The market has priced in 3 rate cuts this year from the Fed, in our opinion this is too aggressive, however the reduction in interest rates and a weaker dollar will support emerging market economies with high levels of dollar denominated debt.

Mexico has approved USMCA, and avoided tariffs from the U.S. President which added some clarity to the situation. This is a positive outcome for all parties but the USMCA needs to be approved by Capitol Hill in order to become legislation. In Brazil, the pension reform bill has been approved by the lower house, and the Brazilian reais has strengthened as a result. The bill aims to save R$267bn reais over the next decade, the government aim to boost investment and stimulate economic growth. Brazil is one of the few countries that have benefitted from the trade war; according Chinese customs data, in May 2019 Brazil's soybeans accounted for 80% of China's imports at 6.302m tonnes.

Brent and WTI prices have gained 15.3% and 21.65% year-to-date, emerging market countries like India, which relies heavily on oil imports, have significant exposure to the price of oil. On a year to date basis, the Rupee has appreciated 1.1%, comparatively WTI has gained 21.65%. This intensifies inflationary pressures for India, who bought the majority of their oil from Iran. Consequently, following Iranian sanctions, India have started to import more U.S. oil. India imported 184,000bpd from the U.S. in May, up from 40,000bpd in May 2018.

China: China data has given mixed signals; Q2 GDP was in line with expectations at 6.3% y/y. Retail sales, industrial production, and fixed assets ex-rural all surprised to the upside for June at 9.8% y/y, 6.3% y/y and 5.8% y/y respectively. Caixin Manufacturing PMI was contractionary at 49.4, the lowest reading since January this year. Beijing have been quiet in recent weeks, we believe they are holding back on stimulus to prepare for a long trade war. Chinese local governments issued a net $202.23bn in special bonds in H1 2019 which has helped support the economy.

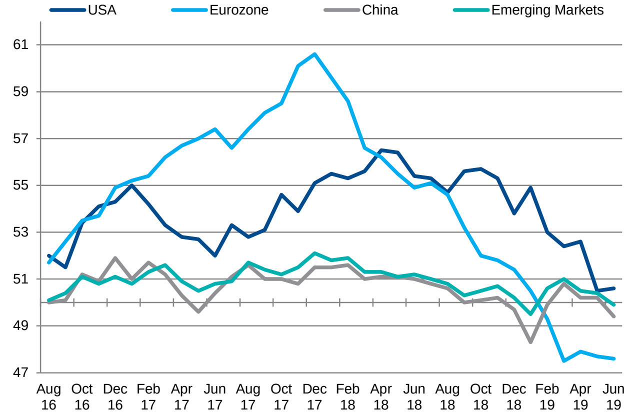
In response to an increase of the tariff rate to 25% on $300b worth of Chinese imports, along with a rise from 10% to 25% on $200b imports, China retaliated with a similar strategy by increasing tariffs to 5-25% from 5-10% on $60b worth of imports from America. They retaliated once again following the latest round of tariffs on $300bn worth of Chinese goods. China raised the prospects of cutting exports of materials used in defence, energy, electronics and automobile sector, which will be the harshest blow to the American economy as it receives 80% of its rare earths from China. The Shanghai Composite index responded to the intensification of the trade war negatively, losing 13.45% over two weeks by the end of April.

June trade data was mixed; the trade surplus increased to $50.98bn but imports fell 7.3% y/y, exports were also weaker at -1.3% y/y. Soft trade data prompted a call for fresh stimulus as the trade war continued to weigh on the Chinese economy. Weak global trade is exemplified by Singapore's exports declining 17.3% in June, compounding fears of a slowdown after GDP fell 3.4% for Q2. The patience by the Chinese government by not embarking on a large round of stimulus suggests the U.S. and China are not close to an agreement and they expect the need for stimulus next year. We do not believe there could be an easing of tensions, as the issues surrounding intellectual property rights are unresolved and China is likely to play hard ball.

In June, Vice-President Liu He mentioned possible additional stimulus measures given U.S.-China trade dispute intensifies. Recall that in March, China approved a 2 trillion-yuan stimulus package to improve business confidence. We believe that additional measures will cushion markets if the continued downfall persists, however, large scale infrastructure projects big enough to revive the economy are diminishing. Previous central bank governor, Zhou Xiaochuan, said it is likely the Chinese government will lower the currency value if the trade fight continues.

Manufacturing PMIs

The manufacturing industry continues to suffer across the globe.



Source: Bloomberg

PMIs: June Markit Manufacturing PMI for the U.S. was in line with the previous months reading at 50.6. New orders improved marginally, we also saw the rate of output growth quicken slightly. However, businesses were anxious about future output growth and expectations of production growth were subdued. Cost pressure increased in conjunction with output charges. The weak demand conditions caused firms to reduce their inventory once again, pre-production stocks declined. Subsequently, we expect business conditions to remain challenging in the U.S. in the coming months. As such, Q2 manufacturing data signals are healthy, but a slowing economy with lower future demand projections for H2'19.

Eurozone's manufacturing performance has been contractionary throughout Q2. May posted new lows at 47.7, moving slightly down from April's 47.9. June was no different at 47.6 as manufacturing conditions deteriorated for the 5th straight month. Operating conditions were weak across the bloc as the challenging business and manufacturing environment persisted. Trade sentiment caused output of new orders to weaken at the detriment to employment. Business confidence was at historical lows. Trade wars, Brexit results and declining demand for automobile industry will remain the most significant headwinds for Q3'19.

Caixin China PMI fell from 50.2 in May to 49.4 in June, manufacturers highlighted trade tensions, declining export orders, production and total sales; as reasons for the contraction. Producers lowered output in June which weakened employment in the sector, causing both sectors to contract. According to the survey, China's domestic demand declined in June; contra to the recent retail sales data. We expect business conditions to remain challenging in the near term as trade uncertainty lingers, manufacturers' remain neutral on the outlook for the next 12 months.

Aluminium - Building a Base Despite Weak Demand

Summary

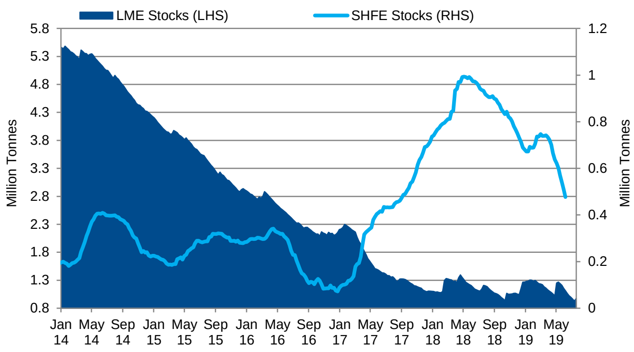
Aluminium prices have been well supported below $1,800/t in Q2 but failed gain a footing above $1,850/t. We expect Chinese aluminium exports to remain elevated in Q3 despite the weak demand outlook. The automotive market and construction industry in Europe especially is a worry which we believe will continue to weigh down prices. Chinese alumina imports declined 9.5% y/y in H1 2019, and Alunorte output may prompt alumina prices outside China to remain under pressure. China's scrap market was tight in July as demand strengthened, in our opinion this will support prices in H2 2019.

Q2 Recap: Aluminium remained on trend in Q2 as prices were capped by the 100 DMA. Prices declined by 6% to close June at $1,798/t on the LME, however SHFE 1st generic futures gained 1% over Q2 to RMB13,840/t. SHFE prices topped out at RMB14,390/t, however as trade tensions escalated market sentiment deteriorated causing prices close on the back foot. The removal of sanctions in conjunction with a poorly performing global economy and re-escalation of trade tensions have compounded headwinds to the aluminium market. Global macroeconomic conditions in H1 2019 have softened as political issues significantly damage global growth prospects. Global manufacturing PMIs have declined significantly in the last 18 months; consequently market sentiment within the metals industry remains weak. Even though trade discussions have restarted, but the relationship has worsened following more tariffs from the U.S. and the retaliation from China. We do not believe there will be a deal this year even though the U.S. and China will continue talks in September.

Norsk Hydro have had the production ban at their Alunorte refinery lifted, the company have stated that they expect to reach 75% of their 6.35mtpa capacity. This prompted further weakness in the alumina market, the Platts 1st Generic FOB Australia declined by 14.45% to close Q2 at $341/t, YTD performance is down 13.5%. In our previous report, we highlighted the impact of falling alumina prices, we maintain our view that as Alunorte and Chinese (production was up 5.4% y/y at 6.41m tonnes in June) material comes to market, alumina prices will struggle. The averaged alumina price for all regions is RMB2,527/t as of July 22nd, at the end of May the average price was around RMB3,150/t, according to SMM.

LME vs SHFE Stocks

SHFE stocks have seen considerable outflows in recent months.



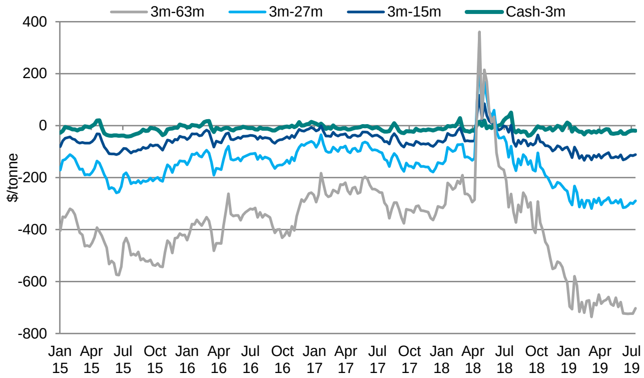
Source: Bloomberg

LME inventories were volatile, and primary aluminium warehouses were busy. Inventories saw significant inflows of material in May, rising 25% to 1.275m tonnes. Stocks trended lower in May and June, falling 21.8% to close Q2 at 997,000 tonnes, total Q2 flows saw a net outflow of 11.2%. SHFE deliverable stocks have declined 42.4% to 423,068 tonnes, below the 5 year average of 446,000 tonnes.

Outlook: Weak June Chinese trade data from an export and import perspective prompted investors to bet on another round of stimulus. Aluminium exports are not an area of weakness, since 2018 Chinese exports of unwrought aluminium and aluminium products have surged 15%. According to customs, exports in June were 506,000 tonnes; a decline of 5.6% m/m, the five year average for Chinese aluminium exports is 423,540 tonnes. Year-to-date exports have increased 10% on 2018 to 2.98m tonnes. We do not envisage a slowdown in Chinese aluminium exports and expect them to weigh on the market, especially with the devaluation in the renminbi. Vietnam have placed anti-dumping tariffs on Chinese goods, the temporary tax ranges from 2.46-35.58% and impacts some aluminium products from China. We expect the rise in Vietnam imports was due to Chinese firms trying to by-pass U.S. tariffs but the rise in imports hurt Vietnam's domestic companies. Imports of 306,930 tonnes of scrap material have been given approval by the Ministry of Environmental protection, following the recent quota. The restriction of scrap imports may support refined consumption going forward.

Aluminium Calendar Spreads

Near dated spreads have tightened despite a weak demand outlook.



Source: Bloomberg

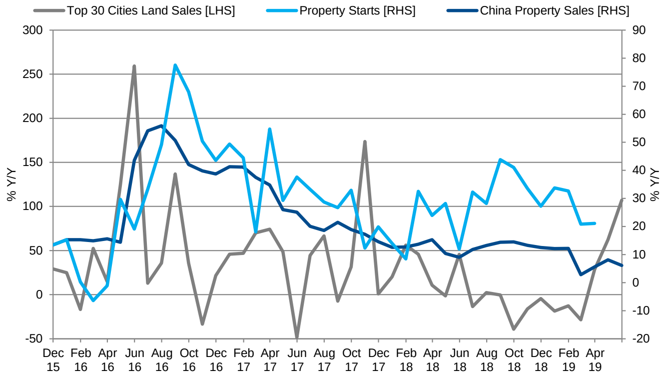
The LME spread remains in contango, affirming outflow of material from exchange warehouses. The SHFE/LME ratio was steady at 7.53 on July 22nd and import losses were to RMB1,300/t. Premiums held at $100-120/t for goods under warrant in shanghai bonded warehouses, whereas goods for bill of landing in Shanghai stood firm at $100-120/t cif. SMM data shows primary aluminium inventories rebounded to 1.047m tonnes in the week to July 22nd, marking the first weekly increase in nearly 4 months. Conversely, 6063 aluminium billet stocks declined as arrivals at five major consumption areas to 81,100 tonnes. Steady premiums and rising primary inventories indicate a soft demand picture.

The most up to date GDP figures show the Chinese economy grew at the slowest rate since 1992; however the economy is significantly larger today. Growth of 6.2% y/y for Q3 was below expectations, but there were some signs of strength. Retail sales for June improved to 9.8% y/y and industrial production grew at 6.3% y/y. Fixed-asset investment was lackluster at 5.8% y/y, reports suggest that factory orders were strong which contrasts with the limited activity in the physical market, indicating we could get a correction to the downside for the metals complex. Data is still on the soft size and with the trade war unresolved we expect the PBOC to support the economy with new stimulus and the government to increase spending; aggregate financing grew to RMB2,260bn in June. Land sales in the top 30 cities have improved but property starts and sales lag behind, there was a pickup in June as property investment improved 10.9% YTD in 2019. Local governments have been buoyed with new policy which involves new special purpose, which should support infrastructure investment going forward.

Chinese demand has remained subdued in recent weeks despite low prices. During the summer months, buying can be muted, supplies of ingots are adequate and this could keep downstream buying activity subdued in July and August. According to SMM, some mills have been selling their ingots inventories due to lack of sufficient orders, reducing their operating rate. If true, this affirmed the worries of ample supply and poor demand. Aluminium ingot prices have been in a persistent decline since the middle of May, declining from around RMB14,400/t to RMB13,850/t as of July 22nd. The ample supplies in addition to weak downstream demand could trigger prices to fall further in the coming months.

Chinese Property Market

Top 30 city land sales have surged which may support property starts

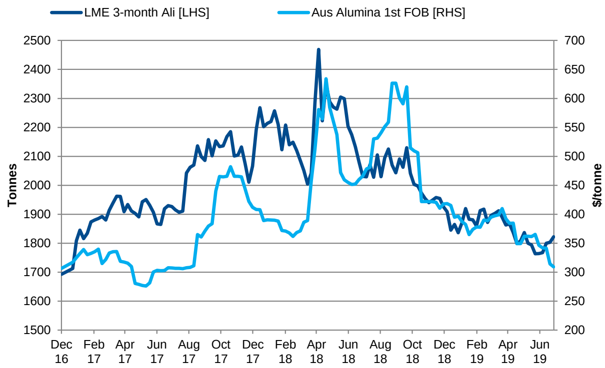


Source: Bloomberg

European construction and automotive data accentuates the weak demand outlook for aluminium in the near term. However, the Markit construction PMI is still expansionary at 50.8 as of June 30th and the manufacturing PMI shows another contractionary reading of 47.6. We anticipate construction to continue to struggle as firms hold back investment due to political uncertainties. Indeed, we do not envisage a pickup in activity over the summer months as uncertainty continues to linger. We maintain our view that the European car sector will remain weak in Q3, according to the European Automotive Manufacturers Association, passenger car sales declined -2.1% in the first five months of 2019 but in May, sales were positive for the first time in 9 months on a m/m basis at 0.1%. Commercial vehicle registrations improved in May gaining 8.5%, this was not a one off, as the market grew at 6.5% for the first 5 months of 2019. The weak passenger car sales and production is detrimental for aluminum demand in Europe, German production declined in May by 10% YTD, with exports to the U.S. down 12%.

3 Month Price vs Alumina 1st Generic FOB

The restoration of Alunorte capacity has weighed on alumina prices.



Source: Bloomberg, Platts

Alumina prices could continue to fall as Alunorte ramps up production, the decline in alumina prices may prompt an increase in imports into China as offshore alumina prices trade at a discount to domestic alumina prices. Indeed, market participants may be putting off purchases as they believe alumina prices outside of China will fall further in the coming months. Alumina prices in China have increased after a red mud dam at the Jiakou refinery failed.

