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Thinkpiece

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Metals Prices Outlook to 2019

"I may be wrong in regard to any or all of them; but holding it a sound maxim, that it is better to be only sometimes right, than at all times wrong, so soon as I discover my opinions to be erroneous, I shall be ready to renounce them."

- Abraham Lincoln, Speeches and Writings, 1832-1858

Metals Prices

Outlook to 2019

- + The small strengthening in the gold price is welcome and this has triggered a much greater rise in the gold stocks
- + Silver has been on a tear and outperforming gold. This has made our target look too low, but one should not discount a pullback
- + Zinc's looming production crisis is starting to move the price higher. A key positive indicator was the zinc price overhauling that of Lead
- + Copper has consolidated firmly above the \$2 per lb mark
- + PGMs are starting to strengthen, with the possibility that China might stockpile Platinum as both a monetary and industrial asset
- + Specialty metals are picking up with Antimony and Tungsten leading the way higher
- + Lithium has soared ahead of the rest but should stabilize without a significant pullback
- **✗** Uranium remains mired in misery
- Despite the iron ore price rebound we remain very negative due to massive over-supply
- × Oil rise is a major negative for all other commodities as it raises production costs
- ➤ The AUD and CAD are recovering from their swoon which raises production costs and reduces margins

Positing a Modest Outlook for Gold

Gold bugs are such inveterate fans that the recent slowdown in the 2016 price rise did not faze them in the least. The fact that most of the weakening took place while the world was reeling from the outrages in Brussels, with the background music of the death rattle of the EU, seemingly also escaped them. Some lashed us for our modest projection for gold at the turn of the year and yet these have proven to be closer to the current situation price-wise than the bulls would have had us hoping. Some of these people seriously thought we would be looking at \$1,500 gold before year end.

It will need some serious encouragement to even stand a chance of getting to that territory this year. Indeed we might posit that by year end ISIS, which is the source of political instability par excellence for the last two years, might even be routed from most or all of their territory. This would leave only the prospect of a Trump presidency as the bogeyman of choice to ginger up the gold/silver pairing. As we have noted before the bugs will need to be betting on a "solid gold bathroom fittings at the White House" led rally to gussy up their favorite metals.

So we remain on the more mooted side for gold in particular though see silver continuing to outperform gold for the next few years. Ironically we see ourselves as gold/silver bulls for taking such a stance. So

while our January outlook was only targetted at 18 months we have received requests to flesh this out to more distant dates, including a request from the major provider of research estimates to the institutional investors community, so we thought it a potentially useful to share our longer term view in the interests of stirring up discussion and fleshing out our "bigger picture". However, doing so we risk the fate of many in recent years of being proved liars by the market doing the opposite of what one forecasts.

Cold Comfort for the Gold Fans

Probably to the infuriation of the precious metals fans, our five year projections give them precious little to fuel the fires of their enthusiasm; then again they do not need us to do that! So while the prices of both may have spikes over the coming years, the gold price in particular is not expected by us to close over \$1,400 at a year end and indeed we have it at \$1,330 by the end of 2019.

Silver is held in higher regard by us but even there our 2019 forecast ends with it at \$15.80. In the last month silver has already surpassed our 2019 target price. It is right that it should outperform gold but we remain wary of a pullback. Industrial usage will keep demand strong but a healthier Lead/Zinc picture should increase by-product supply and dampen the ardour of those that think shortages are even vaguely likely.

	Unit	Jan 2016	End 2016	End 2017	End 2018	End 2019
Lead	lb	\$0.80	\$1.00	\$1.18	\$1.22	\$1.18
	tonne	\$1,763	\$2,204	\$2,601	\$2,689	\$2,601
Zinc	lb l	\$0.70	\$1.05	\$1.33	\$1.45	\$1.50
	tonne	\$1,543	\$2,314	\$2,931	\$3,196	\$3,306
Copper	lb	\$2.11	\$2.72	\$3.05	\$3.10	\$3.20
	tonne	\$4,650	\$5,995	\$6,722	\$6,832	\$7,053
Gold	OZ	\$1,080	\$1,180	\$1,270	\$1,300	\$1,330
Silver	oz	\$14.02	\$14.78	\$15.20	\$15.50	\$15.80
Platinum	OZ	\$890	\$1,050	\$1,250	\$1,280	\$1,300
Palladium	oz	\$544	\$770	\$1,050	\$1,080	\$1,150
Antimony	tonne	\$5,100	\$8,700	\$9,450	\$9,900	\$10,450
Tungsten APT	MTU	\$175	\$325	\$360	\$380	\$410
Tin	tonne	\$14,540	\$18,700	\$20,500	\$22,100	\$22,800
Cobalt	lb	\$11.50	\$14.10	\$16.00	\$16.70	\$17.20
Nickel	lb l	\$3.93	\$4.45	\$4.60	\$4.50	\$4.25
	tonne	\$8,662	\$9,808	\$10,138	\$9,918	\$9,367
Moly	Ib	\$5.44	\$7.20	\$8.50	\$9.30	\$9.40

