Report on Outlook for Platinum by René Hochreiter

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Outlook for Platinum

Platinum group metals (platinum, palladium, rhodium are the four elements that make up what is commonly known as PGM's or 4 "E").

The platinum market has the advantage that half of its demand is legislated and it also has a built-in shock absorber in jewellery (i.e. if the price falls, the jewellery sector buying supports the price as it has done in the last few months). Very few other markets have this advantage.

Speaking to marketing directors (some of whom which have been in the business for 30 years) of the SA platinum companies, it will take another year for platinum prices to recover and consensus is that the industry will be "flying" in 5 years' time. Personally, I believe it will be sooner with the recent cut backs in production and the lack of any new shafts or exploration projects being developed.

The major market for platinum, palladium and rhodium is the autocatalytic industry. The combating of air pollution has been widely accepted in Western countries for many years with increasing stringency being applied to the emission of gases from diesel and petrol engines. These requirements do exist in places like India and China but the emission controls are behind those of the Western world but there is increasing "catch-up" in the emission controls.

The demand for platinum is around 8m ounces per annum and around 8.5m ounces per annum for palladium.

Diesel engines require the use of predominantly platinum catalysts and diesel engines can use palladium as a substitute for platinum but approximately twice as much palladium has to be used to have the same effect as platinum. Thus if the platinum to palladium price ratio is more than two times (approximately), then it is cost effective for auto companies to use palladium in catalysts and conversely if the price of palladium rises to more than 50% that of platinum then the economics swing the other way round.

The Russian palladium stockpile is finally running out after about 20 years. I anticipate the price of platinum:palladium to begin climbing beyond the 2:1 ratio as a result. With the production cutbacks and the palladium stockpile depletion, it is only a matter of time before the price of both metals begins to rise. These swings can be sudden and spectacular.

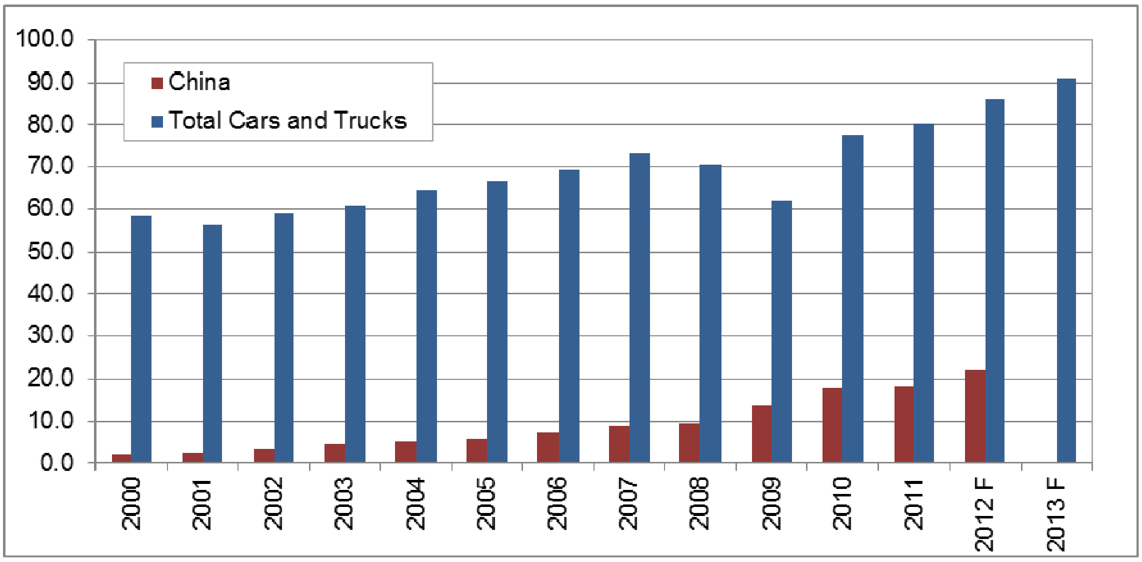
The following price chart shows the ratio of the platinum price to the palladium price has been in favour of using palladium in gasoline engines for some years.