Copper - CNH & Rising Stocks Provide Headwinds

Source: Bloomberg, 30.07.19

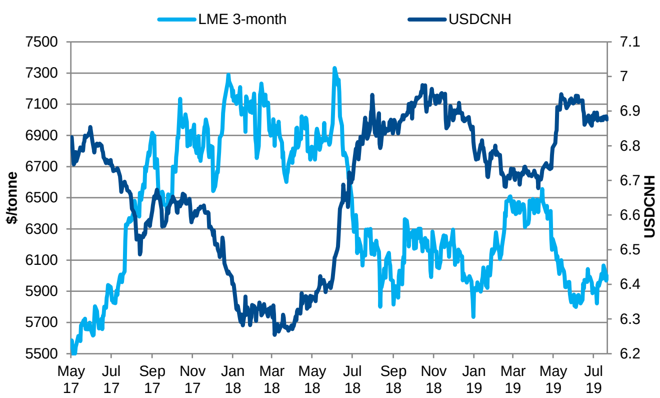
Summary

Rising inventories and a weak demand outlook continue to provide notable headwinds to copper prices. China's refined copper output grew 5.8% y/y in H1 2019 but TCs continue to decline. Yanshan copper premiums have strengthened in recent weeks and local government expenditure filters into the economy. LME inventories have started to grow. Market sentiment remains downbeat and we expect this to continue in Q3, however a weaker dollar in H2 2019 may provide some support to copper prices.

Q2 Recap: Copper prices failed to live up to the performance of Q1, following the intensification of the U.S. /China trade which saw the U.S. raise Chinese export tariffs on May 10th. Anemic economic growth in Europe and Japan has prompted central banks to shift towards loosening already accommodative monetary policy. Poor global trade figures and the 'cross currents' impacting of the U.S. economy are becoming more prevalent. In our opinion the weakness shown in the global economy is due to political policy causing uncertainty, most notably Brexit and the trade war. Consequently, market selling pressure caused copper prices to decline by 6% in Q2, closing at $5,993/t.

LME Copper vs USDCNH

CNH has remained under pressure, providing headwinds to copper.



Source: Bloomberg

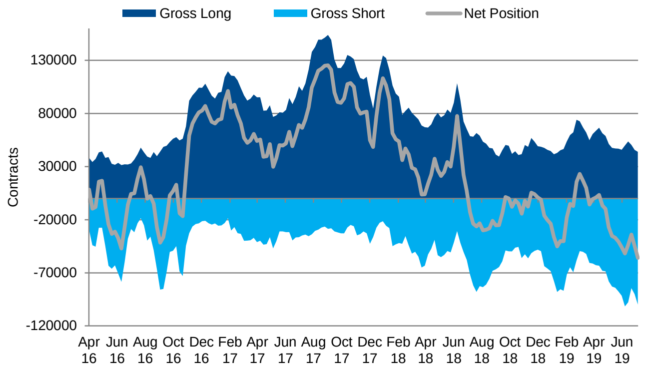
After a bright start to the year, Chinese economic data slowed in Q2; we anticipate the government to support economy once again. Indeed, Chinese government expenditure increased in May at an accumulated rate of 12.5% m/m. All-system financing aggregate was RMB1,400bn for May, considerably below the multi-year high in January at RMB4,65.58bn. Another round of stimulus seems imminent following China's June trade data; exports and imports declined 1.3% y/y and 7.3% y/y respectively but the current account surplus was $50.98bn. Stimulus would support China's economy in the near term, but we once again highlight the long term risks of re-leveraging the economy. Consequently, copper sentiment is soft but there is tightness in supply and the Fed cutting interest rates may weaken the dollar which in turn would support base metals.

Import TCs =>26% copper have been in consistent decline since our last report, in the week to July 5th TCs averaged $57/t. Conversely, the Yangshan premium trended higher in Q2 to $60/t. LME inventories have trended higher since bottoming out in March; inflows into global LME warehouses saw stocks rise 43.25% in Q2 to 241,000 tonnes, fractionally below the 5 year average of 246,000 tonnes. Conversely, SHFE deliverable stocks have trended lower since March 2019, falling 44% in Q2 to 146,000 tonnes. 1st generic SHFE copper prices moved in unison with SHFE stocks, falling 4.5% to RMB46,970/t.

Outlook: Fragility of copper sentiment is highlighted by the COMEX non-commercial COT combined, now holding a 31,288 net short. Non-commercials have liquidated 63,199 contracts since March 2019. The current net short is 89.2% of their historical maxes which was in December 2014; however, there are more futures and options traders as of July 19th at 300 compared to 266 futures then. Consequently, further intensification of trade tensions in conjunction with contractionary manufacturing PMIs and weak European data may prompt new short positions and a new low posted. Open interest for COMEX copper has remained relatively flat since the start of February, baring a spike in June to 297,885. The spike in OI coincided with a selloff in the 1st generic COMEX copper price suggesting new short positions. Conversely, open interest on the LME is just off the three year lows at 406,372 (73% of their historical max position), affirming the cautious sentiment amongst traders.

COMEX Managed Money Positioning

Investors are bearish on prices, but a short covering rally could be vicious.



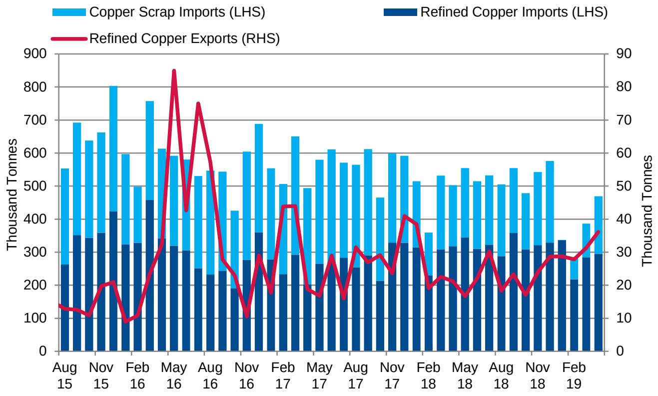
Source: Bloomberg, COMEX

Trade talks between the U.S. and China have restarted; we are doubtful that a long term agreement can be struck at this time; we believe the disagreement over intellectual property rights will continue into the long run. China had previously agreed not to use rare earth exports as a retaliation tool, suggesting they may have learnt from when they restricted rare earth exports to Japan 2010; however with tensions rising we do not rule out China blocking rare earth exports to the U.S. The fragility of the U.S.–Sino relationship was evidenced in May when the U.S. increased tariffs to 25% on $200bn worth of Chinese exports and the again in July when the U.S threatened to impose 10% tariffs on $300bn worth of Chinese imports, China then allowed the yuan to fall below 7. Congress could block the new tariffs; however both sides are in favour of a tougher stance on China.

Chinese production of refined copper grew at an accumulated growth rate of 5.8% in June, up from 4.4% in May. The growth rate of refined copper was 11.8% y/y; output of refined copper for June was 804,000 tonnes, up from 710,000 tonnes in May. Consequently, accumulated output for 2019 has reached 4.5m tonnes of refined copper up 5.8% vs 2018, according to NBS data. The output of copper products in China remained strong in June at 1.76m tonnes, an accumulated growth rate of 12.7% m/m. Output is considerably below last year's production levels for accumulated copper products. However, consumption continues to disappoint and we maintain our view that Chinese copper demand will struggle in H2 2019. Support for copper prices will likely come from the supply side, a weaker dollar due to Federal Reserve cuts and progress with trade negotiations.

China Scrap & Refined Copper Imports/Exports

Refined copper imports increased significantly in Q2 as scrap imports falter.



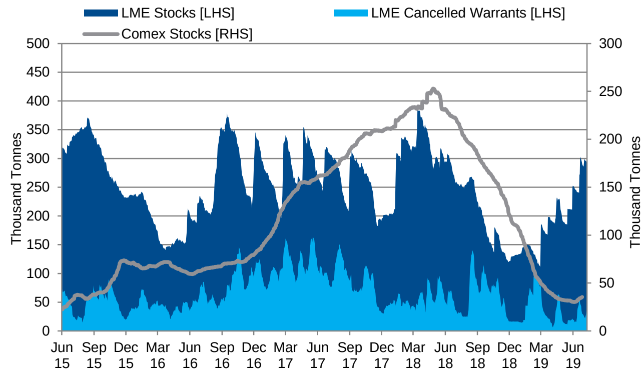
Source: Bloomberg,Customs General Administration

Chinese authorities have released a new round of restrictions on high grade copper import quotas. China's Solid Waste and Chemicals Management approved approximately 125,000 tonnes of scrap quotas. A total of 240,429 tonnes of copper imports have been approved for Q3 for category 6 & 7, we expect to see category 7 imports to weaken in Q3. These restrictions follow the imposition of restrictions on category 6 materials as of July 6th, the import quotas may help offset the loss from the category 6 ban. China's copper imports declined 9.7% m/m (27.2% y/y) in June to 326,000 tonnes according to customs. Concentrate and ore imports were weak, down 20.1% m/m and 16.5%y/y to 1.47m tonnes. According to SMM, the approved volume of category 6 imports, equates to number of imports in Q3 2018. Trade data shows an increase in imports from Malaysia, and we believe low grade copper is processed and upgraded in Malaysia before being sent onto China.

Mine disruptions have been muted in 2019 and according to Wood Mackenzie there have been 420,000 tonnes of copper concentrate and SxEw cathodes. Downbeat market sentiment was exemplified when prices failed to catch a bid following a strike by three unions at Codelco's Chuquicamata facility. The strike has come to an end; however Codelco delayed the return of the Chuquicamata smelter once again. The smelter is running at 50% capacity, processing 80 tonnes of concentrate per hour, Codelco attribute the delay to using contractor workers. Aligning sentiment from Chinese emission regulations, the Chilean government and Vale's issues at the beginning of the year; we believe that environmental restrictions are likely to cause more disruptions in the longer term. Consequently, miners need to become more accountable for their impact on the environment.

LME vs COMEX Inventories

LME inventories have seen significant inflows.



Source: Bloomberg,LME

The decline in exchange prices in Q2 in addition to the improvement in Chinese premiums suggests efficiency in the market. However, in recent weeks low futures prices have failed to improve spot demand prompting premiums for standard quality copper to fall to 60/70/t high grade copper premiums were 100-110/t against the front month SHFE contract. This suggests producers are sufficiently covered. Indeed, home appliance demand in conjunction with a persistently weak auto market in China weakened operating rates for copper rod in June. Operating rates were down 6% m/m in June at 75.65%, and down 5.41% y/y. One bright spot for this sector is demand for cables as China invests in 5G. Furthermore, the Chinese Southern Power Grid has put forward plans to invest RMB170bn over a 5 year period in grid construction at Pearl River Delta.

Lead - Concentrate & Low Stocks Offset Autos

Summary

Lead prices have been supported in recent weeks as limited concentrate supply curtails refined lead production. Operation rates have softened in battery producers and secondary lead smelters. The auto industry is under pressure across the globe, but e-bike battery consumption has improved in China. Environmental inspections in China are entering into a key stage and this may provide further support to prices if capacity is taken offline. Market sentiment remains on the back foot but we expect prices to be supported by low inventories and supply constraints.

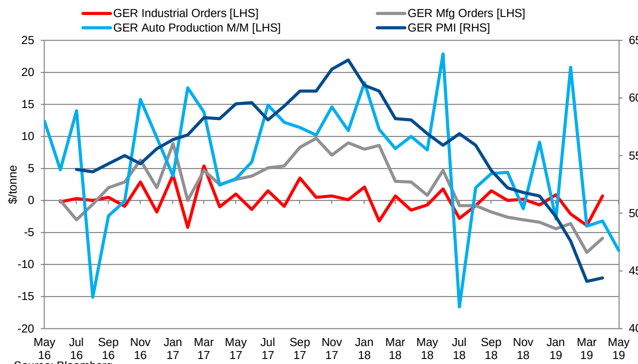
Q2 recap: Lead prices declined by 4.6% in Q2 as weak macro data compounded weak demand fears. German manufacturing and industrial data is weak with manufacturing PMI contractionary at 45, manufacturing orders declined 8.6% y/y, industrial production declined 3.7% y/y, and industrial manufacturing orders down 2.2% y/y. Macroeconomic forces have plagued the lead market and this is expected to continue in the short run, despite Chinese car sales rising for the first time in 12 months in June, gaining 4.9%.

Global LME inventories declined nearly 16% in Q2 to 66,175 tonnes; and SHFE deliverable stocks declined 16.65%. SHFE inventories have trended higher in 2019, contra to activity in LME warehouses. Lead concentrate shortages have caused tightness on the supply side, but demand is soft. The outage at Port Pirie exemplifies the lack of concentrate available but the smelter is set to restart at the end of July.

Outlook: Our base case scenario is that China and the U.S. will look to work towards a deal once again. We expect the deal to involve tariffs and the escalation of tensions surrounding Huawei suggests that ideological differences regarding intellectual property rights are still the key stumbling point. The demise of the US-Sino relationship gave a short lived reprieve to Europe after President Trump decided against tariffs on autos, for 6 months at least. However, the European economy is firmly on the back foot as its two largest export markets continue to raise their protectionist stance, Brexit uncertainty persisting and Middle East tensions are elevated. The ECB has responded by loosening monetary policy and suggesting further stimulus.

German Manufacturing and Industrial Market

German economic data remains weak as European struggles worsen.



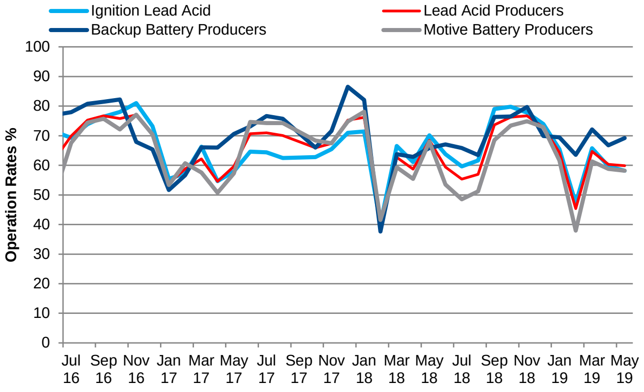
Source: Bloomberg

Indeed, poor manufacturing and industrial data in Germany has continued. German industrial manufacturing orders declined 2.2% m/m in May, down from 0.4% in April. Industrial production declined 3.7% y/y in May, less than manufacturing orders which deteriorated 8.6% y/y in May. We do not see this as a structural issue but more a cyclical slowdown in Europe, this is was partially affirmed after European car sales increased by 0.04% y/y to 1.44m units in May for the first time in 9 months. German auto sales grew by 9.1% y/y in May as producers offered lucrative deals for customer to trade-in older diesel vehicles for newer greener models, including electric vehicles.

Operation rates across lead acid battery plants have softened, we attribute this to the decrease in maintenance at producers, small and medium battery producing firms had operation rates at 27% and 47% restively for June. Back-up producers saw a decrease in operation rates to 67.4% in June. This decrease in operation rates triggered a reduction in lead demand. We expect these operation rates to start remain on the back foot, during the summer months. End user demand has been weaker in H1 2019 and we expect this to continue in the near term as the trade war continues.

China Battery Operation Rules

Operation rates have fallen at Chinese battery producers.



Source: Bloomberg, SMM

China battery production continues to decline accentuating poor demand for lead. Battery production in China is up 0.2% in May versus 2018, with total production at 49.6m kVah. A pick up in operation rates for battery producers could increase finished stock levels, putting pressure on finished good prices. We reaffirm sentiment in previous reports suggesting that despite auto sales and production remaining lackluster, battery renewals and secondary demand will support lead consumption in the long run as China's total car fleet was 240m units in 2018, according to the Ministry of Public Security. However, weak consumer demand has been exemplified by declining spot premia in Europe and North America. Battery prices have been falling across the globe; Chinese lead scrap recycled deep cycle battery ex-VAT are down 6.63% and a scrap recycled start type battery has declined by 6.27% so far this year to RMB9,150/t and RMB8,225/t, respectively.

