ScotiaMocatta

Precious Metals 2011 Forecast

PGM October 2010

Executive Summary

- The extent of the PGM's rebound since 2009 has been almost as surprising as the extent of the sell-off in 2008. In both cases it looks as though prices overshot, which means we would be for the medium term wary of Platinum above $1,750/oz and Palladium above $650/oz

- Over the next twelve months we expect Platinum to trade within a $1,350-$2,000/oz range, Palladium between $450/oz and $700/oz and Rhodium between $2,000/oz and $4,000/oz.

- Strong rebounds have been fuelled by high levels of buying through the ETFs, but the buying seems to have reached a plateau.

- Fund interest has also waned. It appears investors and funds are in 'wait-and see' mode.

- Industrial demand for all metals is expected to show strong recovery, but only when sustainable, organic growth gets underway.

- South African issues might return in 2011 to tighten up Platinum and Rhodium supply, while Russia sales from stockpile will remain key for Palladium supply.

Introduction

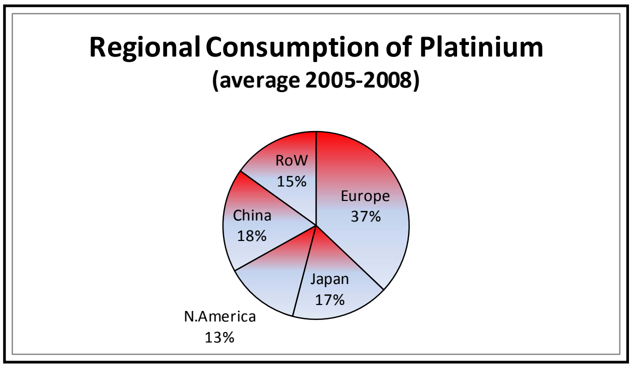
The strong rebound off the lows in late 2008 at $745/oz continued throughout all 2009 and up to April 2010, when Platinum prices peaked at $1,755/oz. Prices then dropped sharply in May to a low of $1,446/oz, before then trading in a sideways range supported by buying below $1,500/oz, but capped by selling around $1,610/oz. However, buying returned in mid-September and prices moved back above $1,700/oz. The medium and long term outlooks for Platinum remain sound, but the uncertain nearer term economic outlook is no doubt making it harder for investors and consumers to have strong views. The price performance since the highs in 2008 suggest the market destocked heavily into the sell-off, but we know jewellery manufacturers and investors restocked and accumulated metal aggressively last year, with investors continuing to buy earlier this year. The fact prices were range bound for an extended period over the summer suggests a certain amount of 'wait-and-see' on behalf of traders. If economic recovery starts to gather upward momentum again, then prices are likely to receive a boost and we would expect investors and industry to restock. However, if the economic outlook starts to deteriorate again then we would expect fund selling and investor redemptions, while industry is likely to continue to operate on a hand to mouth basis. Overall, we remain long term bullish for Platinum prices, but feel the rebound seen in 2009 and into 2010 might have run ahead of itself and that there is likely to be another downward adjustment in prices. Such a development is once again likely to attract buying from the jewellery industry as well as long term investors and funds.

DEMAND

Platinum demand comes from industry, jewellery manufacturers and investors. This diverse demand for the metal provides Platinum with a broad base of consumption, which helps cushion the drop in demand during times of recession. A good example of this is how demand from the jewellery industry acts as a swing factor. In 2007, total demand peaked at 8.3 Moz, by 2009, demand had dropped to 7.0 Moz, a fall of 15.6%. During this period industrial demand dropped 43%, but jewellery demand climbed 42%. In addition, lower prices also led to a 290% pick up in investment demand, although that figure is skewed as it coincided with the launch of ETFs that gave a lot more investors access to the PGM markets.

Platinum demand has recovered in 2010 and it is expect to climb around 4% this year, but a stronger rebound is likely once global recovery gets underway. In 2009, demand for jewellery climbed; in 2010 industrial demand started to recover, but we feel strong growth will not be seen until industry starts to restock more, but that may not be until later in 2011. However, looking at the market geographically, with the US and Europe collectively consuming 50% of consumption and with the other 50% fairly evenly spread across China, Japan and the Rest of the World, at least half of Platinum consumption (that consumed outside of the US and Europe) should see good growth.

