Saturday, October 1, 2016

HALLGARTEN & COMPANY

Portfolio Strategy

Christopher Ecclestone
cecclestone@hallgartenco.com

Model Mining Portfolio:

Metals Lacking Momentum

Performance Review – September 2016

Model Mining Portfolio

Momentum Lacking

- Copper finally gained ground as the seriousness of its supply shortfall started to bite
- Financings continued to bubble along through the month though it is good to see few IPOs as these suck away capital from existing stories
- Tin neared $20,000 per ton for the first time since early 2015. ITRI forecasting a 1% growth in demand this year while supply remains constricted
- The fortunes of drillers should be taking a turn for the better with revived exploration activity
- Silver and gold perked up again after a period of weakness earlier in the month
- Zinc lost some of its upward momentum and briefly tested the $1 per lb mark again
- Tungsten has slid back under $200 per MTU and the major new producer, Wolf, has run into financial difficulties and been suspended from trading
- Financings are being achieved by some of the perennial "deadbeat" explorers who have no intention of going to production

The Changing Nature of Criticality

For decades the British Geological Society was a very low-key institution and scarcely figured on the radars of mining folk with the USGS being far better known and cited far more often. However, while the USGS was known for its annual individual metals summaries, the BGS appeared on the scene with a bang at the end of the last decade with its broad-reaching study and ranking of criticality of metals, which came to be known as the "Risk List". The first of these to glean notice was the one that staked out Rare Earths as being the world's most critical metal in terms of supply problems.

Despite having fallen out of favour with investors, the Rare Earths have remained at the top of the rankings of criticality over the more than half a decade since their first flush and the debut of the "risk list". Well they might because if one weighs up the metals that are most important (in terms of volumes and breadth of applications) and yet still the most tenuous in having an open supply source, then Rare Earths justifiably rank as those with the most critical supply outlook. Frankly reading between the lines of the BGS list the prime characteristic that gets it rated critical is NOT a lack of supply but that the Chinese have any sort of dominance in a metal, and thus the ability to turn off most or all supply in a situation where countries are "fixing bayonets".

The China Syndrome

We cannot fault the BGS's targeting of China as the main driver of criticality. The Chinese brought this designation upon themselves when they escalated the fishing boat incident of several years ago into a full-blown" ban upon Japanese companies receiving exports of REEs sourced from China. When they took that action they signaled that they could and would repeat this across the whole spectrum of strategic metals in which they have a dominance of either production and/or processing. Hence when one looks at the current list of metals ranked by criticality there is a heavy weighting at the top towards metals in which China has a dominant position like REEs or Antimony (or is perceived to have a dominant position, like Tungsten). Amongst the other top ranked metals where there is perceived to be Chinese dominance are Gallium and Germanium, both with valuable high-tech applications are notable.

British Geological Survey

Risk list 2015 — Current supply risk for chemical elements or element groups which are of economic value.

Element or element group	Symbol	Relative supply risk index	Leading producer	Top reserve holder
rare earth elements	REE	9.5	China	China
antimony	Sb	9.0	China	China
bismuth	Bi	8.8	China	China
germanium	Ge	8.6	China	
vanadium	V	8.6	China	China
gallium	Ga	8.6	China	
strontium	Sr	8.3	China	China
tungsten	W	8.1	China	China
molybdenum	Mo	8.1	China	China
cobalt	Co	8.1	DRC	DRC
indium	In	8.1	China	
arsenic	As	7.9	China	
magnesium	Mg	7.6	China	Russia
platinum group elements	PGE	7.6	South Africa	South Africa
lithium	Li	7.6	Australia	Chile
barium	Ba	7.6	China	China
carbon (graphite)	C	7.4	China	China
beryllium	Be	7.1	USA	
silver	Ag	7.1	Mexico	Peru
cadmium	Cd	7.1	China	

Nine out of the top ten metals are China dominated in the BGS's opinion. The 10th is Cobalt where fears have stirred in recent years that the DRC's key position is being cultivated by China as an almost exclusive offtaker. Bismuth, Antimony and Indium are infamously remembered for having been the three horseman of the apocalypse at the FANYA Exchange with Chinese retail investors piling in to real or imagined positions in real or imagined warehouse stockpiles with negative blowback for the prices of the metals in question.