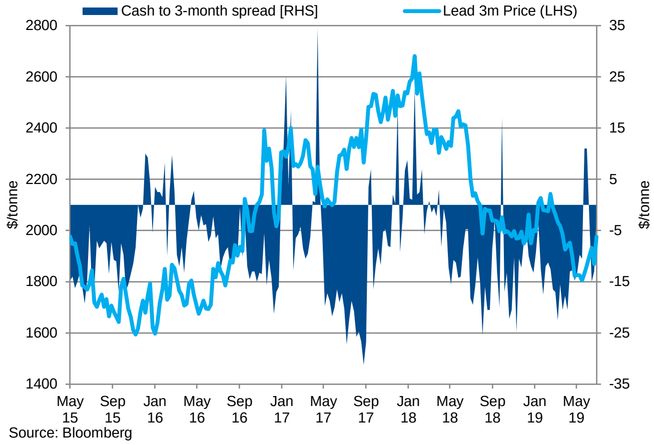
Contra to the zinc market, limited concentrate supply is curtailing the availability of refined lead. Wood Mac forecast global concentrate production at 5,400kt for 2019, an increase from 4,849kt in 2018. The majority of the increase has come from Asia which Wood Mac estimate will produce 3,110kt in 2019. This can be offset by the rise in secondary production in recent years with SMM indicating secondary output was approximately 40% of lead production in 2017. This sentiment is affirmed by Wood Mackenzie who forecast global secondary production to total 9,131kt this year, up from 7,172kt in 2018. National Bureau of Statistics data outlines that refined lead output in China improved in June to 475,000 tonnes, up 18.2% y/y.

However, smelter output has weakened due to limited availability of concentrate and SMM TC for imported lead concentrate into China was $25/dmt and domestic concentrates were RMB1, 850/mt on June 19th. Domestic TCs and global TCs remain low as the power is with the miners not the smelters. The low LME prices do not incentivise production in the near term. Primary smelters outside China have reduced their operation rates, with some citing limited concentrate availability. Reports suggest that Port Pirie resume at the end of July after shutting down in May to allow the Top Submerged Lance Furnace to replenish stocks of material for the Blast furnace. This will impact Nystar's EBITDA substantially in Q2.

According to the LME COT figures, investment funds liquidated their long positions from March 1st to March 29th from 3,695 contracts to 2,611 contracts short. However, the uncertainty surrounding the trade war has increased apprehension amongst traders. Trading has been choppy across base metals. As of March 17th the 30 day average range was $32.50 and implied volatility was 16.37%, fractionally below 10 day realised at 18.66%. The low volatility market could present an opportunity for some investors, however the week leading up to Easter is notoriously quiet and as such investors would do well to keep this in mind.

Cash to 3 month spread vs LME 3 Month Price

The contango has remained intact despite the rally.

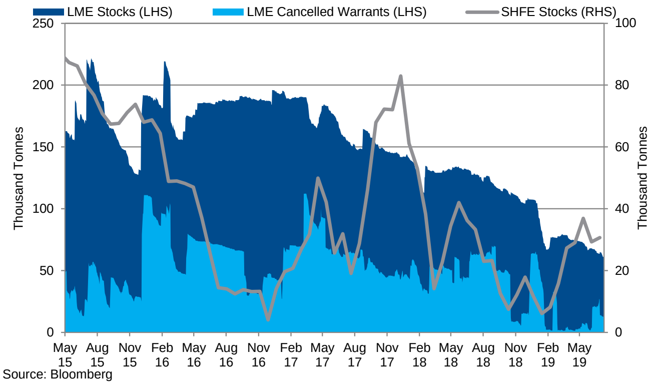


Source: Bloomberg

The spread between lead acid battery scrap and primary lead has been falling in recent years and we expect this to continue. Indeed, according to SMM data lead ingots averaged RMB16, 425/mt as of July 22nd versus secondary lead which cost RMB16,175/mt. Cash-3 month's spreads have widened from $43/ tonne back to $6.75/t contango, reducing the cost of carry and this could cause an inflow of material into exchange warehouses. We expect the fundamental tightness to be indicated in cash-3 month spreads with the spread remaining tighter than the 1 year average of $13.32/t contango.

LME Lead Warehouse Stocks vs SHFE Deliveralble St5ocks

Exchange inventories have diverged in recent months as material flows into SHFE warehouses.



Source: Bloomberg

With consumer demand weak, trade houses and market participants holding off warrant material may prefer to keep the metal off exchange until consumed. This is affirmed by exchange flow data which shows the limited metal coming on-warrant with persistent outflows. LME inventories stand at 60,875 tonnes but only 48,425 tonnes are on warrant. The majority of this material is held in Europe, and this affirms the fundamental tightness in the market which may support spreads and the flat prices, trade war pending. SHFE inventory has been increasing in 2019 with deliverable stocks are 35,262 as of July 22nd. Customs data suggests that imports of unwrought lead and alloys were 20,132 tonnes in May, significantly below January levels of 34,765 tonnes.

Nickel - NPI Output Undermines Prices

Source: Bloomberg, 30.07.19

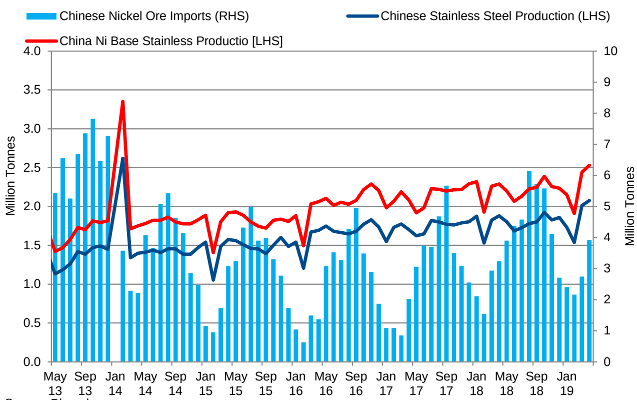
Summary

China refined nickel production declined 8.4%m/m in June according to SHMET. Stainless steel production has been strong in 2019. Tsingshan continue to increase their impact on the market by investing in new countries; India and South Korea after the anti-dumping duties imposed by China on Indonesia stainless. China's stainless imports have declined as a result of the duties. Stainless production is expected to fall as demand is on the back foot despite China's transport investment up 4.8% H1 2019 at RMB1.37trn.

Q2 Recap: Nickel prices came under pressure in Q2, as market sentiment weighed heavily on base metals. Trade talks between the US and China came to an abrupt halt at the beginning of Q2, causing nickel prices to weaken. In unison with nickel prices, 304/2B (2mm) prices have fallen from RMB14,800/mt at the beginning of April to RMB14,500/mt as of July 5th. Nickel prices on the LME declined 3.18% in Q2 as rising inventories, a macroeconomic slowdown in China and stronger dollar (for the most part) took their toll on the stainless steel driven market. 1st generic SHFE prices declined -0.15% over the quarter after finding robust support at RMB95,000/t.

Chinese Nickel Ore Import vs Stainless Steel Production

Chinese stainless production has been strong so far in 2019.



Source: Bloomberg

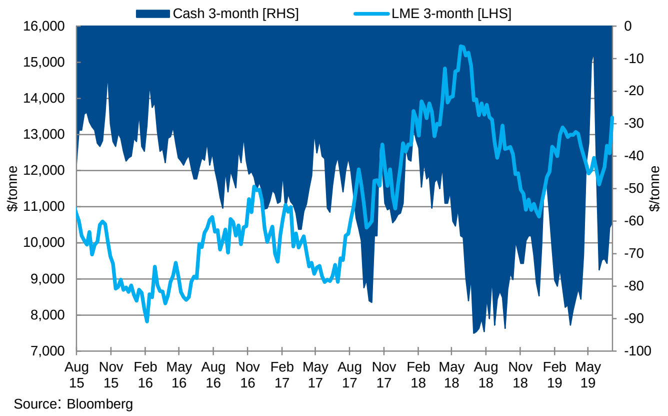
Nickel based stainless steel production soared in the first four months of 2019 with production reaching 2.07m tonnes in April. Stainless steel stocks have continued to rise, exerting downward pressure on stainless prices. This has squeezed margins but production has remained robust and inventories have continued to climb. According to the International Stainless Forum, global stainless meltshop production grew at 5.5% y/y to 50.7m tonnes in 2018. There has been a trend of rising carbon steel production and falling stainless production (ex-china). Ex-China stainless steel output growth was -2.4% y/y in Q1, comparatively; carbon steel production grew 4.9% in Q1.

Chinese macroeconomic data has compounded downside pressure for nickel. Caixin manufacturing PMI is contractionary once again and all-system financing rate is below the 1-year average of RMB1,814bn at RMB1,400bn. However, NBS data suggests that government expenditure has increased with May's accumulated growth rate at 12.5% m/m, down from 15.2%m/m. China's stimulus so far this year has not been good enough; this suggests that the overleveraged nature of China has limited the tools available to them. However, we question if China will embark on another round of stimulus this year.

Outlook: Despite the strong stainless-steel production in Indonesia, India, Japan and China, nickel prices have struggled. NPI output continues to undermine prices and caps gains on the upside. Wood Mackenzie have Asian stainless production at 10,476,000 tonnes in Q2, this figure is set to moderate in Q3 to 10,220,000 tonnes of stainless. However, refined nickel output for stainless will fall to 398,000 tonnes in Q3, the percentage of scrap is also set to decline in Q3 to 39.8%. The robust nature of stainless output in Asia has caused inventories to increase but we anticipate production of 300 series stainless to tail off in H2 2019 as profit margins have been squeezed, as 304/2B and 201/2B series have declined. China's HRC inventories have been rising for 6 weeks despite production outages in Tangshan. HRC arrivals declined for the first time since the end of June in the week to July 24th according to SMM. However, social inventories grew 2.1% in the week to July 5th to 2.32m tonnes up 10.1% y/y; we anticipate HRC social inventories to continue to trend higher.

LME 3-Month Price vs Cash to 3-Month Spread

The cash-3-month contango has tightened as the flat prices surged higher.



Nickel ore inventories at China's ports increased in the week to July 19th to 13.5m wmt, a rise of 310,000 wmt. The lower SHFE spot prices have failed to increase spot consumption as producers may be holding back purchases, as they believe prices will to fall. Confidence is low despite the strong stainless demand, as this will slow at some point and the persistent supply of NPI continues to weigh on prices. According to SHMET, refined nickel production declined 8.44% in June as NPI output increased to 49,500 tonnes in nickel content, a 3.4% m/m rise. According to Wood Mackenzie, global refined nickel output is set to increase to 2.43m tonnes in 2019. We anticipate Indonesia's NPI production to be the driving force behind refined nickel output increase in the coming years.

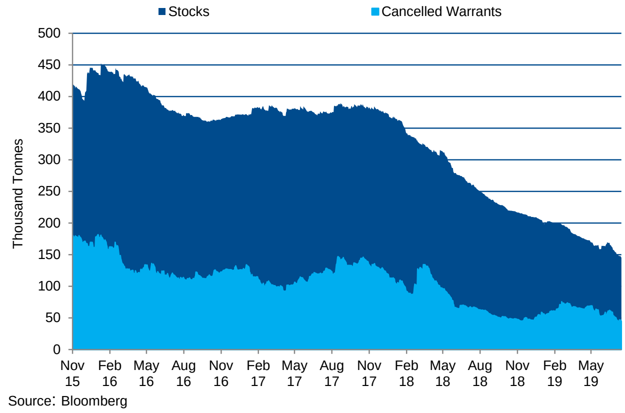
In May, according to Chinese Customs data net exports through to the end of May were down 3.62% y/y 845,000 tonnes. May exports totalled 319,000 tonnes of stainless steel, up 20.84% y/y and 6.86% from April. Total exports for 2019 through to the end of May have reached 1.41million tonnes. With anti-dumping duties placed on Indonesia by China we expect imports of stainless steel to come under pressure, especially from Indonesia. Intriguingly, imports of stainless-steel products surged 87.85% m/m to 70,400 tonnes. Imports of plate/sheet coils increased 12.12% in May, in keeping with the anti-dumping legislation on Indonesian imports, total imports for the first five months of 2019 declined 38.85%. Indeed, Indonesian stainless-steel imports into China have fallen 55% y/y to 284,800 tonnes. Within the same period, Indonesian exports have increased 500% m/m to 4,200 tonnes in May.

In previous reports we have mentioned that Tsingshan are strengthening their grip on the stainless-steel market, this was affirmed after China implemented anti-dumping regulations on Indonesian stainless steel. This meant that they needed to find new destinations for their stainless. European producers continue to see Asian stainless imported into their market. However, S.E. Asian countries and India are increasing their imports of Indonesian stainless-steel products. Imports into South Korea and Taiwan have seen significant increases in the last year, culminating in South Korea importing around 20,000 tonnes of HRC and CRC in March 2019. Imports of CRC into South Korea have surged as their appetite for Tsingshan CRC grows, so much so that they have applied to build a cold-rolled mill in Busan. The proposal for a 600,000-tonne stainless mill has come under significant opposition from Korean producers.

Tsingshan's investment into other countries has already started; they have already proposed a $3bn CR mill in India which would have an output capacity of 600,000. This comes as Indian imports CRC and HRC from Indonesia reached around 30,000 tonnes in Q1 2019 alone. Indeed, HRC imports from Indonesia make up half of India's imports and nearly double from Q4 2018 to Q1 2019, we expect this figure to surge again in Q2 2019.

LME Nickel Warehouse Stocks

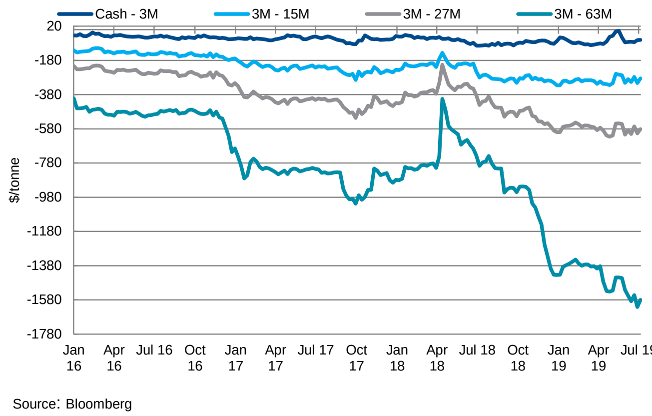
Withdrawals from LME warehouses continue at a steady clip.



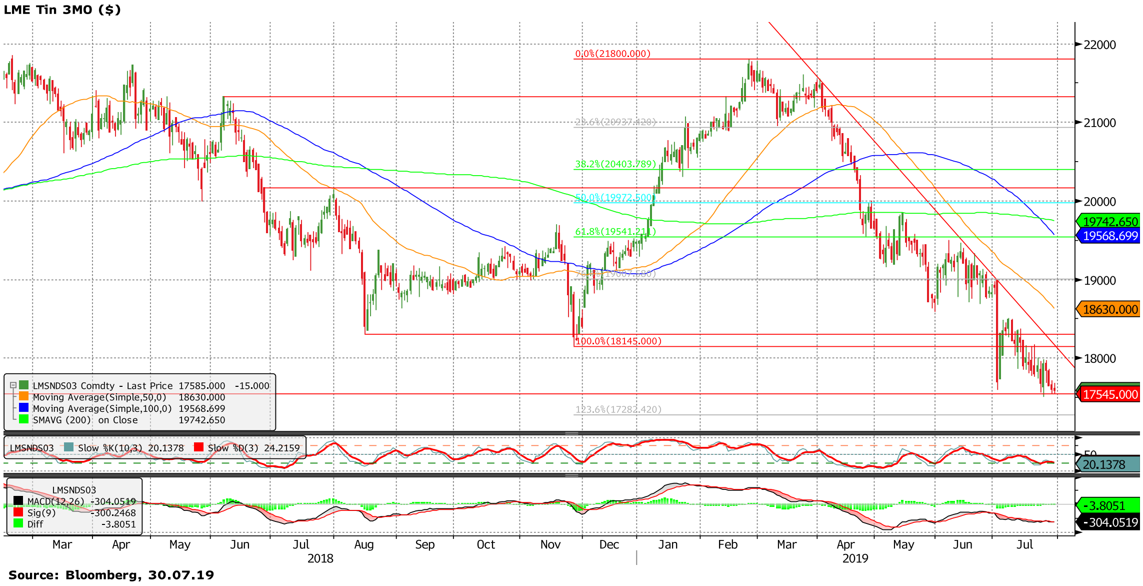
The Chinese government is expected to promote a new dual-credit system for NEV production, in a new-energy development. In addition to this, China extended the purchase tax exemption for NEVs until June 2020. The tax scheme will remain the same at 10% for cars, motorbikes, tramcars, and trailers with gas displacement of over 150 millilitres. The policies come at the same time that 15 cities in Hebei, Henan and Shanxi have increased the severity of car emission standards, in conjunction with Shanghai implementing tougher pemissions for light-duty vehicles. As of July 1st, heavy-duty vehicles and diesel-powered vehicles sold in Beijing must be compliant with new China VI standard. The standard brings China in line with emission standards in the U.S., Japan, E.U. and Canada. PEV sales in China grew 2% y/y in May, totalling 104,000 registrations. Mainstream car sales continue to disappoint, increasing PEV market share to 6.6% in May.