Autocatalyst demand



Platinum's use in autocatalysts dropped 39% in 2009; from peak production in 2007 output has fallen 46%. The recession sparked governments around the world to introduce 'cash for clunkers' incentive schemes and this did see auto sales recover. However, as was feared, the pick-up in sales had the effect of bringing forward demand and sales in the second half of 2010 are expected to suffer. In the first half of 2010, global auto sales were up 16% yoy, but on a month-on-month basis most regions are starting to see growth either slow, or in the case of Western Europe fall. Estimates suggest that global car production will fall around 5% in the second half of 2010.

However, as the regions likely to see the fastest growth are in the developing markets where there is preponderance for petrol-driven vehicles, the recovery in auto sales is likely to benefit Palladium more than Platinum. So a strong recovery in demand for Platinum based autocatalyst might have to wait until the European market recovers. In addition, with Platinum prices still three times the price of Palladium, Palladium is slowly making inroads into diesel autocatalysts. In 2009, one fifth of the metal used in light vehicle diesel "aftertreatment" filters was Palladium, compared to one-eighth a year earlier. Although the outlook for vehicle sales in Europe and the US is slow, growth is expected to return in the months ahead and that should gather moment as 2011 progresses. In addition, a strong rebound in commercial vehicles is being seen in Europe and as these tend to have larger diesel engines the PGM loadings are higher. Global vehicle production is expected to climb around 7 percent in 2011.

Other industrial uses

The outlook for non-emission control applications, which include use in the glass, electronics, petroleum and chemical industries, is generally good as there is room for restocking. Collectively this sector was growing at a steady 6% per annum between 2004 and 2007, but demand fell 6.7% in 2008 and 34% in 2009 as the recession bit. As these industries are all growth industries and accounted for some 31% of Platinum's industrial consumption and 22% of total Platinum demand in 2007, the prospects for an industrial rebound is likely to see a strong pick-up in this sector. To some extent the start of this has already been seen in 2010 as, although growth remains weak, industry generally has been more confident and that has led to a certain amount of restocking in the first half. In July and August, some of the economic data started to disappoint and the market was concerned that maybe China would put the economic brakes on, prompting more talk of a double dipped recession in the West and probably curbing the desire to restock. However, slow growth remains in place and that should lead to some recovery in 2010 as a whole. On balance, although a return to recession is a possibility, it seems more likely that the rest of 2010 and first part of 2011 will continue to see anaemic growth. We would, however, expect this sector to see a more robust recovery later in 2011.

Jewellery demand falls as prices rise

The drop in Platinum prices in 2008 led to a strong pick-up in demand for Platinum jewellery in 2009, indeed demand jumped 50% as low prices prompted not only consumer demand, but also restocking by jewellery manufacturers. This buying, along with investment buying, pushed prices back above $1,400/oz in late 2009 and jewellery demand has fallen back in 2010. Indeed even Chinese demand for Platinum jewellery has ease as high prices affect its affordability. In 2007, global jewellery demand accounted for 26% of total demand - in 2009 the figure jumped to 43%. So once again jewellery demand has proven to be a significant swing factor in Platinum demand and that is likely to remain the case. There are also some interesting regional trends: the recession in 2009 saw jewellery demand fall in Europe and North America (despite the lower prices), while in China, Japan and the Rest of the World, lower prices spurred demand. China is by far the biggest buyer of Platinum jewellery, taking 69% in 2009 and an average of 55% over the period 2005-2009. Interestingly Japan used to be the largest jewellery buyer, taking 1,320,000 oz in 1999, but demand has since fallen. In 2005, Japanese jewellery off take was 670,000 oz and that dropped to 535,000 oz in 2009. In 2010, we expect global demand to have fallen in the first half of the year, but we would not be surprised to see further price weakness towards the year-end that might prompt more restocking by manufacturers. However, we then expect demand to fall and level off in 2011 as we expect firmer prices to once again keep demand from the jewellery industry subdued. High prices, as well as deterring buyers, also squeeze jewellery manufacturers' margins, which encourages them to find better margins by offering customers jewellery made from other metals.

SUPPLY

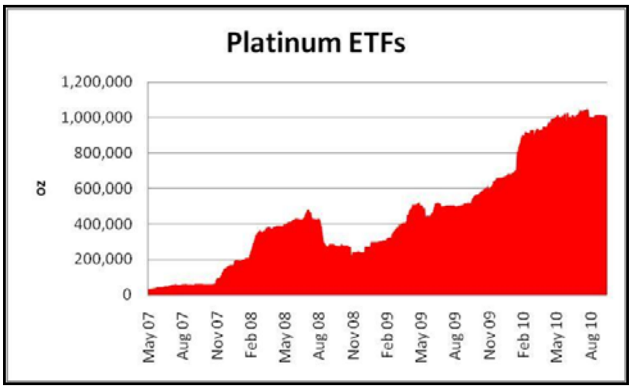
In 2009, Platinum supply was basically unchanged from 2008. Although new production came on stream, some high cost production was closed due to low prices and currency considerations, while output was also lost as a result of strikes. This year output should recover as production is ramped up at new mines in South Africa, idle production is brought back on stream and miners increase utilisation rates in response to higher prices. In 2010, production is expected to rise by around 4.5% and this is expected to increase around 5% in 2011. Although production is set to rise, the risk is that production ends up being disrupted by any number of events such as: power shortages, strikes, accidents, shutdowns caused by low prices, or low operating margins, or as a result of tighter environmental and safety restrictions.