Exposure

The big issue, as always is how to get exposure to these metals. Is exposure to the metal alone (through an explorer) as good as being exposed to production or potential production? In many cases though the choices of producers can be narrowed down to the finger on one hand.

A Criticism

Finally the survey sort of shoots its credibility in the foot with Silver ranked in the top 20 of metals by criticality. Frankly even a silver-nut would not argue that this metal is in short supply. There is not only substantial supply from mines, but there are also large passive investment holdings and there is a vast stock of jewelry that holders would release if the price rises. The spike to $50 several years ago (and the Hunt Brothers corner decades ago) shows that high prices produce a tsunami of silver supply from householders at the right moment.

If we have any criticisms beyond that we would say that Tantalum (a conflict mineral) and Tin (with declining alluvial production and Indonesia restricting concentrate exports) are far more near the edge of a supply crisis than many of the metals ranked as having a higher risk. Both should definitely be in the second decline. Scandium does not even feature on the list, but as applications expand it could be a prominent feature in five years from now.

Filling in the Gaps

The task for companies and promoters (and dare we say, governments) is to encourage companies to go forth and fill up the gaps in the strategic and critical metals matrix. The Chinese don't dominate Gallium, Germanium and Antimony because they are the only country that has these metals. It is only because of a conscious policy on the part of the Chinese government and an unconscious acquiescence on the part of West that has allowed this situation to evolve. A goal for 2020 (dare we call it a Five Year Plan) should be to break the Chinese dominance in the top ten metals on this BGS list.

When the Drills Start to Spin Again

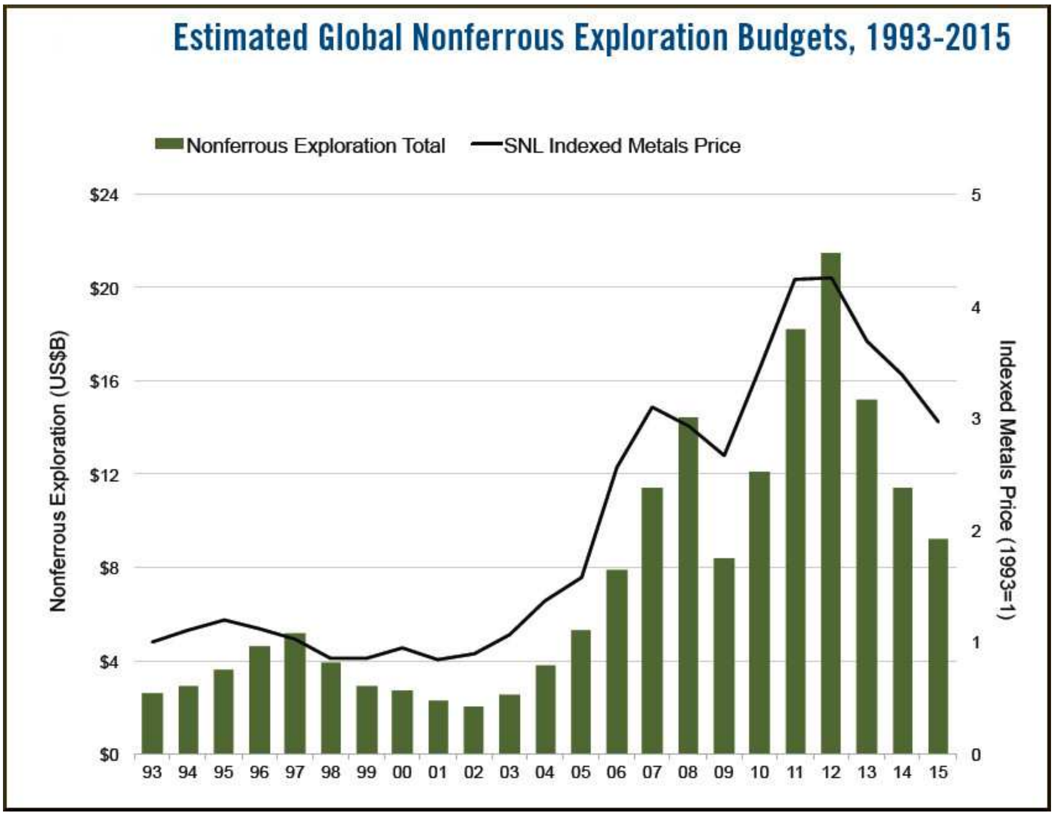
Despite their deep attachment to drilling and press releases or vice versa (or usually both), the majority of Canadian mining executives were forced to trim their coat to suit their cloth during the bleak period that ran from 2011 until recently. As the bottom of the financial barrel was reached, exploration programs felt the knife and drilling was about the most expensive exploration one might undertake, so the knife was wielded and the picture has been grim indeed for drillers until recent months.