Nickel Calendar Spreads

Near-term calendar spreads have tightened but remain in contango.



Tin - Semiconductor Sales Continue Disappoint



Summary

Semiconductor sales continue to fall with five consecutive months on a year-on-year basis, however May sales were slightly higher versus April. Tin concentrate and ore imports into China have declined 18% y/y, in keeping with the recent VAT increase. Malaysia Smelting Corp Bhd outlined that material shortage has caused them to delay shipments. This has caused off-warrant material to flow into exchange warehouses. Lithium ion battery production has weakened in recent months with may weaken demand for tin.

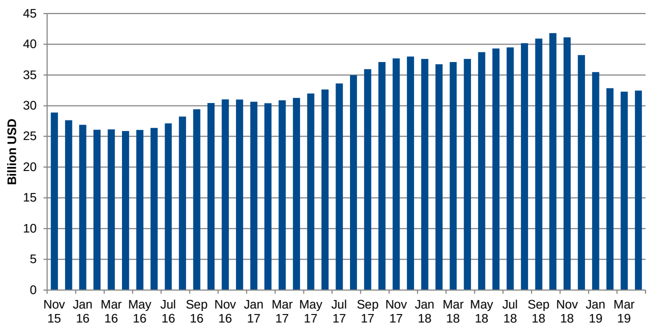
Q2 Recap: Tin prices have come under protracted selling pressure as the semiconductor sales continue to weaken. As mentioned in the previous report, Q1 semiconductor sales were down 15.5% q/q in Q1 and 13% y/y which caused the LME 3-month price to break through support at $19,000/t. Global sales were $96.8bn in Q1 2019 and regional sales were also weak according to the Semiconductor Industry Association (SIA). In contrast, the Philadelphia Semiconductor Index has firmed in recent weeks and closed out Q2 at 1,455, up 2.7%.

The large influx of material into global LME warehouses has outlined the weak demand picture in the near term. Global LME inventories increased 572.6% in Q2 to 6,390 tonnes. The decline in total open interest for all currencies suggests that positions have been closed out over the quarter. Indeed, the LME COT for investment funds declined slightly in Q2 by 26% to a net length of 898 contracts. This suggests positions that the speculative community remains bullish, but goes someway to explain the decline in open interest. The backwardation has weakened and stands at $0.50/t as of July 4th after reaching $340/t back on May 23rd, we attribute this to the weak demand figures and rising stock levels.

Trade negotiations between President Trump and Xi Jinping improved after the G20 meeting, however, as things stand nothing has changed and we remain cautious about getting optimistic. The market is still under pressure and until we have a deal and tariffs start to decline or are taken off, the semiconductor market remains weak as sales continue to disappoint. Globally, macroeconomic jitters have become widespread as central banks look to ease monetary policy in an attempt to stimulate their economies.

Global Semiconductor Sales

Semiconductor sales have declined for 5 consecutive months on a year-on-year basis.



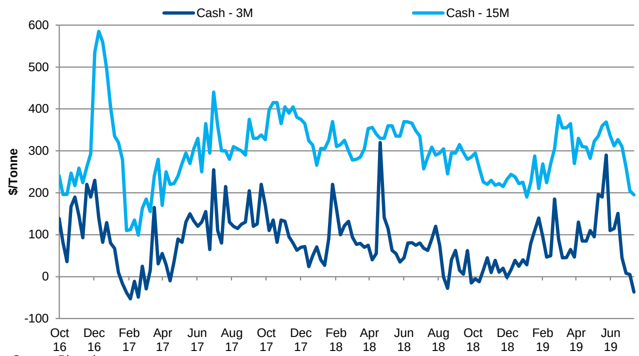
Source: Bloomberg

Outlook: Weak semiconductor sales as a result of the implantation of tariffs have plagued the tin market in 2019. Semiconductor sales declined for the 5th straight month on a year-on-year basis in May. Sales dropped 14.6% y/y in May to $33.1bn. We believe the recent data release suggests that we will see another quarter of declining sales. However, despite the gloomy outlook, on a year-on-year basis, sales in May were marginally higher than the previous month. Regional sales increased on a month-on-month basis in China by 5.4%, Japan 0.9% and the Americas by 1.4%. This provides some optimism in the near term, however, when looking at the regional figures on year-on-year basis, the outlook remains weak; China -9.8%, Europe 9%, Asia Pacific/All other -12.6%, Japan 13.6% and -27.9%.

Tin prices have been under pressure as LME and SHFE inventories have been increasing. LME stocks have been rising and gained 572.6% in Q2, to 6,390 tonnes. The majority of this material is in Asian warehouses, and more specifically Singapore. SHFE deliverable stocks closed Q2 at 8,392 tonnes. Weak semiconductor sales in conjunction with the rising inventories have given tin a weak fundamental outlook. We have seen some short positions close out. Cash-3 month spreads have widened significantly in recent weeks as stock has flowed into exchange warehouses and the demand outlook remains soft. The spread was $10/t contango on July 24th after reaching $340/t backwardation in May.

Calendar Spreads

Cash to 3 now trades at a contango following the inflow material in LME warehouses.

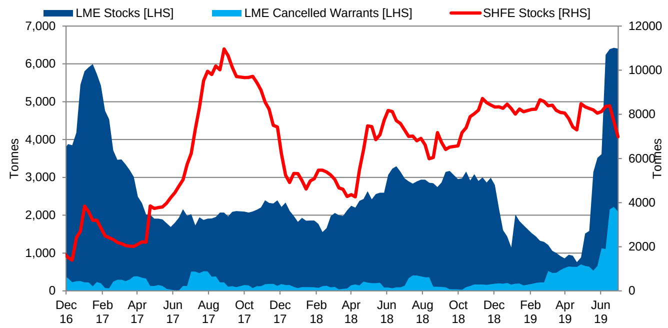


Source: Bloomberg

China's customs data of unwrought tin & alloys have edged higher to 259 tonnes but remain weak on a historical basis. Indeed, customs data for tin concentrate and ore imports fell by 18% y/y in May to 14, 248 tonnes, this equates to a tin content of about 4,100 tonnes. China continues to import the majority of its tin concentrate from Myanmar with 93% in May, and approximately 18,200 tonnes this year. Softer refined production by 1.3% in May of 13,734 tonnes is due to the declining concentrate supplies. Chinese exports of refined tin in the first five months reach 4,587 tonnes, up 79% y/y. The longer term trend of declining tin imports continues; add-in the VAT change in April, importing concentrate from Myanmar has become more expensive.

LME vs SHFE stocks

The inflow of material has alleviated the fundamental tightness.



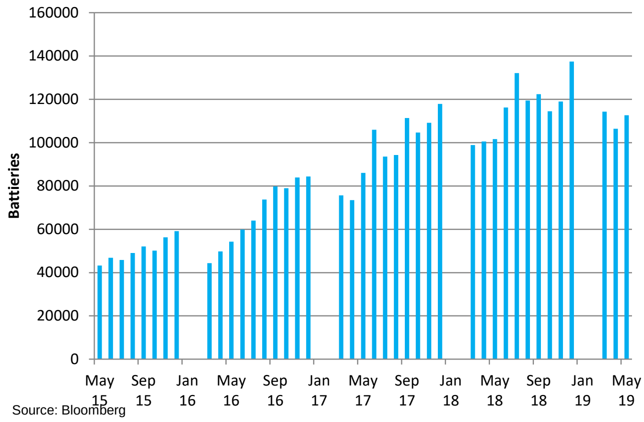
Source: Bloomberg

Chinese refined tin production has weakened in recent months from April's high of 14,000 tonnes, however on a year on year basis; June production was nearly 10% higher. Production continues to trend lower in the longer term as the shortage of concentrate inhibits smelters' ability to produce material. The tightness in the tin market has triggered a decline in invisible stocks with SMM indicating invisible inventories are around 4,000 tonnes, down over 20% y/y. Similarly to the tin market, the limited availability of tin concentrate has caused TCs to fall sharply which in turn de-incentivises production of refined tin.

The tightness in the concentrate market has led Malaysia Smelting Corp Bhd (MSC) to delay shipments due to a shortage of material. The delay was expected to be around 2-4 weeks. With concentrate availability tight, MSC have taken the decision to increase output at their hydraulic mine by 30% by the end of 2019, according to the ITA. MSC CEO has stated that $2.4m has as aside to increase productivity to 10 tonnes per day within the next 2 – 3 years. Recent investment in the mine has been fruitful as productivity has already increased to 9 tonnes a day. Persistent investment in the near term sets the company up nicely for the future.

Lithium Ion Battery Production China

Production of Lithium-ion batteries in China has trended higher.



Source: Bloomberg

Lithium ion battery production has declined in recent months from the December high of 137,417 units to 112,631 units. Despite the strong start to the year, EV sales softened in May with PEV sales up 2% y/y, the considerable drop in general combustion engine sales gives PEVs a market share of 6.6% in May and 5.6% in 2019 so far. We expect production of lithium ion batteries to remain robust for the remainder of the year and in turn, demand for tin. Bloomberg New Energy Finance research suggests that the demand for components that make up lithium ion batteries will rise from 1.3m tonnes to 10.1m tonnes in 2030.

Zinc - Improving Supply Favours The Bears

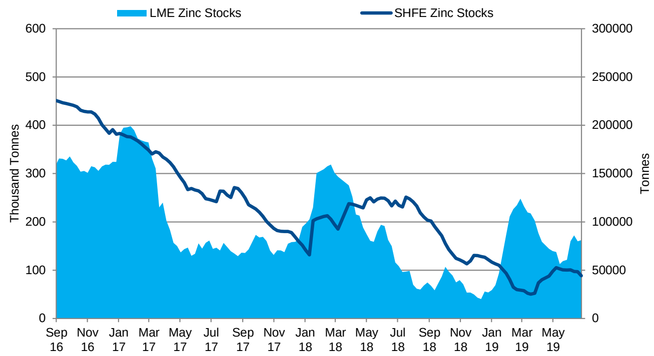
Summary

Chinese refined production has been trending higher in recent months as imports have started to decline. The spot import loss ratio narrowed, and this could keep zinc imports weak in the coming months. As production in China increases, we anticipate prices to remain on the back foot. The cash-3-month spread has widened as the supply outlook improves. Zinc prices may find support from positive trade negotiations and a weaker dollar in H2 2019 but the fundamental outlook is starting to favour lower prices.

Q2 Recap: Zinc prices trended lower in Q2, as investment funds reduced their net long position by 60% throughout the quarter. Prices on the LME slid 14.95% and closed Q2 at $2,476/t, SHFE prices followed suit and lost 12.6% to RMB 20,020/t. The cash to 3 month spread tightened to $160/t backwardation, as the fundamental tightness came to fruition. There was a large long position on the LME at the end of May and second banding shorts. However, in June the spread weakened considerably, this momentum has continued in July with the spread now at -$11.5/t contango as of July 22nd.

LME Stocks vs SHFE

Stocks continue to trend lower but stronger production looms.



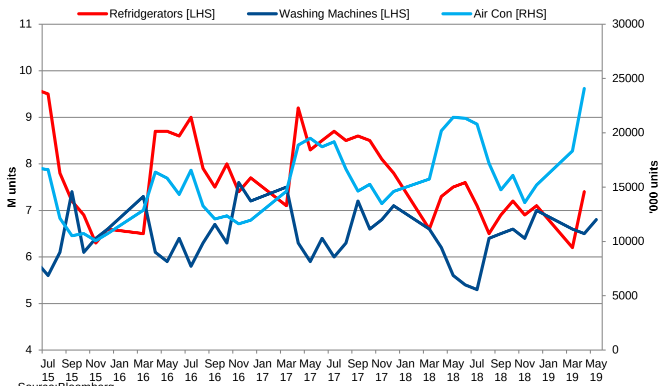
Source: Bloomberg

Material flowed into LME warehouses in Q2, up 85.4% to 97,000 tonnes, the inflow of material helped alleviate some of the fundamental tightness. The sentiment of rising production was affirmed as June refined zinc production grew by 3.34%m/m and 15.37% y/y, according to SMM. Chinese domestic TCs remain high but have started to plateau; smelters are in a strong position when negotiating TCs supporting zinc smelter margins. SHFE deliverable stocks declined in Q2 by 27.24% but as refined production starts to improve, in China, and demand remains on the soft side, we expect inventories to trend higher putting downward pressure on the flat price and spreads.

Outlook: Zinc prices have come under pressure in recent months as the perfect storm of trade war escalation, persistently strong U.S. dollar and looming supply increase on the horizon. However, in recent weeks there has been a change in sentiment. Low prices caused a decline in social inventories as downstream consumers increase their stockpiles, in the final week of June this trend reversed and social inventories in Shanghai, Tianjin and Guangdong. Shanghai-bonded zinc stocks increased for the first time in 8 weeks as of July 19th, inventories remain below 100,000 tonnes at 91,200 tonnes. Low prices have boosted spot demand for zinc, and we anticipate stockpiling to have accelerated in the near term. In the longer term, the market has started to become increasingly bearish on zinc and therefore downstream consumers may hold off purchases. Pricing activity for zinc on the LME and SHFE has narrowed profit margins for miners and anticipate this to transpire into lower TCs in the coming months. July is traditionally slow from a galvanizing, casting and alloy consumption perspective. This may see inventories start to build in the south of China, contra to the north where we expect to see maintenance.

Home Appliance Production China

Washing machine production continues to lag behind.



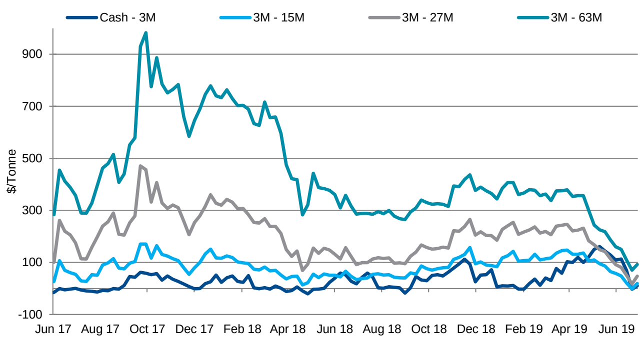
Source:Bloomberg

The LME exchange warehouses have seen a moderate inflow of material in Q2 which added weight to prices. However, since mid-May prices and exchange inventories have been declining. LME inventories stand at 67,825 tonnes and fell as low as 50,900 tonnes in April. SHFE deliverable stocks have trended lower in Q2, down 30.63% in Q2. However, since mid-May inventories have increased from 56,320 to 86,046 tonnes. The rise in stocks is likely to continue in the longer term as we see an increase in refined zinc production; we look to the TCs for an indication. SMM TC for imported zinc concentrate averaged $240/dmt up to July 1st; SMM TCs have been strong in 2019 but have plateaued in recent months. The strong TCs replicate the plentiful availability of zinc concentrates, however, TCs for domestic zinc concentrate were RMB6,325/mt as of July 1st and have started to soften slightly.