In 2008, power shortages in South Africa forced the industry to cut production, but the recession has reduced demand for electricity and that has enabled mines to take more power from the grid. However, as recovery gets going supply shortages are likely to reappear. Eskom, South Africa's power utility, is still saying the power supply will become a matter of serious concern from 2011, as there is no major new capacity coming on stream until 2013. With South Africa providing 76% of World Platinum supply any disruption could have a big effect.

In Russia, output has been falling. In 2009, production was 785,000 oz, down from 805,000 oz in 2008 and 915,000 oz in 2007 – it peaked at 1.3 Moz in 2001. However, in 2010, output is expected to recover as nickel production is set to rise and in turn that is likely to see a rise in PGM output. For 2010, output is expected to climb back towards the 800,000 oz level. Given the general down trend in Russia's output in recent years and now with some up tick expected, we would expect only modest supply gains in 2011, although if metal prices remain strong then that would provide an incentive to increase production further.

North American production dropped 20%, due in part to strike action in Canada and also as low prices saw temporary mine closures. But with the strike now over, production should start to recover and higher prices have led to the restarting of idled capacity. In addition, output from new production will boost the recovery in North American output.

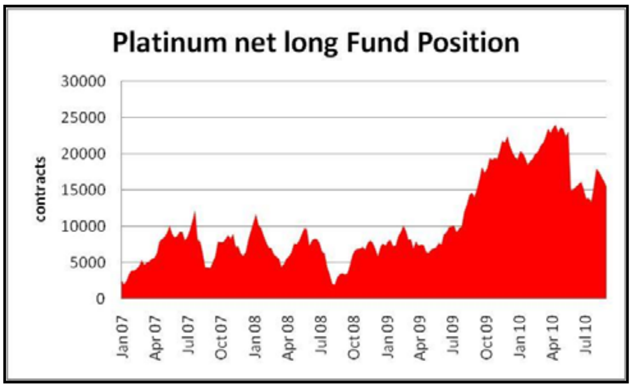
Investment demand



The accumulation of Platinum in the ETFs by investors continued in early 2010 - indeed it accelerated with the launch of PGM ETFs in the US. However, as the chart shows, the interest has levelled out and total holdings are below their peak. This, we think, reflects the general uncertainty as to the economic outlook. Vehicle sales picked up last year and earlier this year on the back of government vehicle scrappage schemes, but there was a feeling that this could just be bringing demand forward and may be followed by another soft period. It looks as though Platinum's industrial demand outlook is dominating investment decisions, rather than its safe-haven attributes. A clear indication of this is the way in which the Platinum-to-Gold premium has dropped to $340/oz from a peak of around $600/oz in April 2010. Furthermore, even strike action in South Africa in August failed to give Platinum prices much lift. Prices averaged $1,543/oz in August down from highs of $1,755/oz in April and record highs of $2,300/oz in 2008.

In 2009, the size of the ETFs grew by 382,310 oz, a gain of 128%. So far in 2010 (January to mid-September) the ETF has increased by 48%, adding a further 328,326 oz – interestingly the US ETFs accounts for the bulk of the rise. Eventually, when a sustainable recovery in the auto industry gets underway, (which we do not think has started yet) the medium-to-long term demand outlook for Platinum is expected to be good and that should encourage ongoing investor interest. However, with the ETFs now holding a large volume of metal, which is extremely liquid as was seen by the pace of redemption in the H2'08, the market needs to be aware that a heavy spell of redemptions could prompt a significant price sell-off. However, it would probably take concrete signs that a double dip recession is underway to trigger such a move. Generally ETF investors seem to be in for the long term and the prospects for good demand ‘further out’ are likely to see most hold on to their ETFs holdings.