Base Metals – A Mixed Bag

By far the biggest uplift should come, in our estimation, in the most beaten down base metals. We have zinc more than doubling, copper up 50% and lead up nearly 50%. Nickel, due to the massive new mines that Vale controls (Goro etc) and Ambartovy strikes us as a metal with more limited uplift potential and we have it only rising 10% over the next three years. The uplift will be in underinvested minerals with zinc being the strongest mover. Lead's fate is more closely tied to the battery market which we see as being stable to declining. However the massive attrition in zinc/lead mines shall precipitate a flip in the balance of power between sellers and buyers with the former coming out on top for the first time since the middle of last decade. Underinvestment in copper shall also have its effect with high capex of sizeable mines being the biggest deterrent to anyone contemplating mega-projects until prices have stabilised for a long while over \$3 per lb. In our version even that felicitous situation won't happen until 2018 or 2019.

PGMs

We separate these metals from the precious metals in the pecking order because their sole interest to us is industrial. However, we do recognize the fascination that Platinum has to Asians as a favoured precious metal.

The rise of the electric vehicle (which we feel unstoppable) and the travails of the diesel sector have knocked sentiment relating to catalyst metals, but again like Zinc it is less the demand side that shall move prices but the supply-side with South Africa looking like a long term decline situation due to its internal vagaries. This has to augur well for these metals. Particularly we favour Palladium over Platinum.

One should also not be surprised to see China start to stockpile Platinum as an all-purpose industrial/monetary reserve instrument. We already perceive it is doing something along these lines in Silver.

Specialty Metals – Chronicle of a Crisis Foretold

This is well-trodden, and much-written, territory for us and our jeremiads should start to bear fruit as massive underinvestment in key metals such as tin, antimony, tungsten and cobalt start to impact. Except for a few primary Cobalt mines that might catch a tailwind from offtakers in the battery space the rest of the supply picture is made up by the strict by-product ratios that join this metal "at the hip" with the nickel and copper mining of the very largest players. The dependence of the metal on copper mines in the DRC and Zambia for its by-product status is a long term sleeper benefit with the old story of "what can go wrong, will go wrong" being apt. A sloppy nickel price projection plays into the hands of Cobalt as it means it is unlikely Vale or Sherritt will "go wild" with their production volumes and thus over-produce cobalt.

Moly is somewhat similar with its symbiotic relationship with copper mines, particularly those in Chile. Tungsten and Antimony are staring at declining Chinese market share through peak production having been passed in recent years while tin is vulnerable to the declining alluvial output of Indonesia and Malaysia. The only bright spot is Almonty's consolidation strategy which should supply the select few (offtakers) who have made a long term bet on that stock. Everyone else will get scrapings, which is a good scenario for this metal. Likewise in Antimony mines don't come out of nowhere and there is zero pipeline of new (or more likely, reactivated) mines. Most of the specialty metals need a consolidator along the lines of the Almonty model.

Conclusion

In retrospect the Mining Supercycle looks less monolithic than it really was. Looking at a few metals we can see that while many rose steadily from 2001, some peaked early and have never been the same since. Zinc and nickel reached their "recent" highs in 2006 and 2007 while copper, cobalt and Moly never recovered from the battering of the 2008 crash. Copper got going again but didn't retake its precrash highs. Moly was reduced to a third of its highs and has never staged more than a fleeting recovery. With this in mind we might then think that it's not 2011 we should be looking back to but 2007 and that is nearly ten years ago now. Using any sort of theory of cycles or waves, there should be a tide coming in (oversupply issues notwithstanding in nickel) in the next five years.

The same cannot be said for gold and silver which both peaked more recently. These therefore do not have much political and international risk going for them, nor inflation scenarios nor cycles/waves. Broadly speaking the longer since the last peak the more likely that production set in motion at that peak will have been either high cost, or past its prime in terms of production volumes. The steady attrition of Zinc/Lead mines in recent years being a good example. In Antimony it's even worse with the spike to \$16,000 per tonne resulting in only one mine opening and that was quickly sold to the Chinese and then shuttered. That was a boomlet that "left no footprints".

Looking through our estimates, none of them are asking too much of the markets. Anyone who expects the peaks of the last 15 years to be retested in ANY metal needs their head read and as they say "to avoid disappointment" should abstain from metals markets.

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