Companies used to drill to please the market but then in recent years, soil-sampling and trenching have been the "poor man's drilling. No drilling meant nothing much in the way of work for consultants converting non-existent drilling into resource estimates or scoping studies. While we have little to no sympathy for the consultants, the drillers had large capital invested in their rig fleets and have struggled to adjust to the tough times.

However, as is oft quoted in the mining industry, the people who made money out of the California gold rush of the 1850s were those selling the shovels rather than those down the mines. Therefore, intermediaries such as drillers should be first-line beneficiaries of the reactivation of the mining space. Now the light is at the end of the tunnel we thought it would be useful to hunt down some of the sub-spaces of mining that have not yet turned and here we shall look at drillers and their potential to be a next mover.

What goes up…

….must come down, but then may go up again.. except, of course, if it's a soufflé. The chart below shows that budgets were on a tear from 2003 onwards with a steep pullback in 2008 that was then followed by an even brusquer surge. This trend has been symmetrical around the 2012 high-water mark. From discussions with drillers in recent weeks, they have told me that numbers in the first half of 2016 were showing an even worse trend that 2015 but that a turn has come which saves the day but that 2016's average drill utilization will still be lower than 2015's before the uptick becomes evident in 2017 numbers.

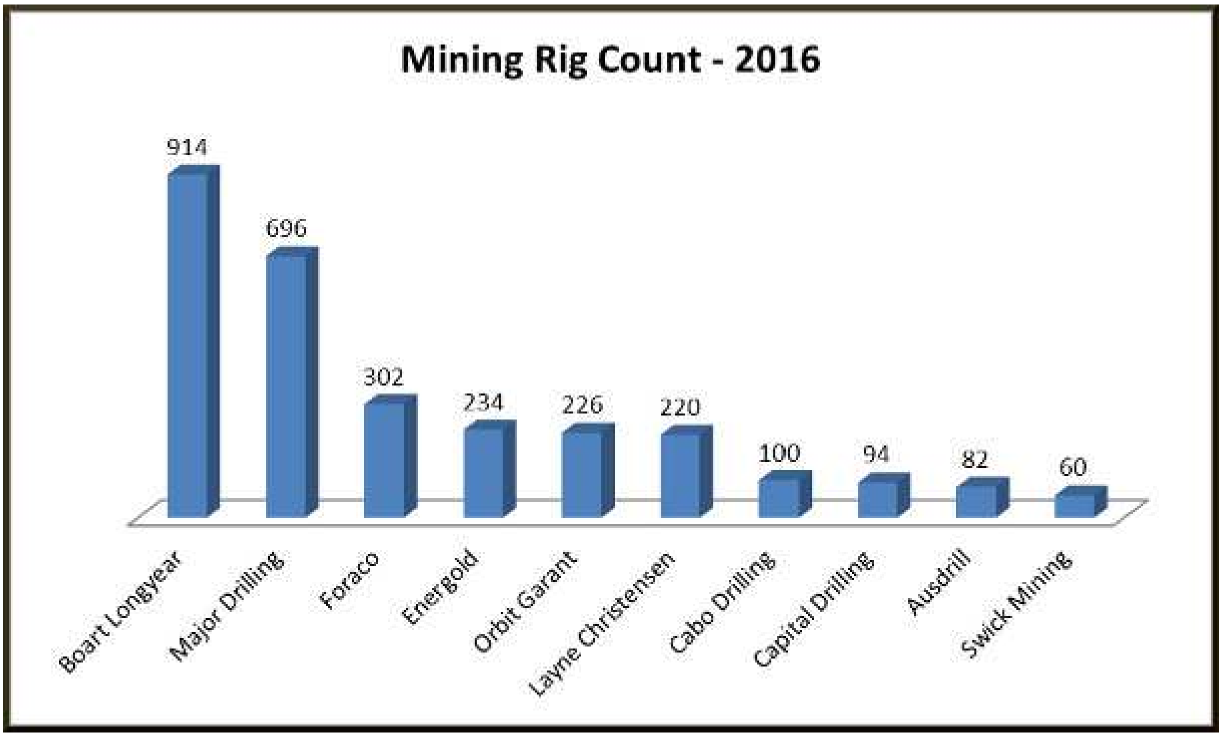


Source: SNL

The impression we have got from many miners is that drilling costs per metre have not been moving up all that much in recent times. In a recent presentation Major drilling claimed pricing was at a 15-year low. One gold explorer in Quebec that we met this week said that they were paying an all-in $85 per metre for work there whereas we recall numbers closer to $200 per metre in the glory days. This has created a scenario where miners now want to get work done (if they have cash) while rates stay low.

The Business Model

From our interactions with the drilling industry there are two key factors in driller selection. Firstly there is traditional usage and secondly is geographical location, with an overlay of the over-riding consideration of availability of drill teams. Firstly explorers tend to use the drillers they have used before with the only factors shaking them loose being a breakdown in relations (i.e. a poor job done or the miner being a poor payer) or an unjustified escalation