

Platinum – Swamped in the Backwash of Volkswagen’s Woes

Maybe I haven’t been looking too closely but it seems to  have been more in the context of Australian gold miners that managements tout the fact that gold is trading above \$1,500 in the local currency. Canadians don’t seem to have been so solicitous in touting the similar statistic as it pertains to Canadian gold production. Maybe they are afraid that it would only prompt the question “where are the profits then?”. Well may we ask!

Thoughts turned to the subject of the value of precious metals in commodity currencies when looking at platinum. Of course the two main producers are South Africa and Russia, with a bunch of wannabe producers in Canada having appeared over recent years. All three currencies have been plunging against the US dollar in recent years. Despite this, considerable gloom has besieged this sub-space of the mining sphere, particularly as regards to South African production.

With the currencies of producer countries hitting new lows, they have been followed down by the metal itself with platinum hitting 6 ^{1/2} year lows this week.

The latest leg down has been prompted by fears of a move away from diesel engines, particularly with the kerfuffle over Volkswagen’s misdemeanours. But for those who constantly bemoan the gold price’s sluggishness, the yellow looks like a great outperformer compared to platinum. Here our chart compares the Physical Gold ETF (GLD) to the Physical Platinum ETF (PPLT).



To Diesel or Not To Diesel

The latest bout of price weakness has been attributed to the various ructions relating to diesel engines in automobiles and more particularly to Volkswagen's travails. The latter are frankly neither here nor there to the price of the metal. The real question relates to the use of diesel automobiles. Governments have a rather schizophrenic attitude to this issue. While they love the fuel efficiency which makes better use of a scarce resource which in many cases (in Europe) needs to be imported and thus damages the balance of payments, they remain wary of environmental costs.

Commentators have noted that upcoming European legislation on CO₂ emissions will make it harder for the authorities to back a shift away from diesel. The measures dictate that from 2020, the fleet average CO₂ emissions to be achieved by all new cars should be just 95 grams per kilometre.

The European Union has a target to cut its greenhouse gas emissions by 20% on 1990 levels by 2020. While diesel cars have been criticised for producing more harmful particulate and higher nitrogen oxides air pollution, their CO₂ emissions are lower than those of petrol-fuelled cars.

Europe is by far the biggest diesel market, with diesel cars accounting for 53% of all new registrations in 2014, according to the ACEA, compared to around 33% in 2000.

Reuters reported that automotive analysts say a fall in market share by diesel cars is a real risk in the wake of the VW scandal. However increased scrutiny of car emissions could actually benefit the metals used in autocatalysts. Ultimately this is better for platinum demand though you would not guess it from the recent panic-selling.

Major Dynamics

When it comes down to it the whole diesel thing may prove to be a storm in a teacup. The real issues are far bigger than

that. These can best be summarized as:

- Falling global mine supply for past nine years since peak in 2006
- The World Platinum Investment Council projects supply deficit to grow to 445,000 ozs in 2015
- South Africa, which accounts for around 70% of global platinum mine production, faces ongoing labour unrest and increasing costs
- Infrastructure issues, most notably power & water, further threaten the South African platinum industry
- Platinum available for recycling has been declining since 2010 due to thrifting & palladium substitution in autocatalysts

South Africa

Most countries, with the tailwind of a brutal devaluation (as the chart below shows) would be able to regain competitiveness but that alas is not happening for the South African mining sector. This is due to labour problems, energy problems and the age (and depth) of mines combining to make a perfect storm that has worked against capitalizing upon the lower currency.



Chief amongst the problems is the labour issue. This has gotten so bad that veteran companies in the sector are selling off once enormously profitable platinum mines to make space between themselves and the issue. The shootings at the Marikana mine last year, between rival unions, that left 34 dead just heightened the “event-risk” that internationally exposed miners can do without.

The South African labor unions consist of the dominant National Union of Mineworkers (NUM) and the upstart Association of Mineworkers and Construction Union (AMCU). The latter group have not been prepared to indulge in the *faux*-struggles of years gone by with management and have used long

and violent strikes as their chief bargaining technique.

The AMCU claimed that the NUM had become too cozy with the government and with mining companies. This smaller union is saying that the average mineworker in South Africa has seen no significant improvement to his lot in life since the end of apartheid.

In 2014 the conflict between AMCU and NUM come to a head in the platinum sector with the Rustenburg platinum mines suffered a 5-month strike over wages.

Anglo American Platinum, which owned the mines, reported that it had lost a third of annual production because of the strike. It then announced that it intended to sell the mines after the strike ended, and several weeks ago it sold several South African mines to Sibanye Gold for \$330 million in cash and stock.

The South African government is clearly conflicted as the mines produce revenue but the votes come from labor. Observers see it as a four-way struggle between the mining companies, NUM, AMCU and the South African government.

The main problem is the age and depth of the mines combined with an intransigent workforce unyielding to more modern methods. Work conditions are increasingly harsh as the mines become deeper and hotter, but they are too unprofitable to pay workers high salaries.