Funds’ net long position fades



The net long fund position continued to climb during the first quarter of 2010, but it peaked at 24,060 contracts in mid-April. As concerns over sovereign debt weakened global growth prospects, fund interest in buying Platinum faded, with the net long position dropping to 13,421 contracts in late July. The combination of some improvement in the economic outlook and reduced fears over sovereign debt, following most of the European banks passing their stress-tests in July, saw a pick-up in buying but as the chart shows this has once again waned. The reason for this is no doubt tied in with a bleaker prognosis for vehicle sales that are faltering after governments withdrew stimulus measures that propped up sales in the US, China Europe and Japan. Forecasts are for global growth in auto sales to rise 10% in 2010, off a low base in 2009 and to increase around 7% in 2011, but for 2010 the strength is likely to have already been seen with sales expected to fall in Europe and Japan in the second half of the year.

Technical

The recovery from the 2008 sell-off has been very strong with prices bouncing from a low of $747/oz in October 2008 to $1,755/oz in April 2010, a move of 135%. Prices are now back above the down trend line and are trading either side of the up trend line and with the stochastics still looking bullish, further gains seem likely. Also note the red sideways channel on the chart that runs between $1,610/oz and $1,485/oz - this looks like a continuation pattern and the confirmed break out of this channel suggests a $125/oz move. The fact prices broke to the upside targets $1,730/oz, some $25/oz short of the April highs. Had it broken to the downside then it would have targeted $1,360/oz. Given the strong gains on the back of less than solid fundamentals, we would be wary of expecting too much on the upside until a stronger economic outlook is forecast and we would now expect strong resistance between $1,730-$1,755/oz. However, if prices to break above this level we would look for resistance around the $2,000/oz area.

Conclusion and Forecast

A look at the Platinum chart shows that the market has not been following the lead of Gold, or Silver, as prices are well down from their 2008 highs, while Gold has set new highs and Silver has moved above its 2008 high. This suggests that Platinum’s safe-haven attributes are playing second fiddle to its industrial attributes. Indeed Platinum also seems to be less buoyant than

Palladium because Platinum is losing some market share to Palladium. As Platinum catalytic convertors are predominantly used in diesel engines and diesel cars are popular in Europe, it means Platinum is relying on a recovery in European car sales and Europe is presently the weakest regional auto market. In addition, whereas Platinum jewellery demand shot higher in 2009 as low prices spurred demand, the rebound in prices has seen demand from jewellery slip.

Overall Platinum remains a metal with a good future, but it does need a sustained pick-up in economic growth to fuel industrial and auto demand. In recent years, investment interest has provided solid growth, but after years of accumulating metal and now with the market unsure whether a return to economic growth lies immediately ahead, investors seem to have pressed the pause button. They don't want to add to their holdings, but likewise they are not ready to cut exposure. Investor interest seems to have reached a plateau and as a result prices are stuck in a broad sideways trend.

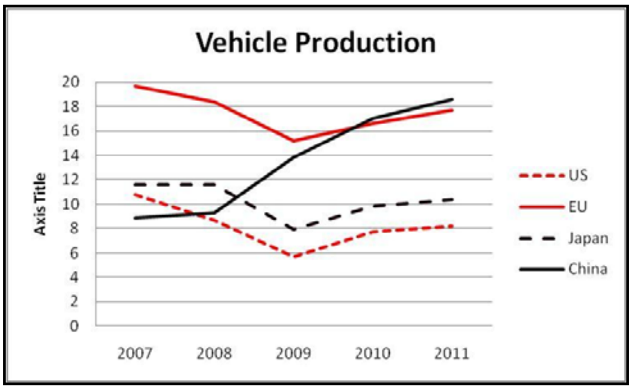
In the short term, we expect prices to remain range bound until the economic outlook becomes clearer. We generally think that the broad market rebounds off the 2009 lows have gone too far and are not justified by the economic fundamentals and as a result we would not be surprised to see another broad based sell-off some time before the year-end. Such a sell-off is likely to drag Platinum prices lower. Longer term, with Platinum's jewellery demand acting as a strong swing-factor we think lower prices will attract strong buying and we would expect good fund and investor buying into price dips. We would be wary if prices fell below $1,500/oz again, (the bottom of the sideways channel) as that could lead to a drop towards $1,360/oz, but we would be surprised to see prices fall much further than that. Conversely on the upside we feel prices will get back towards the $2,000/oz level, but not until a sustainable economic recovery looks possible and indeed gets underway. Overall, we feel Platinum prices will trade in the $1,350/oz to $2,000/oz range over the next twelve months or so.