Accordingly, Chinese output of refined zinc has started to improve. The National Bureau of Statistics in China indicates that smelter output reached 513,000 tonnes in June, a year on year rise of 10.3%. Year to date production for the first five months of the year reached 2.27mt, a decline of 3.2%. Production has been trending higher, over the last couple of months, but output still needs to increase further in order to reduce the fundamental deficit, which The International Lead and Zinc Study Group have a refined zinc deficit at 97,000 tonnes from January through to April 2019. Refined metal production has declined to 4.25m tonnes for the first four months of the year and as mentioned above we attribute this to the bottlenecks at smelters. With utilisation rates already around 80% for 2019 there is little ability to increase production of refined metal in the near term. We anticipate the deficit to run into 2020 however the perceived surplus of refined material in 2020 is expected to weigh on sentiment.

Zinc Calendar Spreads

Spreads have weakened inline with the flat price.



Source: Bloomberg

The cash to 3month spread has weakened significantly since reaching $161/t backwardation at the end of May. The spread now trades at a contango which outlines the easing fundamental outlook, with inventories creeping higher and demand for zinc waning. The spot import ratio edged higher at the beginning of July as losses narrowed. SHMET reported that for brands exempt from customs tariffs, the SHFE/LME cash ratio was 8.03 and 7.93 for duty-free Australia and S.Korea ingots. Chinese customs of unwrought zinc & alloys have fallen back from the April high of 85,418 tons to 66,290 tons in May. Imports of refined zinc also softened in May to 59,000 tonnes from 78,000 tonnes in April. Customs data indicates that year-to-date imports for 2019 have are 20% higher year-on-year. Consequently, the declining imports into China move inversely with rising refined production according to NBS.

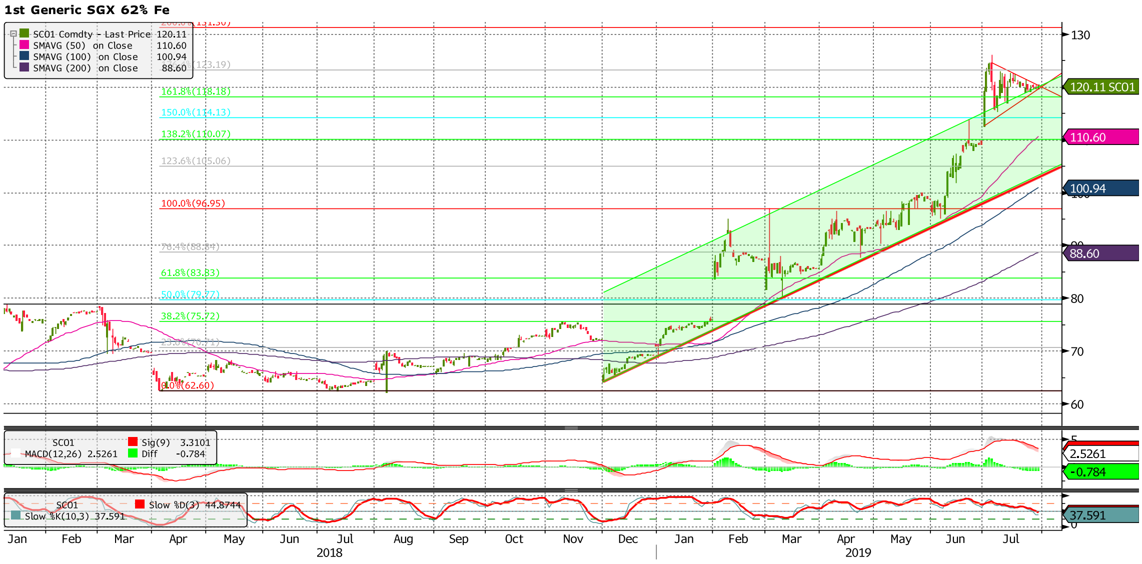
Zinc Stock Change vs Change in Price

2019 price declines muted despite inventory drawdown.

Source: Bloomberg

Sentiment in the zinc market is on the back foot as rising inventories, poor demand and macro jitters weigh on prices. Despite the declaration from President Trump that trade talks are back on track, in the near term there has been no change. The tariffs remain in place and the Chinese economy is struggling, we expect the next round of stimulus to be announced which could provide some relief to the economy. LME COT for investment funds has seen a significant drastic liquidation of long positions in recent months from 29,170 contracts to 4,866 contracts as of July 12th. With Chinese refined output increasing and demand softer, we expect this to weigh on prices in H2 2019. Positive news from trade negotiations may prompt a relief rally through $2,600/t; however we expect gains to be capped on the upside.

Iron Ore & Steel - Brazil Exports Remain Resilient



Source: Bloomberg, 30.07.19

Summary

China's steel production continues at an alarming rate; however, margins have narrowed. Crude steel and stainless-steel output may fall due to capacity cuts. Brazilian exports were resilient in H1 2019, and with Vale output slowing coming back online, this could mitigate the drop-off in exports in H2 2019. The high-quality fines premium has been falling but we expect the demand for high quality ore, pellets and lump to remain high. High prices may entice less efficient producers to raise production.

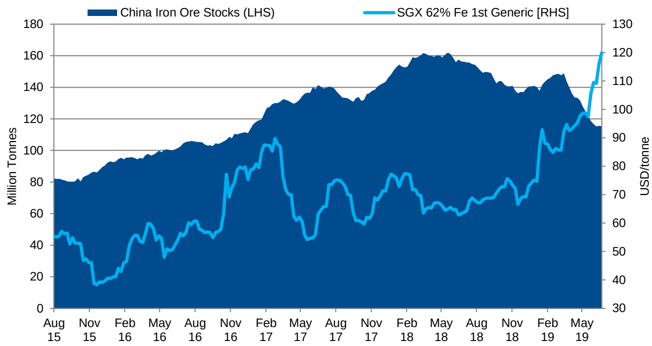
Q2 Recap: The iron ore bull trend gathered steam in Q2 2019 as the fundamental picture remains supportive. SGX 62% fe 1st generic chart shows iron ore prices gaining 27.12% in Q2 alone, bringing performance to 54.5% for H1 2019. The quarter closed the quarter at $107.8/t and prices have continued higher at the beginning of Q3. Iron ore on the Dalian exchange also gained in Q2 by 41.3% to close at RMB833.5/t. Accordingly, the rise in iron ore prices triggered a continuation of the bull run in Q2, with rebar prices for October delivery gaining 16.5% to RMB4,044/t at the end of Q2.

Chinese steel production was very strong in H1 2019, reporting record production in April and May at 85.03m tonnes and 89.09m tonnes respectively. The robust steel output due to good profit margins has kept iron ore consumption strong but mills have not been able to pass on all the higher cost, leading to narrowing profit margins. While we anticipate iron ore demand to start to plateau in H2 2019, the loss of Brazilian output and declining Chinese port stocks is expected to support prices in the longer term.

Steelhome China iron ore port stocks declined by 15.3% in Q2 to 115.25m tonnes of iron ore, this brought the total outflow of material from port stocks to 17% from January but 22.6% from this year's high of 148.9m tonnes. A large proportion of Chinese port stocks is poor quality and the decline in help affirm the premise that mills are consuming lower quality ores as profit margins decline.

Steelhome China vs SGX 62% Fe Price

Declining stocks and strong steel production have supported prices.

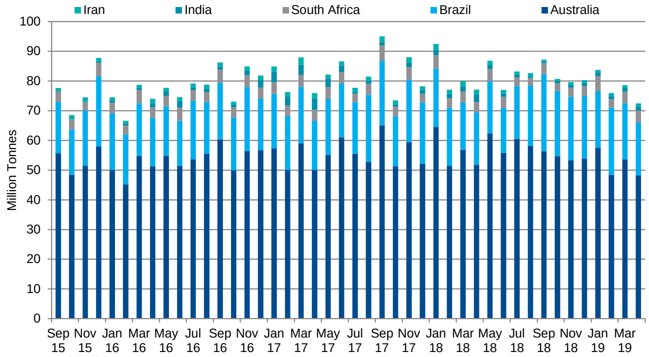


Source: Bloomberg

Outlook: Exports of iron ore have remained constant despite the Vale disaster. Indeed, global shipments totaled 126,797,000 tonnes in May according to GlobalPorts data on Bloomberg. This was an increase of approximately 23mt from April; the majority of this material was shipped by Australia who exported 81.4 tonnes in April. However, Brazil shipments also increased to 29.3 tonnes from 17.7 tonnes the previous month. Unsurprisingly, China was the primary destination, importing 81.64t in May, the highest level since December 2018 when they imported 87.3 tonnes. Australian fines are traditionally lower quality than Brazil but the uncertainty surrounding Brazil's output has caused Australian exports to China to increase of late and we expect this to continue, as China ramp up stimulus and Australian iron ore supply improves.

Top 5 China Iron Ore Imports

Brazilian exports have been resilient so far in 2019.



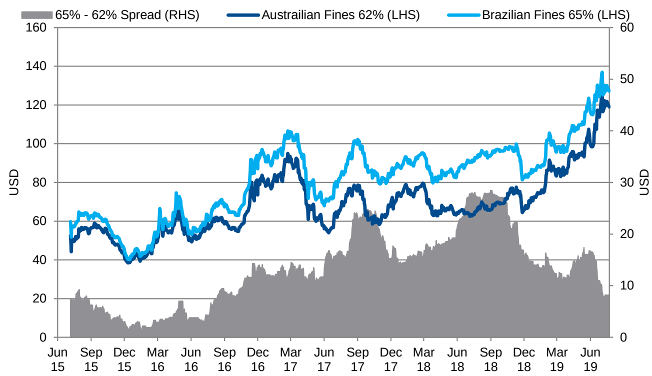
Source: Bloomberg

Brazilian output remains unpredictable at this time; exports have remained relatively firm considering. Wood Mackenzie's preliminary output number for Brazil is a decline of 50m tonnes, however the stability of exports suggest less production will be lost. Weather issues in March and April derailed shipments for these months but we expect exports to surprise to the upside in 2019. Problems continue for Vale in Minas Gerais at their Gongo Soco mine. Slippage from the north slop of the Gongo Soco mine is able to remain within the pit, however both the mine and the Sul Superior dam is under constant surveillance. Uncertainty surrounding Gongo Soco compounds the widespread instability of Vale's Brucutu mine and dam decommissioning in Brazil. A bright spot for iron ore is that Vale have indicated they will start some operations in Brazil, helping to alleviate tightness into Q4 2019.

Price action is supportive and this could entice more inefficient suppliers to enter the market and help fill the void. Accordingly, we have seen an increase in exports from South Africa and India. Chinese supply is likely to remain supported this year with forecasts suggesting output breaking above 200t for 2019. The higher cost producers such as small to medium sized mines have increased their output with large mine utilisation rates rising to 60%. With terminal prices at $100/t, producers have looked to the domestic market as seaborne prices are so high. The high terminal prices allow for the processing costs of the traditionally poor quality Chinese ores.

Australian 62% Fe CFR N.China vs Brazilian 65% Fe CFR N.China

The premium for high qualtiy fines continues to weaken.



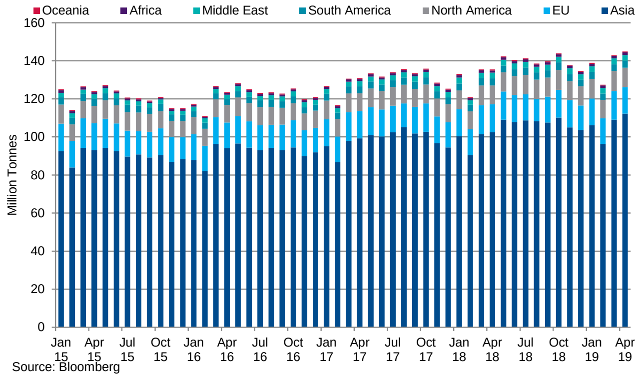
Source: Bloomberg

The spread between high and low grade ores has remained wide despite the escalation in seaborne and terminal prices. We expect demand for high grade sintering fines, pellets and lumps to be strong in the coming quarter, keeping the spread wide. Steel margins have diminished with Mysteel suggesting rebar-making margins are $17/t or RMB119/t. Due to coking prices increasing since April, September futures trade at RMB1,400/t as of July 22nd , we anticipate steel margins to have softened. As steel margins dwindle, consumption of lower grade iron ore is expected to increase, narrowing the spread between 58% and 62% and 65% fines. Chinese consumption is set to rise as the government look to stimulate the economy with more traditional policies such as construction and infrastructure.

Demand for iron ore has been strong in 2019 due to robust steel margins mentioned above. Chinese rebar production increased by 29% y/y in June to 22.7m tonnes, output for H1 2019 was up 19.3% y/y to 119m tonnes. The strong margins prompted strong production levels causing social inventories to increase putting downward pressure on rebar prices which stood at RMB3,949/t as of July 23rd. Rebar social inventories grew further in mid-June as demand from railway construction slowed slightly, stocks across steelmakers and social warehouses increased to 8.31m tonnes as of July 23rd , a weekly increase of 3%. Indeed, steel plant inventories grew to 2.32m tonnes as social warehouses stood at 5.58m tonnes. Accordingly, social inventories at steel plants increased to 2.38m tonnes, and long steel inventories in Guangdong grew to 1.08m tonnes in the week to 17th July. The strong production and persistent rise in inventories could see prices soften, however the strong output could be producers frontloading before environmental production curbs.

Crude Steel Output

China continues to produce record amounts of crude steel.



Source: Bloomberg

Chinese crude steel output has increased exponentially this year; production reached a record 89.09m tonnes in May, but June output was 87.53 up 10% y/y. Implied steel demand in China increased to 84.726m tonnes, exports have remained relatively constant in recent months at 6.3m tonnes in March and April, but May shipments have been reported at 5.70m tonnes. Year-to-date exports are up 6% y/y, but price differentials for other major steel markets have been falling in recent months. This may prompt Chinese exports to soften. This does not account for indirect exports which include finished steel products in equipment and transportation. This industry has seen considerable growth in exports in recent years according to Worldsteel. Accordingly, European construction has also weakened with the market PMI at 50.6 in May. China is the largest indirect exporter with the U.S. being the largest indirect importer.

Chinese property indicators affirm the premise of a slowdown in activity. Floor starts grew 4% y/y in May, up 10.5% y/y through May for 2019, and floor space sales declined 5.5% y/y in May, down 1.6% for the first 5 months of 2019. Softer demand in recent months has triggered an uncharacteristic deceleration in steel inventories. However, floor space starts are considerably above 2017 and 2016 levels, and with further stimulus expected in the coming months we could see steel demand continue to strengthen in China. We anticipate the decline of steel inventories in China to resume despite the robust steel output in China.

Gold - Synchronised Easing From CBs Supportive

Source: Bloomberg, 30.07.19

Summary

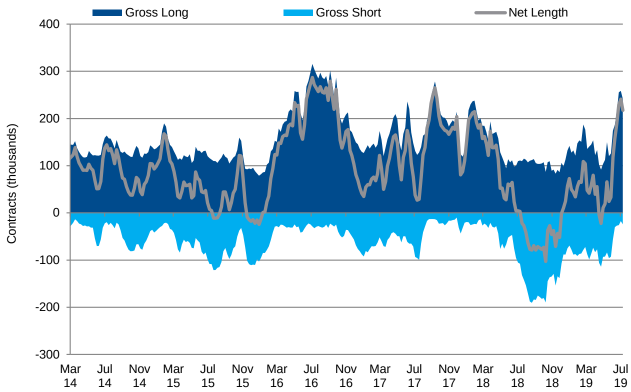
With markets pricing in further interest rate cuts from the Fed, we believe investors' appetite for gold will drive prices in Q3. Demand for gold will remain supported as sovereign bonds are negative. Central banks continue to increase their bullion reserves at an alarming rate which should support prices. Lower interest rates should stimulate financial markets but as earnings disappoint, appetite for safe havens may grow. In our opinion gold prices will continue to trend higher in Q3.