in drilling costs. The second factor is more self-explanatory with a company obviously using a driller than is on the scene in a mining region rather than requesting that a previously favoured supplier ship in a team and equipment. The factor of time availability has been a crucial one in recent years where sometimes mining companies could not secure a driller for love nor money in some locations due to intense demand in some locations. This is less of a problem in the last four years. As demand revives in some parts of the world we would expect greater mobility in rigs than hitherto as companies attempt to redeploy from dead locations to hot spots.



Boart Longyear is currently a prisoner of its creditors. Major Drilling, much to our surprise, has a rather stunning market cap of over $500mn at the current time, which makes it very heavily overvalued compared to the rest of the universe. We would venture that it has nowhere to run. Energold and Cabo are the companies we know best and they seem to be light and nimble.

Residual debt burdens are the big problem. Layne Christensen has total liabilities of US$355mn, while Boart Longyear has a stunning US$670mn in debt and that was after various rescues/restructurings during the grim times. Foraco has CAD$153mn in debt, while Major Drilling has only $77mn at the current time. Ausdrill on the other hand, for quite a small fleet has AUD$543mn in total liabilities. Cabo Drilling in contrast has CAD$11.67mn in debt and Energold has CAD$44mn in debt. Frankly we would prefer to run with the players with the smallest debt burdens.

The Medium Term Trend

As we have seen the drilling space has all the same players as 2012, which is quite spooky as it implies no rationalization. Also rig numbers have not gone by any noticeable amount. This has been despite the massive culling of junior explorers which used to make up most of the customer base of the drillers. The surviving miners/explorers have managed to still be around for the recovery by basically cutting exploration to the bone.

With the recovery now six months old the flow of financings is healthier but we noticed that many of those raising funds were stashing the money and focusing on “cheap and cheerful” exploration like rock sampling and geochem. The most prosperous sub-sector, Lithium, has seen very little drilling at all and is a microcosm of this Scrooge-like attitude. However, investors are not going to tolerate companies raising funds and giving nothing back in terms of work. The longer the recovery lasts the more likely the need for the rubber to hit the road or the drill-bit to hit the ground spinning.