Palladium

Palladium prices dropped dramatically after February 2008 - from a high of $592/oz in March that year, prices plunged to $156/oz in October, but by early 2009 prices were rebounding and the rally became almost exponential, reaching $573/oz in April this year. Prices sold off again in May, but once again have rallied strongly. Given the move above $400/oz in 2008 was primarily driven by fears of power shortages in South Africa and the economic outlook is not certain now, we feel prices above $650/oz will difficult to justify. We do feel the fundamentals are generally supportive and we realise there may be supply shocks down the road, which will become a bullish feature at some stage. However, in the short-to-medium term we feel the bigger risk is of another slowdown in economic activity that could once again hit industrial demand and confidence. Given the steep price gains of late, we therefore think there is considerable risk of another downside correction. Basis the chart picture we would not be surprised to see prices correct down towards the $450/oz level and then for prices to consolidate until an improved demand picture materialises.

Auto catalysts

Despite governments introducing 'cash for clunkers' incentive programmes the autocatalyst industry consumed 9.3% less Palladium in 2009. However, demand is recovering this year and



the outlook for 2011 is for continued growth. Total global vehicle production is expected to rise 7% in 2011 on top of an estimated 10% rise this year. However, these percentage increases are being from a low base as global vehicle production fell 3.7% in 2008 and 13% in 2009. As the chart shows, recovery is being seen in all regions, although in China car production avoided dipping in 2008/2009.

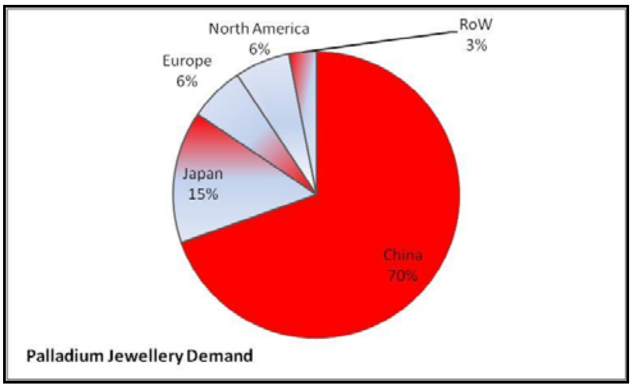
Palladium demand is expected to grow significantly as the countries leading the growth in vehicle sales are China, other developing Asian countries and Brazil. As these countries have preference for petrol-driven vehicles, Palladium-based catalytic convertors will be in high demand. Palladium is also making inroads into the diesel catalyst convertor market as Platinum-Palladium catalysts are now being used as opposed to Platinum-only convertors, boosting European demand for Palladium. Demand for Palladium in emission control catalysts is expected to rise 17% in 2010 and around 11% in 2011. However, this, too, is from a low base, since demand fell 22% between 2007 and 2009.

Other industrial uses

Palladium's other industrial uses include electronics, chemicals and other emission control equipment for factories and petrol-powered machinery, such as garden equipment. The economic slowdown that started in 2008 has seen demand for Palladium from this sector drop. In 2009, Palladium use in electronics was down 18% from 2007's level, use by the chemical industry dropped 13%, and other industries' use had dropped 17 percent. However, as these industries destocked into the recession, the recovery should be quite robust as it will include a certain amount of restocking. Also, the high rate of technological change in electrical equipment and computer industry, plus tighter emission restrictions for factories and petrol-powered machinery, will also mean good growth in demand for emission control equipment. Between 2004 and 2007, this sector saw average growth rates of 12% per annum, which we would expect to see again once a sustainable recovery is underway.

Jewellery demand

Demand for Palladium jewellery dropped in 2009 to 815,000 oz, down from 985,000 oz in 2008 and a peak of 1,490,000 oz in 2005. The popularity of Palladium jewellery took off in China once Platinum prices rose to a level that choked off demand. However, as Platinum jewellery has always acted as a swing factor on demand, the drop in Platinum prices in the second half of 2008 and in 2009, led to a surge in Platinum jewellery demand in China and Palladium suffered as a consequence.



Geographically demand for Palladium jewellery held steady in US and Japan, but grew in Europe, in 2009. China remains by far the largest consumer of Palladium jewellery, see chart. Given the drop in demand, in 2009, it will be interesting to see what lies in store for Palladium jewellery. Within China, Palladium jewellery has become quite regional, with it being sold in less affluent cities rather than the richer eastern cities. This suggests that retailers are dictating where it is sold as they try to maximise profit-margins. Outside China, Palladium jewellery is making headway; the UK introduced a hallmark, which means it is more likely to become an accepted product. Palladium jewellery is still a relatively new concept and it has taken manufacturers time to adopt it but now it is gaining recognition and we would expect it to gain market share, especially while Platinum remains so much more expensive.