South Africa is not a total write-off though with new mines appearing in the platinum space but these are being developed using mechanization, employing a low number of skilled and highly-paid workers from the outset to avoid the turmoil that affecting older platinum mines in the country. New mechanized platinum mines, which employ fewer people and offer better pay and superior working conditions, might stand to benefit. An example accessible to Canadian is Platinum Group Metals, a company that we have known for a long while now that is

developing the Western Bushveld Joint Venture (WBJV) in league with a Black Enterprise Empowerment group, Wesizwe. Also investable is Eastern Platinum (TSX & AIM: ELR; JSE: EPS) which has three properties, two of which are currently producing.

Then there is the well-known name, Ivanhoe Mines, which is planning a multi-phased mine development on its 64%-owned Platreef discovery of platinum, palladium, nickel, copper, gold and rhodium in South Africa's Bushveld Complex. A pre-feasibility study released in January 2015 estimated a first phase of development mining four million tonnes per year could produce 433,000 ounces of platinum, palladium, rhodium (and gold) annually.

The lesson here is that the fantastic prospectivity in South Africa for PGEs is not going away. It's just that it needs to be exploited in an economic fashion.



The Players in Canada

Names to conjure with here which we may expand upon further in the future include Wellgreen Platinum which we also knew in its former guise as Prophecy Platinum. This holds the eponymous Wellgreen PGM-Ni-Cu project, located in the Yukon. Then there is St-Georges Platinum and Base Metals (CSE: SX and FSE: 85G1) is a sometime Platinum-Palladium & Nickel explorer with projects in the Province of Quebec, Canada. Its flagship project is the Julie property on Quebec's North Shore near the deep-seaport town of Baie-Comeau.

Then there is Pacific North West Capital (TSX.V: PFN, FSE: P7J). Its River Valley PGM project is located in the Dana and Pardo townships of Northern Ontario, approximately 60km east of Sudbury. On a PdEq basis, the Measured + Indicated resources contain 3,944,000 ounces PdEq and the Inferred resources contain 1,201,000 ounces PdEq.

Conclusion

The old adage is that “what goes up must come down” while we would hope that in the case of platinum “what comes down, must go up”. As discussed a number of factors mitigate against platinum staying in the dumps long-term. The market at the moment has the look of shorters having had their way with it. Frankly the Volkswagen angle is overwrought and overdone. In a few weeks it will be forgotten as a negative stimuli for the price of this metal. Such has been the fall in recent weeks that there is the possibility of a sharp uptickng correction.

As we have seen there is a secular downturn working against most of the traditional South African producers, which implies a secular upturn for the producers outside that country, particularly Canada, as they move in to take up the slack in supply over the next decade. With Russia largely “beyond the pale” and Zimbabwe still a “no man’s land” the focus will increasingly turn to up and coming Canadian platinum miners as the main source of future production. Much will depend upon the Canadian dollar remaining at an advantageous position *vis-a-vis* the US dollar in which platinum is denominated and, of course, the resolution of the ever-present problem of financing.

**Ecclestone on PGMs –
Strategic Chess Pieces in a**

Russian Game

As tensions heat up again with Russia over the long-simmering Ukraine dispute things are likely to go one of two ways. Either the West will wimp out and let Russia keep doing what it's doing or the screws will be tightened. As I have written before the oil price fall has dealt a body blow to the Russian economy and exchange rate. This triggered soaring interest rates and raised questions amongst oligarchs as to whether Putin was in their own best interests. However while the West has indulged in financial sanctions (and may have orchestrated the oil price tumble) it has not restricted imports of mineral products from Russia, most noticeably Uranium or Palladium (and Platinum). This is rather a cynical move as restrictions of either or both would send prices of Uranium and the PGMs soaring. Of course, the Russians themselves might resolve to take some retaliatory action by restricting exports of these products. That could play merry hell as the Russians represent so much of the capacity in both metals that prices would go wild.

I thought it apt then to follow up my previous musings on Uranium and Palladium in light of the Russian "threat" with a review of PGMs with a tight focus on their supply and price dynamics without dallying on issues of metallurgy.

Uses – Cars Lead the Charge

PGM demand in recent years has been good with Platinum demand climbing 4.9% to 8.42 million ozs in 2013, according to the refiner, Johnson Matthey, however some of that may have been end-users stocking up in anticipation of industrial action in South Africa.

Platinum has a diverse consumer base with demand coming from four main sectors: auto catalysts (37% in 2013), jewellery (33% in 2013), industry (21% in 2013) and investors (9% in 2013).

The breakdown of the main users in industry are the chemical, electronics, glass, petroleum and medical industries.

While emerging market car demand is booming, that in major Western markets has never got back to the ebullience pre-2008. The US made a good recovery after the slump but not enough while Europe has only just started to fire up again (though the UK had been doing better than most of Europe). Interestingly Palladium has been stealing the thunder of Platinum because it is cheaper and it has captured an increasing part of the catalyst market.