They say it is cheapest to buy straw hats in winter, but in the case of drillers, you can buy them in this mining spring still at prices that reigned during the mining sector's long winter of discontent. The pitfalls to avoid are the over-indebted (Boart, Layne and Ausdrill) and the overpriced (Major). We are taking this opportunity to reopen a position in Cabo Drilling (CBE.v) in the Model Mining Portfolio with a twelve-month target price of CAD 8 cts.

The Portfolio Move

The Model Mining Portfolio ended the month at $4.04mn, up from $3.957mn. Cash holdings shrunk again to $991,000 due to our sole purchase during the month.

Portfolio Changes

There was only one portfolio change in September as the pace of changes in recent months slowed. The transaction we undertook was:

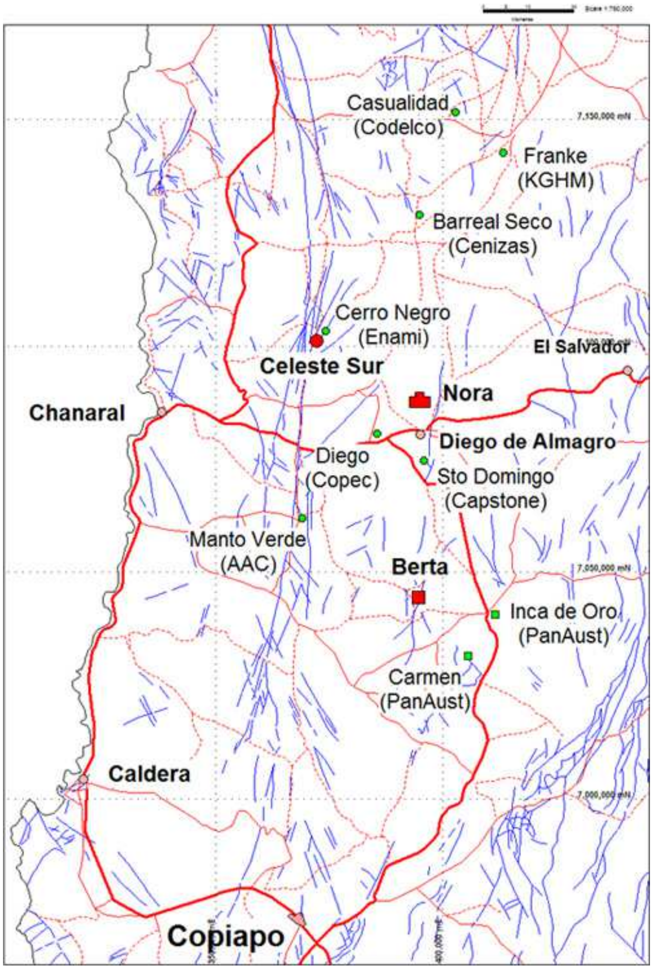
- Added a Long position in Cabo Drilling. Bought 2mn shares in CBE.v at CAD 2.5 cts per share on September 28th

Worthy of special mention is our Short position in Galane Gold. This hapless company paid for some sponsored research from a German outfit during the month (seemingly to try and mitigate the effect of our negative stance on the stock) and then had to, embarrassingly, distance itself from the material on the first day after it had gone out. This only reinforced our view of this company and its management.

Coro Mining (COP.to) – Bootstrapping Berta

Our initial punt on this then little-known Chilean copper wannabe with its Berta project paid off handsomely when the market suddenly awoke to the possibilities and the reality of production and boosted the stock, in mid-April, by over 300% in a matter of days. At that point it became massively overweight in our portfolio and we cut the position back down to size through profit-taking.

The micro-mining focus at Coro meshes with our belief that small is beautiful and cheap is not a pejorative. Initially the company came to our attention in 2015 due to its SCM Berta project and the associated remediation and refurbishment of the Nora SXEW plant, located 5kms north of the town of Diego de Almagro in the III Region of Chile.



The Nora facility was acquired in September 2014 from the receivers of the previous owners for approximately US$3.3mn. The remediation was required to lift the Nora plant suspension order

SCMB completed a PEA on the Berta Deposit as an open-pit mine in June 2015 and initially plans to truck high-grade material from Berta to Nora for the first eleven months of operation. Concurrently, the Nora plant capacity will be expanded from 3k tpa to 5k tpa copper cathode and a crushing circuit, agglomerator and leach pads installed at Berta with transport of PLS, water and raffinate between Berta and Nora via a pipeline.