Supply

Russia is the largest source of Palladium, mining 2.67 Moz in 2009 and selling a further 0.96 Moz from stock - taking total supply to 3.64 Moz. South Africa is the second largest producer with output at 2.37 Moz in 2009, followed by North America (0.76 Moz), Zimbabwe (0.18 Moz) and other countries (0.16 Moz). Total supply in 2009 was 7.1 Moz, while demand was 7.77 Moz. This means that sales from Russian stockpiles were once again needed to balance the market.

In addition to the market relying on sales from stockpiles, it is also noteworthy that mine output has been falling in recent years. It peaked in 2006 at 7.25 Moz and has dropped each year since to 6.14 Moz in 2009. That said, output is expected to grow this year on the back of new mine output in South Africa and a pick-up in output at existing mines. North American output is expected to fall in 2010, but now that strike action is over at Sudbury and other mines see production restarted, or ramped up, output is expected to recover in 2011. Output in Zimbabwe increase in 2009 as new production came on stream and that should continue this year and into 2011.

In 2010, Palladium mine output is expected to rise 2.5%t to 6.30 Moz and then to increase 4.5% to 6.6 Moz in 2011.

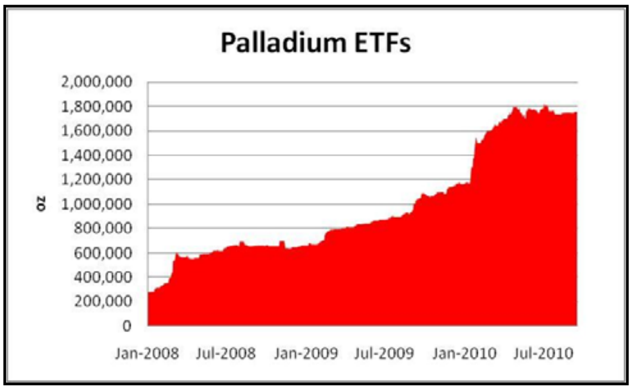
Russian sales from stockpile remain all important

As each year passes the question as to how long Russian stockpiles will last becomes ever more critical as there must be a finite amount stockpiled. If you consider that 13% of supply came from stocks in 2009, then when stocks do dry up, there will be a big gap to be filled. There is no immediate shortage of metal as there are some 1.7 Moz held in the ETFs, but it would likely take a considerably higher price to attract holders to sell.

Russian PGM stockpiles are a state secret and the size of the stockpile is not in the public domain. In recent years, the level of sales from inventory has fallen, but whether this is a sign that inventory levels are getting low is not known. In 2007 and 2008, an estimated 3 Moz of Palladium was shipped from Russia to Switzerland and reports suggest that about 1Moz of that was still left to be sold at the start of 2010. In addition, a further 0.32 Moz was shipped to Switzerland in early 2010.

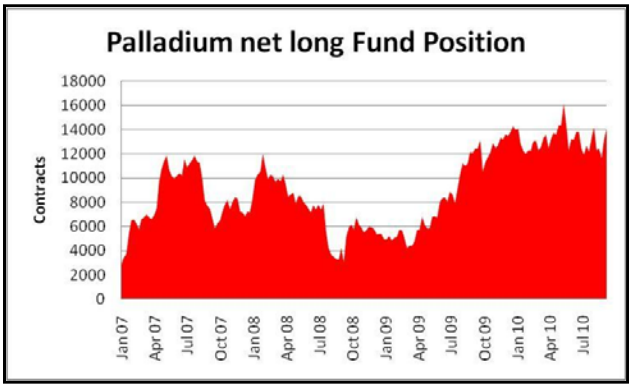
The production / demand balance shifted from a deficit in 2008 to a surplus in 2009 and is likely to remain in a small surplus in 2010. So Russian sales from stockpiles would push the market into a bigger surplus, but in turn investor demand will no doubt absorb most of this. In the first eight months of 2010, the ETFs have increased their holding by 580,000 oz, which would equate to an annualised 870,000 oz. For 2011, we have to assume that Russian stockpiles will continue but would remain alert for any signs that might suggest they are dwindling. Once that happens then Palladium's fundamentals are likely to become significantly more bullish. Interestingly in May 2010, there were reports from Russia saying that there may be no sales from state stocks to the market in 2011. Excluding ETF buying and Russian sales from stocks, the Palladium supply/demand balance is likely to swing back to a deficit and that should be bullish for investors, especially if they feel Russian stockpiles are getting low.