Figure 1. Platinum to palladium price chart

In 2011, total car and commercial vehicles produced were 78.4 units, of which the Asia/Pacific region was the largest with 39.0m units and of which China has been a strong growth region alone accounting for 18.4m units. Europe is the second biggest region with 21.2m units and North America follows in third place with 13.5m units. Note that over half of Europe and just under half of Asia/Pacific vehicles are diesel driven, which require mostly platinum in their autocatalysts.

The global auto pool is growing again after the slump of 2008 and 2009. The forecast for 2013 is for global auto sales to reach 91m units (LMC Automotive - Oxford) an all-time record.

Figure 2. Light and Heavy Duty Vehicles Sales and Forecast (millions of vehicles)



The United States and China are predominantly gasoline engines and therefore palladium is favoured under current price conditions.

The following pie charts illustrate the demand for platinum and palladium by industry sector.

Figure 3. Platinum demand by sector

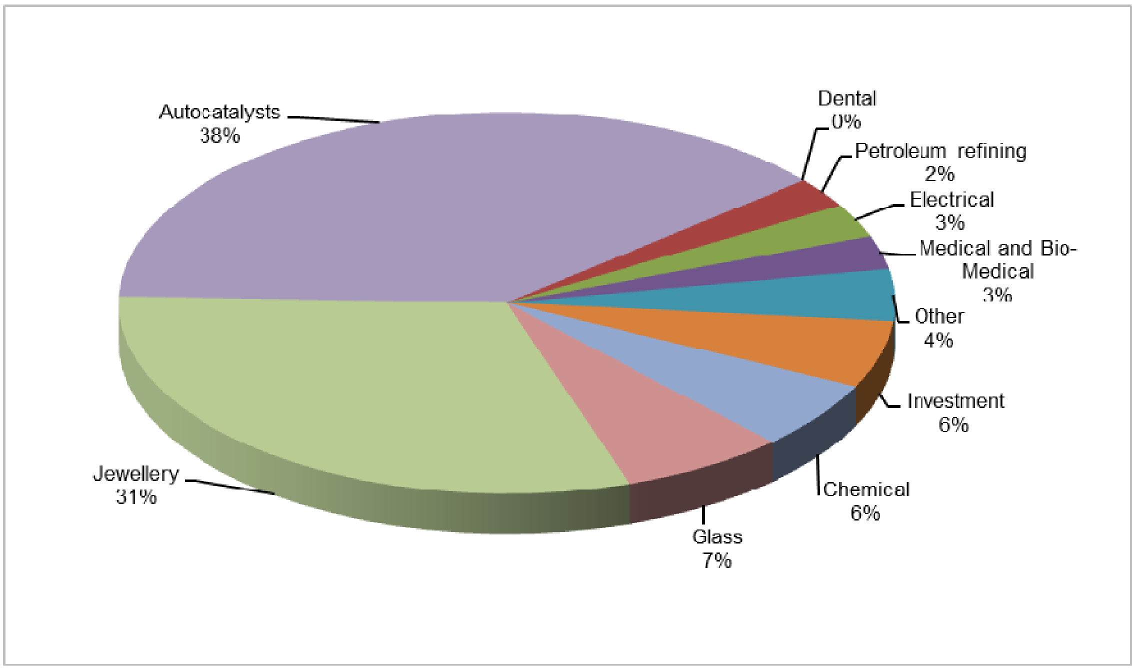
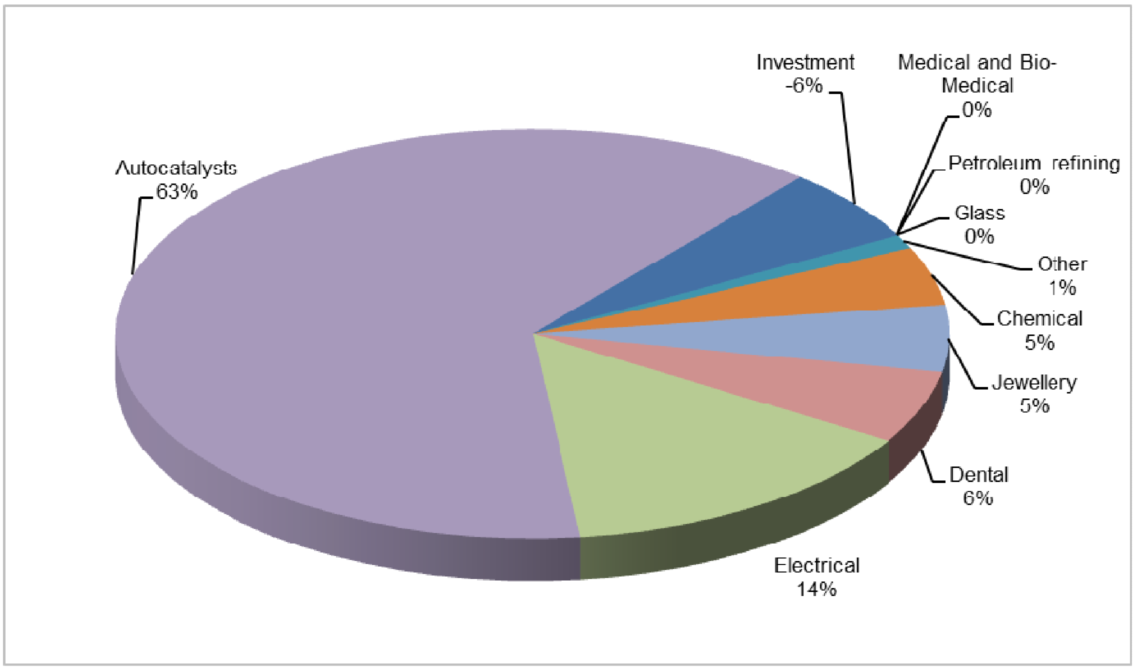