The Updated PEA was announced in mid-June 2015 and the estaimted resource was:

- In-pit Measured and Indicated Resources of 17.6mn tonnes at 0.37%CuT at a cutoff grade of 0.1%CuT
- Measured Resources 14.1mn tonnes at 0.38% CuT
- Indicated Resources 3.5mn tonnes at 0.29% Cut

Elaborating further it said that there was:

- High-grade trucking material 0.4mn tonnes @ 0.83% CuT for 2.7k tonnes of copper cathode production
- Heap leach material 6.8mn tonnes @ 0.56%CuT for 29.5k tonnes copper cathode production
- Dump leach material 5.9mn tonnes @ 0.20%CuT for 5.3k tonnes of copper cathode production
- Total copper production of 37.8k tonnes of copper cathode production

- Waste of 5.3mn tonnes
- Life of mine strip ratio of 0.54:1
- Mine Life of 8 years

Berta is nobody’s idea of a super-pit. It is a throwback to the times when mines were smaller and made money. The management team is following all the steps that miners did in that by-gone age. There is no real reason why it should not work again in current times.

Year to date SCMB has produced 777 t of copper and has not yet reached commercial production. The current capacity of the plant is ~250 tpm, but it has only been operating at ~52% due to start up and commissioning activities in Q1 2016 and less than expected production from non-Berta dump material in Q2 2016 due to recovery issues. The Nora plant has not yet met break-even thresholds, but this is expected to improve in Q3 2016 when SCMB shifts to production from Berta material.

The expansion of the Nora plant from 3 to 5ktpy of copper cathode is substantially complete and the Company has decided to accelerate the installation of the Berta leach pads and crusher in order to capitalize on the currently favourable capital cost environment and to reduce the operating costs of processing Berta materials. Further details are contained in the Company's MD&A to be released shortly.

The goal until Cu prices pick up is to reduce opex. The relatively weak copper price is offset by declining oil and acid prices and the favourable Chilean peso exchange rate movements. The company has been helped in reducing capex by the enhanced equipment availability and lower pricing caused by a near cessation of new mining projects in Chile and elsewhere.

Drilling has further defined the higher grade cores of the Berta Sur and Central deposits as highlighted by oxide intersections of 56m @ 0.73%CuT from surface in BD-02 and 60m @ 1.09%CuT from 10m depth in BD-05, respectively. It will be interesting to see how this pit and mine develop as mining progresses.

Marimaca

This project is essentially a repeat of the experience at Berta. Buy a past producing mine and acquire some recently used equipment and cobble together a production plan.

Coro has the right to earn a 75% interest in the property as follows;

- 51% interest earned in Marimaca with a $125k payment together with completion of a NI43-101 resource estimate and engineering study that demonstrates the technical and economic feasibility of producing a minimum of 1.5k tpa Cu cathode by August 6th 2018 at Coro's cost

- Additional 24% interest in Maramaca earned by Coro upon obtaining financing for the project construction

- The owner’s interest will comprise a 15% interest free carry to commencement of commercial production and a 10% participating interest subject to dilution. The owners at their election may request Coro to loan them the equity portion corresponding to their 10% interest, if any, recoverable by Coro from 100% of the project's free cash flow after debt repayments

The Marimaca deposit is hosted by Jurassic age coarse grained dioritic rocks. Primary mineralization at Marimaca consists of hairline to centimetric veinlets of chalcopyrite-magnetite with accompanying strong potassic alteration; very little disseminated sulphides have been noted. Subsequent deep oxidation and remobilization has taken place and the deposit is a now an oxidised enrichment blanket with the distribution and grade of copper mineralization controlled by fracture density.