Investment demand grows steadily



Investors' interest in Palladium shot higher in early 2010 with the launch of PGM ETFs in the US. By the end of January, the US ETF had accumulated just under 400,000 oz, taking the total holdings of Palladium in ETFs to 1.5Moz. Investors continued to buy up until July, when holdings reached a peak of 1.83 Moz, but then as the chart shows, holdings have drifted sideways and in mid-September were 1.75 Moz. Investors seem in limbo at present, the long term outlook is good, especially as Russian stockpile sales will come to an end at some stage, but the investors seem nervous about chasing prices, which considering the economic outlook we can understand. We expect investors to generally hold on to their holdings, but they might refrain from increasing their exposure until the economic outlook improves.

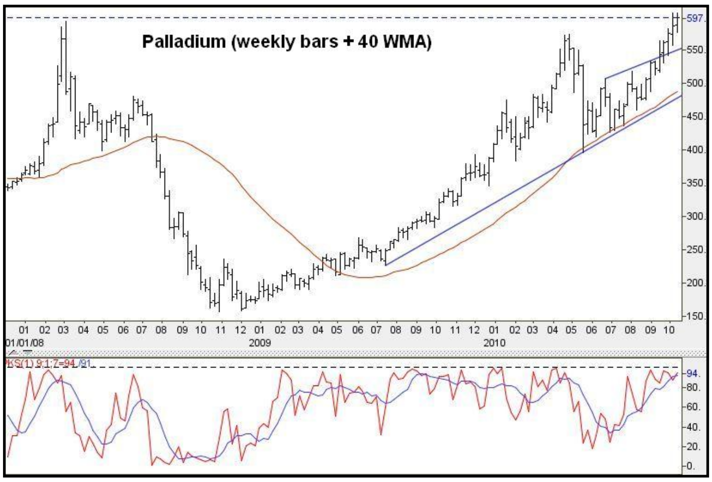
Fund



The net fund long position in Palladium has been quite choppy, but generally has held up at a relatively high level. The long position peaked at 16,185 contracts in mid-May, which was a new record high, but has since drifted. The sovereign debt crisis in Europe and the pick-up in concerns over the prospects for a double-dipped recession have dampened funds enthusiasm, but generally there has been no major change in sentiment, although they do seem to have taken on a more "wait and see" attitude. However, should concerns over a double –dipped recession mount, then the overall high level of the net long position could correct and that would weigh on prices.

Technical

Palladium prices have recovered well after the devastating pull back in 2008 and by April 2010, prices had reached $573/oz, just $20/oz short of the pre-financial crisis high of $592/oz. However, prices then dropped to $395/oz in May, before once again recovering. The keenness of the buying suggests strong demand and with the ETF position peaking in July, we would say a good deal of the buying was from the investment community. However, up until September it did look as though prices were trading in a rising-wedge formation, (which tends to be a bearish sign) and that suggested a possible pull back to trend line support. However, at the time of writing, prices have punched up through the top of the wedge and have challenged and overcome the 2008 highs at $592/oz to reach a high of $604/oz. The move up above multi-year highs suggests the market is getting ahead of itself again. Given that sustained economic recovery does not seem underway yet, we would be surprised if prices managed to hold above



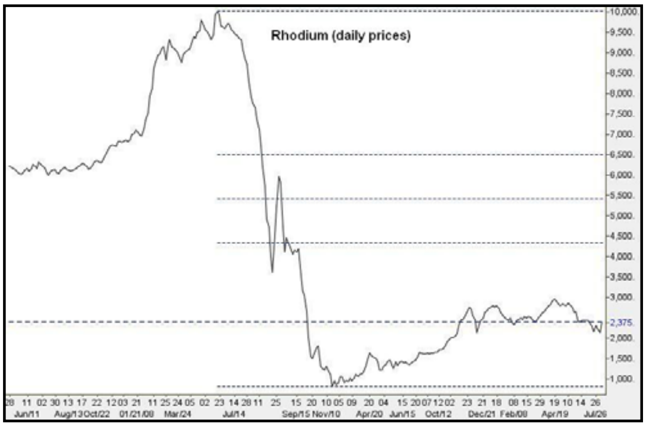
$650/oz for any length of time. We would suggest a likely trading range between $450-$700/oz that is until a better economic outlook unfolds.