Q2 Recap: Market sentiment for gold has completely shifted in Q2, with April and May prices trading below $1,310/oz as major economies showed resilience to previously vocalised fears of slowing global growth, especially recession fears in the U.S., to then later gaining 11.84% to 1,439.21/oz on June 25th amid fears of worsened trade relationship between China and the U.S. With a more dovish outlook in H2'19 and a slowdown in the greenback appreciation, we see investor demand for the safe-haven continue to grow throughout Q3. U.S. – Sino relationship seem to have hit a road block despite both parties suggesting progress has been made. Geo-political tensions have provided support for bullion in recent months, and this could continue in Q3.

Since the beginning of Q2 2019 much has changed in terms of the outlook for gold. The Fed no longer sees neutral interest rates for 2019 and is under pressure to reduce interest rates. Additionally, 10-year treasury yields sold off, as slowing economic growth and poor global trade weigh on market sentiment and investors started to bet on monetary easing. Gold prices continued their progression toward a six-year high as of June 24th, with a weaker dollar, and 10-year treasury yields falling closer to 2% for the first time since the end of 2016.

COMEX Managed Money Net Positions

FX headwinds have flushed out long positions.



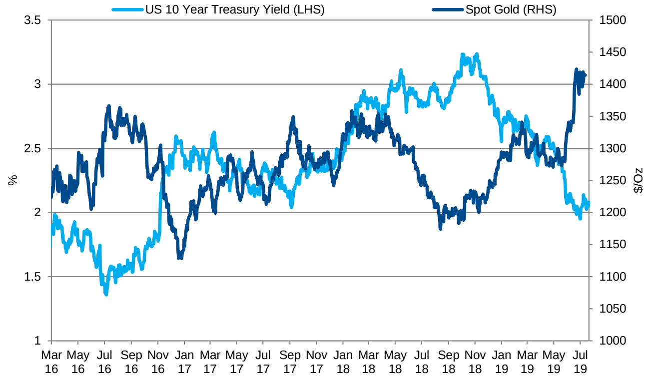
Source: Bloomberg

Geo-political tensions supported a recovery in bullion, especially in June, when President Trump was threatening tariffs on Mexico, Iran and Germany. As U.S. relations deteriorated with Iran in Q2 and added tailwinds to gold, as prices reached $1,427/oz on June 25th, following Iranian forces shooting down a U.S. military drone. CFTC CMX gold net non-commercial futures position went from a net long 37,395 to 115,000 on June 11th. The continued tensions in conjunction with monetary easing from central banks and falling bond yields has triggered appetite for precious metals. We anticipate this to continue in Q3.

Outlook: Major economy's central banks have become synchronised in loosening monetary policy. The Fed, ECB, BOJ and BOE have all hinted at further monetary easing or interest rate cuts as global economic growth weakens as the impact of the trade war cripples global trade and sentiment. With markets pricing in an interest rate cut from the Fed, we believe investors' appetite for gold will drive prices in Q3. Strong data for the U.S. in June is unlikely to prompt a change in path from the Fed who do not want a fallout with President Trump. The weakness in major bond yields outlines nervousness in the global economy which should support safe haven assets. In the short term, we expect the divergence between U.S. yields and stock indices to continue.

US 10-year Treasury Yield vs Spot Gold

Bond rally has acts as a headwind to prices.

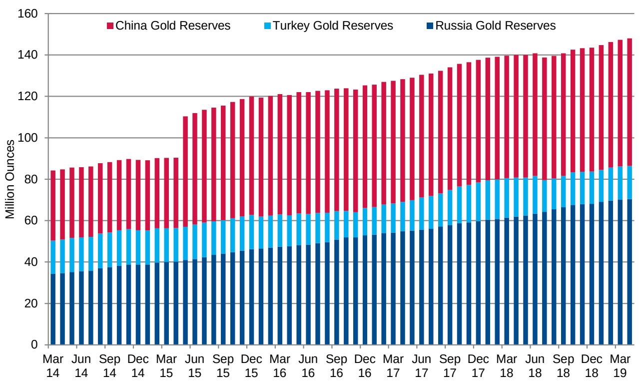


Source: Bloomberg

According to the World Gold Council, Q1 2019 Central Bank net gold purchases reached 145.5 tonnes, up 68% y/y and demand (in gold buying terms) grew to 1,053.3 tonnes, up 7% y/y, Jewellery demand was 1% higher in Q1 and with 5% y/y growth in India. Central Banks continue to buy gold for their foreign reserves as means of diversification and protection against the global slowdown. Global gold reserves grew by 145.5 tonnes, 68% higher y/y; demand reached a record high of 715.7 tonnes in Q1. We believe that U.S.-Sino and U.S.-Iran tensions, slower economic growth and interest rate cuts and a large proportion of sovereign debt carry a negative real interest rate, will boost demand for the safe-haven metal. Russia was again the largest buyer, adding 55.3 tonnes in Q1, bringing gold reserves to 2,168.3 tonnes. Russia's gold reserves constitute 19% of the country's total reserves, while reducing dollar-denominated holdings.

Central Bank Gold Reserves

China added to their gold reserves for the first time since October 2016.

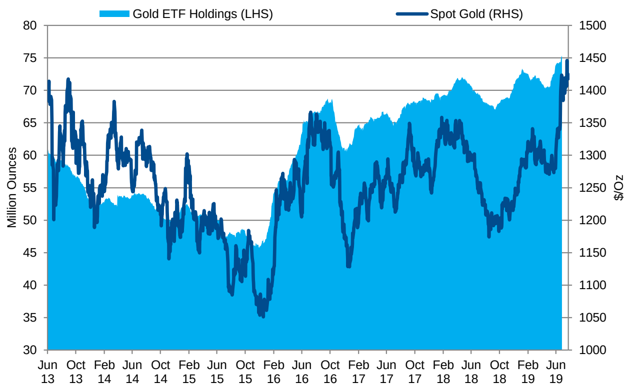


Source: Bloomberg

The People's Bank of China have upped their purchasing of gold, from December 2018 to June 2019, they purchased nearly 85 tonnes. Total gold reserves stood at 1,885.5 tonnes in at the end of Q1, less than 3% of total reserves. The strong purchases indicate that the PBOC are looking diversify their holdings away from the U.S. dollar. Cracks continue to appear in the global economy and central banks look to aligning themselves appropriately. Chinese jewellery and physical demand declined by 2% y/y to 184.1 tonnes as consumer confidence worsened following the re-escalation of trade tensions and a slowing economy. This sentiment has been affirmed by gold futures prices which show economic uncertainty, especially in China's manufacturing industry.

Gold ETF Holdings vs Spot Price

ETF holdings have remained elevated despite the moderate downturn in gold.

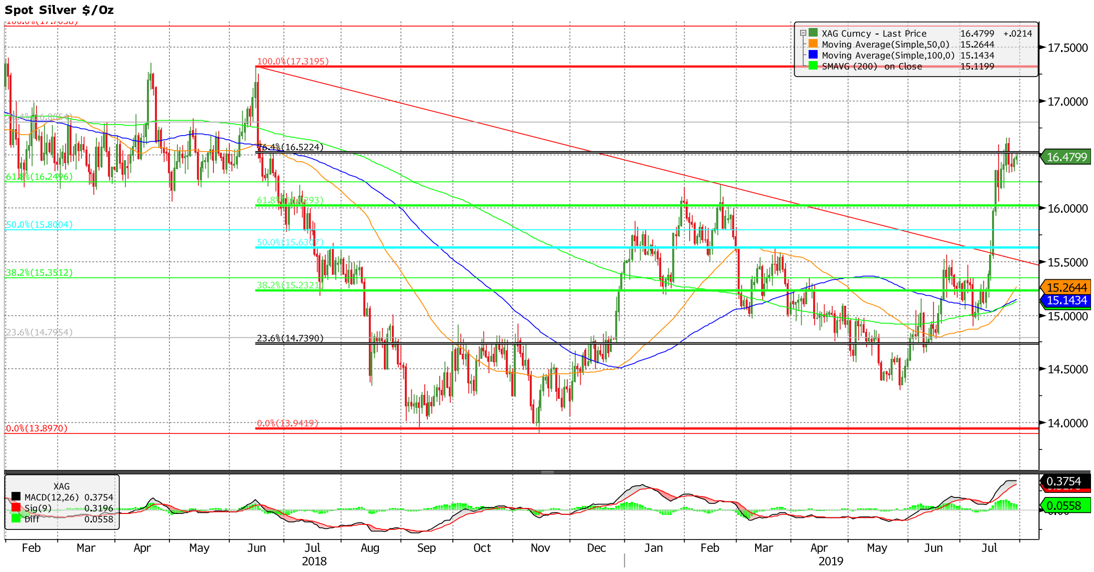


Source: Bloomberg

Gold ETFs grew at the fastest pace of 4.51% in June since June 2016. At the time of writing, the value of total ETF holdings of gold stands at 74m/oz, the highest since April 2013. So far in Q2, CFTC gold net non-com futures have seesawed throughout the quarter before rising sharply up to 200,000 by the end of June 25th. The significant ETF purchases affirm speculator's apprehension about current macroeconomic conditions. Strong positive buying of gold indicates market fears of global growth deceleration; dovish Fed outlook was a major tailwind in gold growth. We believe that gold may be due a correction with long positions at their highest level since February 2018; however, we expect bullion to be well big in H2 2019.

Total bar and coin investment weakened by 1% to 257.8 tonnes, due to falling demand for gold bars. According to the World Gold Council, gold coin buying grew 12% to 56.1t. China and Japan were the main hinders to its growth, with Chinese losing 8% y/y. India; however, saw increased investment by 4% y/y. Jewellery saw some mild growth, with demand growth at 1% stronger y/y at 530.5 tonnes (WGC), mainly due to consumer demand in the Indian market. Recent central bank purchases and better gold performance led to jewellery resilience despite falling global economic concerns. Indian demand grew 5% y/y, as a lower rupee gold price in Q1 along with the gold-buying wedding season, lifted jewellery demand in India to 125.4 tonnes. Further wedding celebrations in India in Q2 might boost short-term demand. In reaction to this, retailers have launched new sales programs to attract consumers as fears of slower long-term growth in consumer demand for the physical commodity.

Silver - ETFs and Net Long Outlines Appetite



Source: Bloomberg, 30.07.19

Summary

Silver has caught up with gold in recent weeks, causing the ratio to decline. Rising ETF holdings and the COMEX non-commercial net length has increased outlining investor appetite for silver. The Fed cutting interest rates would help support silver demand, however if the Fed only cut rates once speculator demand for silver may wane. Industrial demand for silver remains strong and a new feed-in tariff in China should support installations in H2 2019.

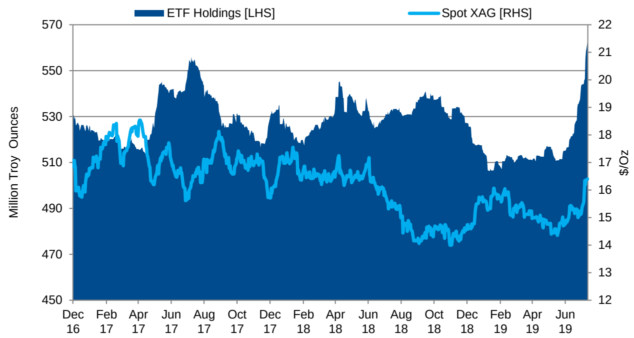
Q2 Recap: Silver prices had a mixed performance in Q2, through to May prices declined to test support at $14.30/oz despite the intensification of trade tensions. U.S. economic data was softening but the greenback was persistently strong which caused silver to remain on the back foot. The COMEX non-commercial commitment showed significant liquidation of long positions through to the end of May; the net position fell from a 26,627 long in April to a 26,016 net short. As the Fed highlighted their intention to cut interest rates, silver caught a bid and closed the quarter at $15.3150/oz.

The move by major economy central banks to loosen monetary policy strengthened demand for safe haven assets, providing tailwinds to silver. The U.S. 10 year yields declined 16.87% in Q2 as the S&P 500 gained 3.27% in the same period. Repeated downgrades to global economic growth by the IMF have dampened sentiment in the market slightly. However, in our opinion a lot of the headwinds to the market are a consequence of political policies creating uncertainty. Indeed, European sentiment is caught in the crossfire of the trade war, which has curtailed exports but Brexit is still unresolved and this is highlighted by the European consumer confidence which was -7.2 in June.

Outlook: Industrial demand for silver has accounted for more than half of the metal's consumption in the last five years. We believe this has skewed the metal way from its traditional safe haven assets qualities. This is exemplified by the contrasting performance between gold and silver since the start of 2014; silver prices have declined 19.07% compared to gold which has gained 16.51%. This helps to explain the reason for the persistent strength in the gold/silver ratio which gained 7.76% to 92.04 at the end of Q2. For the gold/silver ratio to retreat from the record highs, silver needs to outperform gold. Silver has caught up with gold's performance in recent weeks, as ETF holdings have increased and speculators have piled in. This may continue in the short term as silver remains relatively cheap which could entice speculators; however the longer term divergence in prices between silver and gold raises questions.

Silver ETF Holdings vs Spot Price

ETF holdings have seen large inflows as speculators bet on higher prices.



Source: Bloomberg

Solar panel subsidies in China have increased after the Ministry of Finance approved RMB3.08 worth of new subsidies. Approximately RMB3bn worth of subsidies was granted to support power stations, industrial and commercial distributed solar PV projects.RMB37.18 million was allocated to help alleviate poverty in rural areas. China have attempted to reduce their subsidies on solar panels in recent years after costs have declined and the government even suggested they would give preference to subsidy-free projects. China's renewable energy investment declined nearly 40% in H1 2019. However, Beijing approved 22.8GW with their recently approved Feed-in tariff policy, following the approval of the tariff we anticipate the installments to increase in H2 2019. All projects that have been awarded subsidies must be completed by the final day of 2019, if they are not completed by this day they will see their tariffs reduced.

Gold/Silver Ratio

The gold/silver ratio has corrected to the downside as silver outperforms gold.

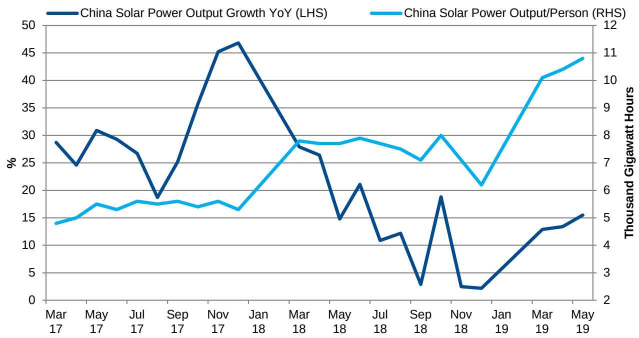
Source: Bloomberg

China is considerably ahead of the competition in regards to capacity installations and Wood Mackenzie see them moving further ahead in the next 5 years. Wood Mackenzie forecast Chinese solar panel installations to reach a cumulative total 370GWdc in 2024. However, the transition to auctions may slow the pace of installments in the coming years. However, the energy mix in China is still vastly in favour of fossil fuels, more specifically coal, despite consumption falling but new solar power generation is below new coal in most major economies. China's appetite for solar compared to other countries was affirmed last year when the Section 201 tariffs caused U.S. market to contract slightly. India is expected to become a 10GW market for the first time in 2019 as a result of subsidy approval.

Total known ETF holdings increased significantly towards the end of Q2, up 2.9% in June to 528m ounces. This trend has continued so far in July with holdings up an additional 3.35% to 544m. The increase in ETF holdings outlines speculators belief that monetary policy easing will fuel demand for safe haven assets. Indeed, the softer outlook for the U.S. should provide support to silver prices in the near term, especially in the summer months when liquidity is slightly thinner. However, we do not think the dollar will weaken significantly just yet which may limit silver's performance. An insurance cut from the Fed of 0.25% is largely priced into the market, in our opinion a 0.50% cut is too aggressive and we doubt that the Fed will cut rates three more times in 2019. A response from inflation would confirm this but the time lag effect of a cut in interest rates suggests that patience is needed. The dollar index has maintained its strength in recent months as economic data elsewhere has been weaker and bond yields in the U.S. are comparatively high. Moving forward, if an insurance cut helps improve U.S. inflation and labour market figure remain strong we expect the U.S. dollar to remain firm.