At Marimaca the strategy is to use a second-hand SXEW plant to kickstart production. To this end, Coro has signed a non-binding Letter of Intent to acquire Minera Rayrock Ltda from the Peruvian miner, Minera Milpo. Rayrock is the owner of the Ivan SXEW plant located ~18km to the south of Marimaca. This plant has installed capacity of 12k tpa copper cathode and operated from 1995 until 2012, but this is now on care & maintenance. The transaction also brought along the associated water rights and environmental and operating permits, some of which require updating.

The main terms of the LOI are:

- Paid US$250k on signature in return for 60 day exclusive due diligence, extendable to 90 days under certain circumstances
- Closing period of 30 days to negotiate and execute a definitive purchase agreement Payment of US$6.25m on execution of the DPA

The Rayrock deals also bring along the 38,283 hectares of mineral claims that it owns. Milpo retains a 2% NSR on all production from the Rayrock mineral claims. Coro may acquire half the NSR for US$2mn at any time and will have a right of first refusal over the NSR.

It is still early days at Coro but the product is flowing and its already looking at project number two and beyond. Fortunately the copper price is starting to come to the party also. In light of these developments, we are upping our previous twelve-month target price from 14 cts to 30 cts per share.

Parting Arrow

Boom, what boom? While valuations have moved up for many mining stocks, in some cases by multiples of what the valuations were only late last year, it is scarcely a situation in which we can party like its 2009 again. A litmus test is whether when one goes to a mining event there are more people in the room asking for money than offering it. At the moment there has been a resurgence in mining “events” but not necessarily a recovery in the number of people with spare cash to fling at the opportunities. With the welter of financings in recent times the investors are coming into stories that, in many cases have already made their quantum leap. Thus with gold and silver doodling about and the base metals taking it in turns to run and then retreat, the mining market needs fresh money if it isn’t going to have fresh stories. At least we don't have the problem of IPOs sucking up new cash as IPOs are scarcely evident as yet.

There may be an indigestion moment looming as companies are getting greedier in their "ask" of the market. What were sub-$100K keeping-the-lights-on financings late last year became sub-$1mn lets-think-about-exploring financings in the first half of this year became multi-million dollar gather-acorns-while-we-may financings in recent months. This risk is rising of the market actually choking at some point on too much issuance, and too little demand, for too little in exploration or production outcomes and/or a lack of favourable metal price evolution.