Conclusion and Forecast

Palladium prices have generally been in a bullish frame of mind since Q4'2008, there have been bouts of aggressive selling, but the dips have attracted bargain hunting. In many ways Palladium's fundamentals are in better shape than Platinum's in that it has a significant price advantage so is in position to win market share from Platinum where it can be a substitute - notably auto-catalysts and jewellery. It also has the advantage of being the main PGM used in petro-driven vehicles, which happen to be the prevalent in Asia which is currently the strongest regional market for vehicle growth. So it has a robust demand set-up at present and the fact the supply does rely on sales from stockpile is another factor that at some stage is going to be a potentially very bullish feature. As such, we are not surprised that dips remain well supported.

However, we would not be surprised to see another dip in prices as we feel the recovery has probably run ahead of the fundamentals and we expect further economic hardship to lead to a more broad based correction across markets. There may well be room for fund liquidation selling and some redemptions from ETF investors that are likely to push prices lower. We also expect any dips to attract a good level of investment buying. Overall we look for prices to spend the bulk of time over the next twelve months trading in the $450-$700/oz range.

Rhodium Outlook



Rhodium prices tumbled from $10,200/oz in June 2008 to $800/oz in November 2008, from where, surprisingly, the rebound has been relatively limited when compared to Platinum and Palladium. Rhodium prices have recovered 17% of the lost ground, whereas Platinum has recovered 66% and Palladium has recovered 100%. This, we think highlights two points; first it shows that Rhodium is a purely industrial metal which does not have the 'benefit' of being used for jewellery and secondly it shows how much of the rebound in Platinum and Palladium has been investor driven, rather than driven by the fundamental outlook. We therefore see Rhodium as a useful indicator and expect Rhodium prices to continue to track the actual recovery in real demand, providing a good bellwether as to how the auto industry is recovering.

Between 2004 and 2007, Rhodium was in a supply deficit, with the balance made up from inventory and from recycled metal. In 2008, the market showed a supply surplus of 25,000 oz and this leapt to 241,000 oz in 2009 as supply recovered in South Africa after the power related shortages in 2008 and industrial demand slumped 20%.

Demand

Rhodium demand is predominantly focused on the autocatalyst market which in 2007 (i.e. before the economic slowdown) absorbed around 85% of supply and the glass and chemical industries both accounted for around 6% of global demand. Generally, demand from these industries is price inelastic, but what was noticeable in the glass industry last year was that the recession prompted factory closures which released Rhodium back into the market. In 2009, Rhodium demand fell to 19,000 oz, down from 34,000 oz in 2008 and an average of 60,000 oz in the period 2005-2007. During the last recession in 2001, the only sector that suffered a significant drop in Rhodium demand was the autocatalyst industry, which saw a fall of 28% Last year's 20% drop in demand from the auto industry was therefore less severe, no doubt reflecting the overall importance of vehicle demand in Asia, especially China.

All in all, we expect Rhodium demand to recover in line with the general economic recovery, but especially in line with the recovery in auto production, which in the West is likely to be sluggish, but which should generally remain robust in China.

Supply

In 2008, Rhodium supply dropped heavily in South Africa as output at PGM operations were affected by power outages and shutdowns. Output in South Africa recovered in 2009, to match the average level of output seen in 2005 to 2007.

In Russia and in North America output declined around 17%, while Zimbabwe's production climbed 27%. Since South Africa produces 86% of the world's Rhodium, any disruptions to production by strikes, or power shortages will have a noticeable affect on supply. The economic slowdown has alleviated the power shortages in South Africa, but when economic recovery picks-up, the electricity shortages are likely to once again become an issue that could affect Rhodium supply.

Lower prices in 2009 and 2010 have made recycling less attractive and in 2009 the amount of metal recycled fell to 187,000 oz from 227,000 oz in 2008. However, the incentive schemes to scrap old cars over the past year or so should lead to a good volume of scrap metal that is likely to feed through the recycling process once prices recover. Recycled metal accounts for around 19% to 20% of total supply and we would expect that to increase this year and next.

Conclusion

Apparent consumption in 2009 was hit by both the fall in use and by destocking and we do not expect demand to recover strongly until a more sustainable recovery gets underway, the timing of which is still far from clear. However, we feel Rhodium prices will respond quickly as soon as auto manufacturers feel more confident and therefore we would watch Rhodium prices carefully. However, after two years of surpluses, in 2008 and 2009 and with another surplus expected this year, we doubt that there will be any sudden return to the very high prices seen in 2007 and 2008.

Overall, we expect Rhodium prices to remain range bound in the $2,000-$4,000/oz area until better economic times are signalled. We would then expect a gradual price climb as stocks are drawn down. The risk on the downside is of a further slowdown in the global economy, until 2011, when focus may move to the upside risk of disruptions to South African supply.

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