China Solar Power

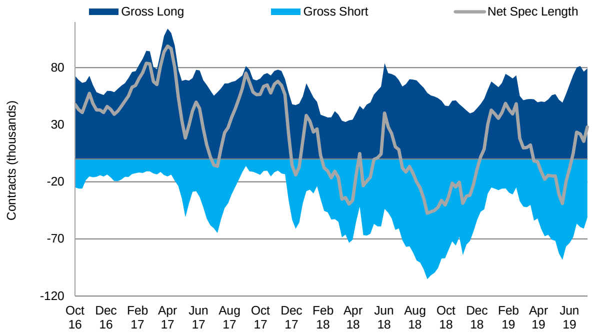
China's Solar Power investment is coming to fruition.



Source: Bloomberg

COMEX Managed Money Positioning

Speculators have increased their long exposure to silver.



Source: Bloomberg

CFTC data outlines improved appetite for silver in recent months, the COMEX non-commercial combined net long has increased to 38,026 as of July 19th from a net short of 69,231 at the beginning of May. Affirming that speculator demand for silver is improving. The current max long is 41% of the record long positon in 2017, furthermore in 2017 there were approximately 228 traders in the market, and on July 19th there were 251. This suggests that there is significant capacity to increase their exposure on the upside and prompt a rally in silver prices. We expect the macro-outlook to provide some tailwinds to prices in Q3. We maintain our nervous view about the long term outlook, the reduction in interest rates is unlikely to provide economic benefits in the near term. In our opinion, a rate cut will stimulate equity markets which are performing well above their earnings and also reduce the tools available to central banks in the long run. Japan is an example where the economy needs to be stimulated but the BOJ have no new tools available to them and an inflated balance sheet.

Palladium - No Demand Destruction Yet

Source: Bloomberg, 30.07.19

Summary

Fiat recalling 862,000 vehicles provided support for prices as new vehicles required additional palladium in an already tight market. Despite weak car sales data in 2019, and high palladium prices we expect the trend to continue as changing the whole supply chain towards platinum takes time. Mine supply is set to increase in 2019 but with petrol car sales significantly stronger than diesel, the market will remain fundamentally tight.

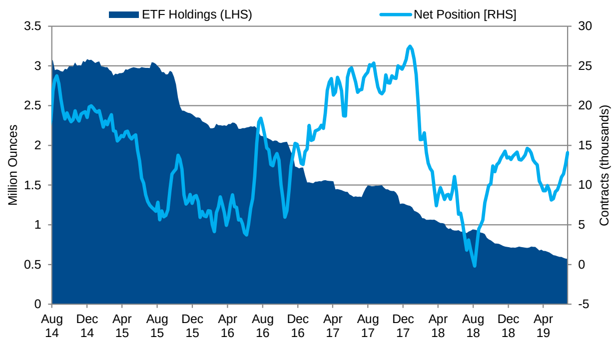
Q2 Recap: Consistent with our previous report, palladium prices performed strongly in Q2 and trended back towards the record high. Spot palladium gained 11% in Q2 and closed June just off the record highs at $1,523.7/oz. At the beginning of Q2, some investors liquidated long positons and amid fears that high production costs for autocatalytic converters may prompt car producers to switch to platinum instead of using palladium. However, this process takes a considerable amount of time and therefore palladium demand is likely to remain supported in the near term.

Known palladium ETFs have continued to weaken, declining 16.7% in Q2 and down 18.4% in H1 2019. Outflows gathered significant pace in Q2 suggesting some profit taking but fundamental tightness may have caused some physical ETF outflows. CFTC data shows the shift in sentiment throughout Q2, but speculator appetite improved towards the end of H1 2019 as the non-commercial net length reached 10,849 contracts.

Outlook: We maintain our constructive view on palladium for Q3, due to consumption maintaining its strength in the near term. China's total passenger-car sales improved 4.9% y/y in June; however vehicle sales were down 12% y/y in H1 2019. 85% of palladium's consumption comes from autocatalytic converters and fundamental deficits have been triggered by a move away from diesel cars, outlined by the petro registrations in Germany holding at elevated levels in June at 196,439 units compared to diesel cars at 102,758 units. Automotive sales figures continue to disappoint across the globe which may provide some headwinds to prices. However, the inelastic supply will continue to support palladium.

ETF Holdings vs Palladium Net Position

Palladium net length has been rebuilding following the sell off.



Source: Bloomberg

Nornickel expect mine supply to increase 300,000/oz in 2019, Russia is the largest producer but palladium is mined as a by-product to nickel and the recent sanctions from the U.S. on Russia have kept credit in the country tight. Indeed, investment in mining may have softened due to the political tensions and uncertainty. We believe the secondary market palladium will improve in the coming years. Older vehicles which are coming to the end of their life will contain significant amount of palladium which may help alleviate some of the tightness in the market.

The current non-commercial commitment of traders' shows the net long position is 47% of their historical max suggesting further ammunition on the upside. However, persistently weak car sales and the threat of tariffs on EU automobiles from the U.S. not completely out of the question, we expect demand for autos to continue to be soft in Q3; therefore palladium may to find resistance and long liquidations, as car manufacturers aggressively reduce the palladium content. EU car makers, palladium purchasing is set to grow 8%y/y in 2019.

Platinum - China VI Regulation a Negative

Spot Platinum $/Oz

Source: Bloomberg, 30.07.19

Summary

Demand for hybrid cars may support platinum consumption in the long run. The World Platinum Investment Council forecast a 5% increase in refined platinum output, pushing the balance into a 375,000 surplus. The Association of Mineworkers and Construction Union has requested a 48% wage increase for workers, as higher palladium and rhodium prices boost earnings. A stronger ZAR will support platinum prices in the near term; however, this could trigger South African unions to increase their demands.

Q2 Recap: Platinum prices fell 1.68% in Q2 but volatility was high with 90 day volatility peaking in June at 21%. Prices peaked at the beginning of April as investors increased their holdings of ETFs; the spot price tested $915.91/oz. Appetite for platinum waned throughout the remainder of Q2 and closed June at $834.75/oz. Weak car sales have plagued the PGM market and apart from China's 4.9% y/y rise in passenger car sales in June, there is little positive data for autos. This is exemplified by European sales falling 7.9%, registrations declined to 1.49m units in June from 1.62m units the previous month. The weak auto market has been affirmed by firms releasing profit warnings.

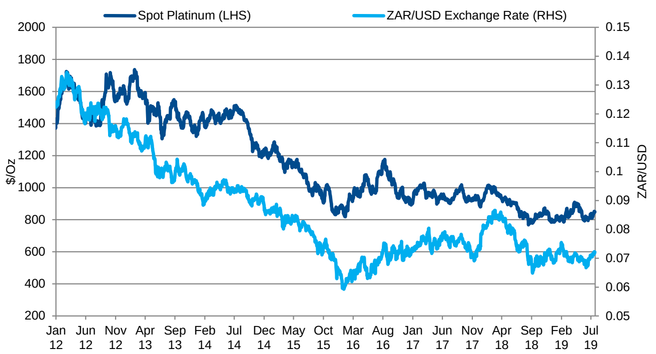
Known ETF holdings continue to trend higher but at a slower pace gaining 0.3% to 2.98m ounces compared to the 27.7% increase we saw in Q1. The rise in ETFs shows that speculators continue to bet on a paradigm shift in the auto market towards platinum. The NYMEX non-commercial commitment of traders showed a futures and options net long of 16,170 contracts as of July 16th, affirming the liquidation of longs in the market, despite the rise in ETF holdings.

Outlook: Stringent pollution regulation is providing significant headwinds to platinum; China has started implementing stricter pollution regulations with their policy "China VI". The standards were originally meant to be enforced in July 2020, but producers have unveiled new environmentally friendly models. The recent policy compliments tax exemptions for NEV purchases through to 2020. The global shift towards EVs is set to reduce demand for platinum in the long run, however with palladium prices at record highs and the platinum/palladium spread still printing record lows at 0.5480; platinum consumption through hybrid vehicles may support prices in the longer run.

From a supply perspective, trade unions in South Africa could curtail production. The union has requested a 48% wage increase for workers, as higher palladium and rhodium prices boost earnings for Anglo American Platinum Ltd, Impala Platinum Holdings Ltd and Sibanye Gold Ltd. These demands are bold but if rebuffed by the firms, we expect strike action which is likely to tighten fundamentals. The World Platinum Investment Council (WPIC) is forecasting a 5% increase in refined output in 2019, pushing the balance into a 375,000 surplus (5% of annual demand). Despite union talks, WPIC estimate South African production increasing to record levels at 4,685,000 ounces this year.

Spot Platinum vs ZAR/USD

Postive linear correlation continues but platinum struggles to sustain rally.



Source: Bloomberg

The South African rand has oscillated around the moving averages for the majority of 2019, trading between R15/$1 and R13.5/$1. Monetary easing could provide support for ZAR as the dollar weakens and interest on dollar denominated debt reduces. A stronger ZAR will support platinum prices in the near term; however this could trigger South African unions to increase their demands. The correlation between platinum prices and the USDZAR exchange rate has been -0.935 since the end of 2016, suggesting a strong negative relationship.

Appendix

Global

Global Manufacturing PMI

Date	USA (Markit)	China (Caixin)	Eurozone (Markit)	Japan (Nikkei)	Emerging Markets (Markit)
Feb-2016	51.3	48.0	51.2	50.1	48.9
Mar-2016	51.5	49.7	51.6	49.1	50.2
Apr-2016	50.8	49.4	51.7	48.2	49.6
May-2016	50.7	49.2	51.5	47.7	49.6
Jun-2016	51.3	48.6	52.8	48.1	49.3
Jul-2016	52.9	50.6	52.0	49.3	50.3
Aug-2016	52.0	50.0	51.7	49.5	50.1
Sep-2016	51.5	50.1	52.6	50.4	50.4
Oct-2016	53.4	51.2	53.5	51.4	51.1
Nov-2016	54.1	50.9	53.7	51.3	50.8
Dec-2016	54.3	51.9	54.9	52.4	51.1
Jan-2017	55.0	51.0	55.2	52.7	50.8
Feb-2017	54.2	51.7	55.4	53.3	51.3
Mar-2017	53.3	51.2	56.2	52.4	51.6
Apr-2017	52.8	50.3	56.7	52.7	50.9
May-2017	52.7	49.6	57.0	53.1	50.6
Jun-2017	52.0	50.4	57.4	52.4	50.8
Jul-2017	53.3	51.1	56.6	52.1	50.9
Aug-2017	52.8	51.6	57.4	52.2	51.7
Sep-2017	53.1	51.0	58.1	52.9	51.3
Oct-2017	54.6	51.0	58.5	52.8	51.2
Nov-2017	53.9	50.8	60.1	53.6	51.6
Dec-2017	55.1	51.5	60.6	54.0	52.2
Jan-2018	55.5	51.5	59.6	54.8	51.9
Feb-2018	55.3	51.6	58.6	54.1	51.9
Mar-2018	55.6	51.0	56.6	53.1	51.3
Apr-2018	56.5	51.1	56.2	53.8	51.3
May-2018	56.4	51.1	55.5	52.8	51.1
Jun-2018	55.4	51.0	54.9	53.0	51.2
Jul-2018	55.3	50.8	55.1	52.3	51.0
Aug-2018	54.7	50.6	54.6	52.5	50.8
Sep-2018	55.6	50.0	53.2	52.5	50.3
Oct-2018	55.7	50.1	52.0	52.9	50.5
Nov-2018	55.3	50.2	51.8	52.2	50.8
Dec-2018	53.8	49.7	51.4	52.6	50.3
Jan-2019	54.9	48.3	50.5	50.3	49.5
Feb-2019	53.0	49.9	49.3	48.9	50.6
Mar-2019	52.4	50.8	47.5	49.2	51.0
Apr-2019	52.4		47.8	49.5	

Source: Bloomberg

Aluminium

Price Forecasts and China Quarterly Supply/Demand Balance (kt)

		Production	Consumption	Balance	Stocks Days Cons	SHFE Cash Price $/tonne
2015						
	Q1	7420	6092	1328	90	2077
	Q2	7733	7463	270	77	2107
	Q3	7894	7597	297	80	1911
	Q4	7753	8221	-468	69	1657
	Total/Average	30800	29373	1427	74	1952
2016						
	Q1	7622	6527	1095	98	1693
	Q2	8009	8096	-87	79	1880
	Q3	8302	8217	86	79	1888
	Q4	8567	8825	-258	71	1997
	Total/Average	32500	31664	836	77	1952
2017						
	Q1	9164	7164	1999	109	1971
	Q2	9362	8795	567	96	2023
	Q3	9003	8897	106	97	2316
	Q4	9301	9563	-262	88	2306
	Total/Average	36830	34419	2410	95	1867
2018						
	Q1	9014	7568	1446	123	2247
	Q2	9124	9316	-191	99	2271
	Q3	9238	9454	-216	97	2112
	Q4	9067	10182	-1115	80	2003
	Total/Average	36443	36519	-76	86	2154
2019						
	Q1	8975	7876	1099	111	2002
	Q2	9124	9710	-586	86	2057
	Q3	9415	9844	-429	81	
	Q4	9629	10586	-956	67	
	Total/Average	37144	38016	-872	72	
2020						
	Q1	9551	8268	1283	96	
	Q2	9745	10173	-428	75	
	Q3	10008	10310	-302	72	
	Q4	10096	11090	-995	59	
	Total/Average	39400	39841	-441	63	

Source: Wood Mackenzie

Aluminium Forecasts

Global (Mt)	2016	%	2017	%	2018	%	2019	%	2020	%	2021	%
Alumina Production (SGA)	115.0	4.0%	124.3	8.0%	124.3	0.0%	127.0	2.1%	133.6	10.0%	139.7	4.5%
Aluminium Production	59.5	4.1%	64.3	8.0%	64.3	0.1%	65.8	2.2%	69.2	5.3%	72.5	4.6%
Consumption	59.6	5.6%	63.2	6.0%	65.4	3.6%	67.1	2.6%	69.6	3.7%	72.3	3.9%
Metal Market Balance	-0.1		1.1		-1.1		-1.3		-0.4		0.2	
Stock Days of Consumption	83		85		76		67		62		61	
Alumina Market Balance	-1.9		-2.7		-2.8		1.2		2.3		1.0	
Stock Days of Requirement	48		36		28		31		36		36	
Prices												
Cash Aluminium ($/t)	1604		1968		2110		1825		1982		2156	
(c/lb)	73		89		96		83		90		98	
Spot Alumina ($/t)	254		354		474		346		317		340	

Source: Wood Mackenzie

Price Forecasts and World Quarterly Supply/Demand Balance (kt)

		Production	Consumption	Balance	Stocks Days Cons	LME Cash Price $/tonne
2015						
	Q1	13923	12758	1165	99	1800
	Q2	14290	14439	-149	88	1768
	Q3	14518	14413	105	90	1589
	Q4	14457	14877	-420	84	1495
	Total/Average	57188	56488	700	88	1663
2016						
	Q1	14268	13425	843	97	1515
	Q2	14680	15281	-601	83	1571
	Q3	15131	15232	-101	83	1620
	Q4	15443	15687	-243	79	1710
	Total/Average	59523	59625	-102	83	1604
2017						
	Q1	15918	14268	1650	96	1849
	Q2	16188	16201	-12	85	1911
	Q3	15938	16114	-176	86	2011
	Q4	16269	16594	-325	81	2100
	Total/Average	64314	63177	1137	85	1968
2018						
	Q1	15903	14739	1164	97	2158
	Q2	16081	16820	-739	82	2259
	Q3	16271	16702	-431	81	2055
	Q4	16092	17167	-1075	73	1967
	Total/Average	64347	65428	-1082	76	2110
2019						
	Q1	15832	15102	730	85	1859
	Q2	16175	17261	-1086	69	1790
	Q3	16734	17137	-403	67	1818
	Q4	17023	17602	-578	63	1833
	Total/Average	65765	67103	-1338	67	1825
2020						
	Q1	16841	15659	1182	77	1900
	Q2	17149	17897	-749	64	1960
	Q3	17547	17771	-224	63	2007
	Q4	17704	18268	-565	59	2060
	Total/Average	69241	69596	-356	62	1982