Mining Model Portfolio as at: 1-Oct-16

	Security	Initiated	Currency	Price Avg.	Price Current	Portfolio Weighting	Increase in Value	Target
Long Equities								
Various Large/Mid-Cap	Capstone Mining (CS.to)	5/29/2009	CAD	2.32	0.8	1.00%	-65.50%	$2.00
	NevSun (NSU)	3/23/2012	CAD	3.45	3.97	5.40%	15.10%	$5.00
	Sherritt International (S.to)	7/11/2013	CAD	1.78	0.84	3.40%	-52.80%	$2.50
	Palladium ETF (PALL)	10/16/2014	USD	72.08	69.4	4.90%	-3.70%	$74.00
	Metals X (MLX.ax)	29/5/2014	AUD	0.98	1.51	5.50%	54.30%	$1.80
Uranium	Uranium Participation Corp (U.to)	10/20/2010	CAD	7.01	3.92	2.70%	-44.10%	$6.00
	Western Uranium (WUC.cx)	7/5/2016	CAD	2.25	1.75	2.80%	-22.20%	$4.80
	GoviEx (GXU.cx)	6/29/2015	CAD	0.08	0.17	5.50%	106.90%	$0.50
Zinc/Lead Plays	Zinc ETF (Zinc.L)	1/15/2010	USD	7.04	6.99	2.50%	-0.70%	£9.00
	Canadian Zinc (CZN.to)	12/9/2011	CAD	0.82	0.29	0.90%	-64.60%	$0.70
	Nyrstar (NYR:BR)	9/28/2009	Euros	65.1	6.54	1.00%	-90.00%	€ 15.00
	Southern Silver Exploration (SSV.v)	8/25/2016	CAD	0.4	0.485	3.30%	21.30%	$0.94
Gold Producers	NewGold (NGD.to)	5/31/2013	CAD	7.05	5.69	4.60%	-19.30%	$8.00
	Patagonia Gold (PGD.L)	10/2/2013	GBP	3.6	2.6	2.40%	-27.80%	£4.00
	Eldorado Gold (EGO)	6/21/2012	USD	9.12	5.16	5.50%	-43.40%	$7.00
	Teranga Gold (TGZ.to)	6/21/2012	CAD	1.57	1.17	3.80%	-25.50%	$1.50
Copper Producer	Coro Mining (COP.to)	2/23/2015	CAD	0.03	0.13	3.50%	333.30%	$0.30
Trading House	Glencore (GLEN.L)	1/5/2016	GBP	0.88	2.12	9.80%	139.70%	£2.20
Processor	IBC Advanced Alloys (IB.v)	4/29/2016	CAD	0.3	0.57	1.50%	90.00%	$1.40
Driller	Cabo Drilling (CBE.v)	9/28/2016	CAD	0.025	0.03	1.60%	20.00%	$0.08
Gold Explorers	Everton Resources (EVR.v)	4/17/2012	CAD	0.08	0.1	2.70%	33.30%	$0.10
Tungsten Producer	Almonty Industries (AII.v)	7/31/2015	CAD	0.36	0.27	3.70%	-25.50%	$1.00
Copper Explorer	Asiamet Resources (ARS.v)	4/28/2016	CAD	0.05	0.04	1.60%	-20.00%	$0.24
Nickel Explorer	Sama Resources (SME.V)	23/2/2015	CAD	0.16	0.12	2.60%	-25.00%	$0.30
Lithium	Neometals (NMT.ax)	7/31/2014	AUD	0.04	0.32	4.40%	764.90%	$0.28
	Galaxy Mining (GXY.ax)	6/28/2016	AUD	0.35	0.32	1.90%	-7.40%	$0.70
Scandium Explorer	Scandium International (SCY.to)	8/23/2016	CAD	0.14	0.17	2.80%	21.40%	$1.00
Graphite Producer	Elcora Resources (ERA.v)	29/5/2014	CAD	0.2	0.32	4.30%	60.00%	$0.64
Graphite Developer	Talga Resources (TLG.ax)	8/25/2016	AUD	0.27	0.28	3.80%	5.70%	$0.42
REE Explorer	Northern Minerals (NTU.ax)	6/9/2011	AUD	0.73	0.13	0.50%	-82.20%	$0.28
	NET CASH					**991,012**		
Short Equities						**Weighting**		
Shorts	Bacanora (BCN.v)	12/4/2015	CAD	1.53	1.51	29.40%	1.30%	$0.80
	Orocobre (ORE.ax)	6/28/2016	AUD	4.61	3.73	24.30%	19.10%	$3.20
	Galane Gold (GG.v)	4/28/2016	CAD	0.06	0.13	46.30%	-116.70%	$0.03

Current Cash Position	**991,012**
Current Liability on Shorts Not Covered	**235,034**
Net Cash	**1,226,046**
Current Value of Bonds	**0**
Current Value of Long Equities	**2,815,356**
TOTAL VALUE OF PORTFOLIO	**4,041,402**

Short Equities	**-9%**
Long Equities	**109%**

Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Hallgarten's Equity Research rating system consists of LONG, SHORT and NEUTRAL recommendations. LONG suggests capital appreciation to our target price during the next twelve months, while SHORT suggests capital depreciation to our target price during the next twelve months. NEUTRAL denotes a stock that is not likely to provide outstanding performance in either direction during the next twelve months, or it is a stock that we do not wish to place a rating on at the present time. Information contained herein is based on sources that we believe to be reliable, but we do not guarantee their accuracy. Prices and opinions concerning the composition of market sectors included in this report reflect the judgments of this date and are subject to change without notice. This report is for information purposes only and is not intended as an offer to sell or as a solicitation to buy securities.

Hallgarten & Company or persons associated do not own securities of the securities described herein and may not make purchases or sales within one month, before or after, the publication of this report. Hallgarten policy does not permit any analyst to own shares in any company that he/she covers. Additional information is available upon request.

Web access at:

Research: www.hallgartenco.com