Meanwhile the other industrial uses are pretty stable, jewellery fluctuates with economic growth, fashion and the metal prices. The Chinese have taken a particular shine to platinum jewellery in recent times (with 63% of all platinum jewellery demand). The industrial applications in electronics of the whole range of PGMs have been on the rise, but not enough as yet to quantify as a surge by any means in the broader usage of the metals. The investment usage of the metals was spurred by the strong prices prompted by the South African price which sucked interest into the ETFs and physical holding of the metals. That however mainly takes its lead from the rest of the usages. Therefore if the outlook for auto usage was down then price perceptions would be down and investment interest would fade as well.

However, all in all the industrial usages look good with Western auto demand now coming to the party and the slower Chinese economy not seemingly denting demand there. Indeed, with property so high in value, a car of any sort becomes the affordable status symbol.

The chart below belies this enthusiasm though looking rather sickly of late.



Supply – The Club of Three

PGMs are up there with a few very obscure metals in having a very tight range of supply sources. This is not to say that PGMs aren't found broadly around the world but the production side has evolved into one that is highly concentrated with Russia and Southern Africa (essentially South Africa and Zimbabwe) dominating the supply-side.

The chart below shows the sources of supply. South Africa has the dominant role in Platinum and Russia Palladium. In South Africa we have industrial disputes, latent political instability, energy supply issues and mediocre profitability while Russia is inefficient and now a political pariah. Output has generally been in decline in recent years with Johnson Matthey data showing that production peaked in 2001 at 1.3 million ozs, falling to a low of 785,000 ozs in 2009. It recovered to 835,000 ozs by 2011, but has since started to fall again. The weaker trend is expected to continue as ore grades deteriorate. It's interesting to mention that other basket case Zimbabwe where mining news tends to be dire. However production of platinum has been soaring there (from 165,000 oz in 2006 to 408,000 oz in 2013) so they must be doing something right. Indeed they have been taking up the slack left by falling Russian supply. Whether the growth will continue to match Russia's decline strikes me as unlikely.

The big mystery with Russia how much of its sales of Palladium are actually from stockpiles rather than production. The size of ex-Soviet stockpiles has long been a mystery as has been the rate at which they are being run-down. It has been thought in recent years that these are nearly exhausted.



Recycling is also worth a mention with the USGS estimating that 155,000 kilograms of platinum, palladium and rhodium was recovered globally from new and old scrap in 2014, including

about 50,000 kilograms recovered from automobile catalytic converters in the United States. Palladium is interesting from the recycling point of view as most of the metal goes into auto catalysts so it is very recyclable. In fact the second largest source of the metal is now recycling after Russian production and ahead of South African production.

Store of Value

Unlike the wild oscillations in perceptions of what the gold:silver ratio should be, the platinum price is more often spoken of in terms of parity with the gold price. As the chart below shows the gold price has risen and platinum has fallen and brought both back to near parity after a period of outperformance by platinum partly fired by the misconceptions engendered by last year's miners' strike in South Africa. I never bought into the argument that the strike was a turning point for the better, as no strike lasts forever. It shows the extent to which metals watchers like to grasp at straws. In any case the strike ended and platinum went on the skids heading back down to levels not seen since 2009.



Part of this slide was unwinding of stockpiles built up by users in anticipation of the strike. As the strike didn't last as long as many feared (and others hoped) not only was the disappointment reflected in the price but users then were able to sit out of the market and just use up their hoards of the PGMs they had paid up for in 2013. As the strike didn't last forever neither will the destocking and we expect the price to start ticking upwards again in the near future.

Names to Conjure With

We have dealt with North American Palladium and Stillwater before so no need to say too much and of course, I remain very fond of the Palladium ETF (NYSE:PALL) as an avenue to

specifically play that metal in the physical form.

We have long followed the eponymously named, Platinum Group Metals (PGM.to) which is one of the few TSX-listed names pursuing projects in South Africa. I have known them since they first appeared on the scene but slowly but surely they have inched through the thickets of BEE negotiations and are on the way to building themselves a mine on the famed WWW belt.

Another name to have recently surfaced is Wellgreen Platinum which comes with Greg Johnson of NovaGold fame as the head of the company. Its Wellgreen property is in the Yukon and was formerly a project of HudBay but many eons ago. The company describes its project as one of the largest undeveloped platinum group metals deposits outside of southern Africa or Russia. Maybe I shall elaborate on this more at a future opportunity.

I also met recently with another nickel/PGM project in West Africa, Sama Resources in Cote d'Ivoire which is run by an amalgam of ex-SEMAFO, ex-Xstrata and ex-Salares Lithium people. All of which I hold in high esteem. With a capex of only a tad over \$200mn it also comes in at one of the lowest capexes for either nickel OR PGMs that we are acquainted with. This is another one I hope to expand upon in the future.

Conclusion

The Russia/Ukraine matter is on the slow boil at the current time but this does not mean it has gone away. If the heat turns up it is not beyond the Machiavellian playbook of Putin to play the mineral export card selectively and Palladium, Uranium and to a lesser extent Platinum are powerful cards to play. Restricting supply would send prices ballistic which would then probably have the Russians leaking out supply to the spot market. Russians do love chess and Palladium is a particularly strategic piece on the board.. will they play it?