Source: Wood Mackenzie

Copper

Copper Forecasts

Global (kt)	2018	%	2019	%	2020	%	2021	%
Total Mine Production	20812	3.5	20647	-0.8	21284	3.1	22131	4.0
Total Smelter Production	19461	2.1	19576	0.6	20169	3.0	21070	4.5
Refined Production	23476	2.1	23490	0.1	23960	2.0	24722	3.2
Consumption	23513	2.2	23876	1.5	24182	1.3	24450	1.1
Concentrate Stock Change	-4		-175		50		100	
Metal Market Balance	-37		-386		-223		272	
Metal Stocks - Days of Cons	70		63		59		62	
Prices								
Cash LME Price ($/t)	6523		6690		8050		8025	
(c/lb)	296		303		365		364	
Contract TC/RCs (c/lb excl pp) for 30% Cu Conc	21.1		20.7		20.1		20.0	
Contract Blister Europe ($/t)	165		160		160		160	

Source: Wood Mackenzie

Copper Concentrate Market TC/RCs

	Asia Term Contracts (Benchmark)			Far East Spot Market (CIF Asia) Miner Selling Terms to Merchants						
	2017	2018	2019	2016	2017	2018	2019			
	Ave	Ave	Ave	Ave	Ave	Q4	Q1	Apr	May	June
T/C ($/tonne Conc.)	92.50	82.25	80.80	87	73	76	71	58	48	45
R/C (c/lb Cu)	9.25	8.23	8.08	8.7	7.3	7.6	7.1	5.8	4.8	4.5
PP (c/lb Cu)				-	-					
Combined (c/lb) +	26.7	23.8	23.4	25.1	21.1	22.0	20.5	16.8	13.9	13
Combined (c/lb) #	23.7	21.1	20.7	22.3	18.7	19.5	18.2	14.9	12.3	11.5
				Chinese smelter buying terms (CIF basis)						
				2016	2017	2018	2019			
				Ave	Ave	Ave	Q1	Apr	May	June
T/C ($/tonne Conc.)				95	84	85	79	69	63	60
R/C (c/lb Cu)				9.5	8.4	8.5	7.9.	6.9	6.3	6.0
PP (c/lb Cu)				-	-					
Combined (c/lb) +				27.5	24.3	24.6	22.8	19.9	18.2	17.3
Combined (c/lb) #				24.4	21.5	21.8	20.3	17.7	16.2	15.4
+ For a 25% copper concentrate										
# For a 30% copper concentrate										

Source: Wood Mackenzie

Price Forecasts & Quarterly Supply/Demand Balance

		Refined Production	Refined Consumption	Balance	Metal Stocks Days of Cons	Cash Price $/tonne	c/lb
2018							
	Q1	5883	5310	573	79	6960	316
	Q2	5844	6105	-261	75	6872	312
	Q3	5814	6157	-344	70	6105	277
	Q4	5936	5941	-6	70	6171	280
	Total/Avg	23476	23513	-37	70	6523	296
2019							
	Q1	5722	5326	396	75	6214	282
	Q2	5798	6115	-318	70	6120	278
	Q3	5965	6346	-381	64	7150	324
	Q4	6005	6089	-84	63	7275	330
	Total/Avg	23490	23876	-386	63	6690	303
2020							
	Q1	5988	5399	589	71	7300	331
	Q2	5988	6196	-208	68	7600	345
	Q3	5988	6424	-436	61	8600	390
	Q4	5995	6163	-167	59	8700	395
	Total/Avg	23960	24182	-223	59	8050	365
2021							
	Q1	6169	5460	709	69	7850	356
	Q2	6171	6266	-95	67	7900	358
	Q3	6174	6495	-321	63	8150	370
	Q4	6208	6228	-20	62	8200	372
	Total/Avg	24722	24450	272	62	8025	364

Source: Wood Mackenzie

Lead

Global Quarterly Supply/Demand Balance And Price Forecasts

		Refined Prod'n	Cons'n	Balance	Stock Days	$/tonne	c/lb
2017							
	Q1	2900	2863	37	49	2278	103.3
	Q2	3085	3212	-127	40	2164	98.2
	Q3	3152	3169	-18	40	2333	105.8
	Q4	3228	3293	-65	37	2493	113.1
	Total/Avg	12365	12538	-173	39	2317	105.1
2018							
	Q1	2895	2890	5	42	2522	114.4
	Q2	3093	3245	-152	33	2387	108.3
	Q3	3168	3208	-40	33	2102	95.3
	Q4	3241	3332	-90	29	1963	89.0
	Total/Avg	12397	12674	-277	31	2243	101.8
2019							
	Q1	2975	2885	90	36	2036	92.4
	Q2	3167	3244	-76	30	1885	85.5
	Q3	3236	3209	27	31	1883	85.4
	Q4	3325	3335	-10	30	1925	87.3
	Total/Avg	12703	12672	31	32	1932	87.7
2020							
	Q1	3043	2929	114	38	1925	87.3
	Q2	3239	3292	-53	32	1850	83.9
	Q3	3315	3254	61	34	1825	82.8
	Q4	3404	3379	25	33	1850	83.9
	Total/Avg	13001	12854	147	36	1863	84.5

Source: Wood Mackenzie

Lead Forecasts

Global (kt)	2018	%	2019	%	2020	%	2021	%
Mine production	4842	1.5	5008	3.4	5339	6.6	5595	4.8
Refined production	12397	0.3	12703	2.5	13045	2.7	13195	1.1
Consumption	12674	1.1	12672	0.0	12854	1.4	12859	0.0
Concentrate balance	14		-25		-39		84	
In days of requirement	30		27		23		28	
Refined market balance	-277		31		191		336	
In days of requirement	31		32		37		46	
Prices								
Cash LME Price ($/t)	2243		1932		1863		1825	
(c/lb)	101.8		87.7		84.5		82.8	
Realised TCs ($/t conc)	106		105		107		130	

Source: Wood Mackenzie

Nickel

Global Nickel Quarterly Supply/Demand Balance - (kt)

		Refined Supplies	Refined Consumption	Balance	Cash Price $/tonne	c/lb	Stocks kt	Days of Cons
2018	Q1	540	565	-25	13283	603	1361	217
	Q2	551	574	-23	14463	656	1337	212
	Q3	551	556	-6	13240	601	1332	220
	Q4	596	585	11	11469	520	1342	211
	Total/Avg	2237	2280	-43	13114	595		
2019	Q1	579	585	-6	12385	562	1336	206
	Q2	602	604	-2	12233	555	1334	201
	Q3	602	585	17	12015	545	1351	213
	Q4	616	614	1	12640	573	1353	203
	Total/Avg	2399	2388	10	12318	559		
2020	Q1	619	621	-2	12713	577	1351	196
	Q2	620	648	-28	13522	613	1322	186
	Q3	608	624	-16	13375	607	1306	193
	Q4	624	649	-25	13301	603	1281	182
	Total/Avg	2471	2542	-71	13228	600		
2021	Q1	638	654	-15	13705	622	1266	174
	Q2	641	674	-33	14514	658	1233	167
	Q3	642	662	-20	14293	648	1213	168
	Q4	643	685	-42	13889	630	1171	157
	Total/Avg	2564	2674	-110	14100	640		

Source: Wood Mackenzie

Nickel Forecasts

Global (kt)	2018		2019		2020		2021	
Mine Production	2283	+6.6%	2458	+7.7%	2599	+5.7%	2761	+6.2%
Smelter Production	2191	+6.2%	2320	+5.9%	2373	+2.3%	2447	+3.1%
Refined Production	2237	+6.5%	2399	+7.2%	2471	+3.0%	2564	+3.8%
Consumption	2280	+4.5%	2388	+4.7%	2542	+6.4%	2674	+5.2%
Market Balance	-43		10		-71		-110	
Cash LME price								
($/t - Current)	13114		12318		13228		14100	
(c/lb - Current)	595		559		600		640	

Source: Wood Mackenzie

Tin

ICDX & LME Tin Price

	ICDX	LME Cash	LME premium to ICDX
04-Jan-16	14,575	14,442	-133
01-Feb-16	14,750	14,854	104
01-Mar-16	16,100	16,155	55
01-Apr-16	16,800	16,743	-57
02-May-16	17,225	17,220	-5
01-Jun-16	16,300	16,200	-100
01-Jul-16	16,950	17,375	425
01-Aug-16	17,950	17,865	-85
01-Sep-16	19,000	19,165	165
03-Oct-16	20,150	20,060	-90
01-Nov-16	20,500	21,015	515
01-Dec-16	21,350	21,315	-35
03-Jan-17	21,100	21,094	-6
01-Feb-17	19,950	19,814	-136
01-Mar-17	19,300	19,500	200
03-Apr-17	20,100	20,084	-16
02-May-17	20,100	20,015	-85
02-Jun-17	20,425	20,420	-5
04-Jul-17	20,000	20,240	240
01-Aug-17	20,700	20,650	-50
04-Sep-17	20,880	20,985	105
03-Oct-17	20,700	20,954	254
01-Nov-17	19,650	19,535	-115
04-Dec-17	19,600	19,582	-18
02-Jan-18	20,100	20,112	12
01-Feb-18	21,820	21,550	-270
01-Mar-18	21,800	21,755	-45
02-Apr-18	21,100	21,252	152
01-May-18	21,375	21,340	-35
01-Jun-18	20,800	20,795	-5
02-Jul-18	19,850	19,825	-25
01-Aug-18	20,100	19,925	-175
03-Sep-18	19,200	18,895	-305
01-Oct-18	19,150	18,970	-180
01-Nov-18	19,180	19,115	-65
03-Dec-18	18,690	18,871	181
02-Jan-19	19,525	19,508	-17
01-Feb-19	20,750	20,985	235
01-Mar-19	21,790	21,710	-80
04-Apr-19	21,515	21,524	9
02-May-19	19,685	19,639	-46
03-Jun-19	18,770	19,350	580
01-Jul-19	18,840	18,890	50

Source: LME, ICDX

Zinc

Price Forecasts and World Quarterly Supply/Demand Balance

		Refined Supplies	Refined Consumption	Balance	Metal Stocks Days of Cons	Cash $/tonne	Price c/lb
2017	Q1	3,344	3,520	-176	84	2,780	126.1
	Q2	3,324	3,599	-274	75	2,595	117.7
	Q3	3,349	3,542	-193	71	2,962	134.4
	Q4	3,514	3,563	-48	70	3,236	146.8
	Total/Avg	13,532	14,223	-692	70	2,895	131.3
2018	Q1	3,339	3,508	-169	66	3,421	155.2
	Q2	3,348	3,586	-238	59	3,112	141.1
	Q3	3,186	3,529	-344	51	2,537	115.1
	Q4	3,380	3,551	-170	46	2,630	119.3
	Total/Avg	13,253	14,174	-921	46	2,921	132.5
2019	Q1	3,152	3,473	-321	39	2,702	122.5
	Q2	3,319	3,550	-231	32	2,762	125.3
	Q3	3,481	3,494	-13	32	2,667	121.0
	Q4	3,579	3,515	63	34	3,200	145.1
	Total/Avg	13,530	14,032	-502	34	2,833	128.5
2020	Q1	3,559	3,527	31	34	3,000	136.1
	Q2	3,645	3,606	39	34	2,800	127.0
	Q3	3,613	3,549	64	37	2,700	122.5
	Q4	3,668	3,570	98	39	2,700	122.5
	Total/Avg	14,485	14,252	233	39	2,800	127.0

Source: Wood Mackenzie

Price Forecasts and World Quarterly Supply/Demand Balance

Global (kt)	2018	%	2019	%	2020	%	2021	%
Mine Production	12910	2.5	13322	3.2	14221	6.7	14705	3.4
Refined Production	13253	-2.1	13530	2.1	14485	7.1	15159	4.7
Consumption	14174	-0.3	14032	-1.0	14252	1.6	14476	1.6
Concentrate Market Balance	281		425		470		341	
Metal Market Balance	-921		-502		233		682	
Prices								
Cash LME Price ($/t)	2921		2833		2800		2625	
(c/lb)	133		128		127		119	
Realised TCs ($/t concentrate)	147		245		306		292	

Source: Wood Mackenzie

About Sucden Financial

Sucden Financial was formed in 1973 as the London brokerage arm of Sucden. The firm has evolved into one of the largest independently owned brokers for traders, fabricators, producers, consumers, merchants, investment houses, hedge funds, commodity firms and retail FX brokers. As a ring dealing member of the London Metal Exchange (LME) and with access to major global exchanges, the company provides fast, direct access to worldwide markets. Based in the City of London, Sucden Financial also has offices in Moscow and subsidiaries in Hong Kong (Sucden Financial (HK) Limited) and New York (Sucden Futures Inc.).

Sucden Financial Limited is authorised and regulated by the Financial Conduct Authority. Sucden Financial (HK) Limited is licensed by the Securities and Futures Commission (SFC). Sucden Futures Inc. is registered with the National Futures Association (NFA).

Disclaimer

The material in this report has been issued in the United Kingdom by Sucden Financial Limited ("Sucden") which is incorporated in England and Wales with company number 1095841. Sucden's registered office is: Plantation Place South, 60 Great Tower Street, London, EC3R 5AZ. Sucden is authorised and regulated by the Financial Conduct Authority.

Sucden Financial Limited is authorised and regulated by the Financial Conduct Authority.

This is a marketing communication. Forecasts are not a reliable indicator of future performance. The information in this report is provided solely for informational purposes and should not be regarded as a recommendation to buy, sell or otherwise deal in any particular investment. Please be aware that, where any views have been expressed in this report, the author of this report may have had many, varied views over the past 12 months, including contrary views. A large number of views are being generated at all times and these may change quickly. Any valuations or underlying assumptions made are solely based upon the author's market knowledge and experience. Please contact the author should you require a copy of any previous reports for comparative purposes. Furthermore, the information in this report has not been prepared in accordance with legal requirements designed to promote the independence of investment research. Data in this report has been sourced from Wood Mackenzie unless otherwise stated. All information in this report is obtained from sources believed to be reliable and we make no representation as to its completeness or accuracy. This report is not subject to any prohibition on dealing ahead of the dissemination of investment research. Accordingly, the information may have been acted upon by us for our own purposes and has not been procured for the exclusive benefit of customers. Sucden Financial believes that the information contained within this report is already in the public domain. Private customers should not invest in these products unless they are satisfied that the products are suitable for them and they have sought professional advice. Please visit our website to view our full risk warnings and disclaimers: www.sucdenfinancial.com.

August 2019

Quarterly
Metals Report
Q3 2019

Sucden Financial
Established 1973

United Kingdom
Sucden Financial Limited
Plantation Place South
60 Great Tower Street
London
EC3R 5AZ

Tel: +44 (0)20 3207 5000
Email: info@sucfin.com

Russia
Sucden Financial Limited
Sucden Financial (Russia)
Representative Office
Orlikov per. 3 'B'
Moscow 107139

Tel: +7 495 796 96 40
Email: russia@sucfin.com

Hong Kong
Sucden Financial (HK) Limited
Unit 1001, 10/F.,
Li Po Chun Chambers,
189 Des Voeux Road Central,
Hong Kong

Tel: +852 3665 6000
Email: hk@sucfin.com

USA
Sucden Futures Inc.
30 Wall Street - 9th Floor
New York
NY 10005

Tel: +1 212 422 3265
Email: ny@sucfin.com

www.sucdenfinancial.com/QMR