Figure 4. Palladium demand by sector



Demand for palladium in autocatalysts is currently around 6m ounces per annum versus the demand for platinum in autocatalayst of around 3.1m ounces per annum. Approximately 50% of the demand for platinum in autocatalysts goes into Europe.

The primary supply of palladium is around 7.4m ounces per annum with an additional supply of around 2.4m ounces from recycling. Mine supply of palladium has been augmented for many years by the supply from the Russian stockpile of palladium. This has declined from 1.5m ounces in 2007 to 775 000 ounces in 2012. It is estimated by Johnson Matthey that the supplies from the Russian stockpile should be ending in 2012. It is likely that even if they do not cease altogether that the supply from Russian stocks will decline again in 2012 and probably cease in 2013. This combined with increased auto demand in China and the United States should result in a platinum deficit in 2012 growing into 2013. This should lead to increased prices for palladium and this in turn should lead to increased prices for platinum as the economic benefit of using palladium in gasoline engines declines.

The heavy dependence on Europe for platinum autocatalyst demand is likely to shift in coming years as demand in China and the Untied States increases and the advantage of palladium declines.

Platinum is fortunate in that there is a large demand (31%) for platinum jewellery, particularly from China, a region where this demand is anticipated to continue with strong growth.

At 7% of demand the glass sector is still small compared to autocatalysts and jewellery. Platinum is resistant to the abrasive nature of molten glass and is used as a crucible and mould for the manufacture of high quality glass used in mobile phone, flat screen TVs, iPads etc. This is often under the brand name “Gorilla Glass” which is owned by Corning. Demand in this sector grew from 385 000 ounces in 2010 to 555 000 ounces in 2011.

Recycling forms an important part of the supply and demand equation in PGMs with recycling adding 2m ounces to the supply of platinum (South Africa mine production in 2011 was 4.8m ounces) and 2.4m ounces to the supply of palladium (South Africa produced 2.6m ounces of palladium in 2011). It is estimated that the supply from recycled material is unlikely to grow at a similar pace in 2012 as it did in 2011 because the price of the metals is lower and therefore the incentive to recycle autocatalysts and jewellery is lower than it was in 2011.

Anglo American Platinum is the world’s largest producer of platinum having produced 1.94m ounces in 2011. Recent management changes at Anglo American Platinum are believed to herald a change in strategy at the company with regard to loss-making operations. It is believed that the largest shareholder (Anglo American) has been pushing for more mine closures than the previous management was prepared to implement.

It is believed that increased demand from the auto sector, combined with increased industrial demand and supply side constraints are likely to lead to increased prices in 2013.

The current cycle in the platinum sector is very similar to that of the late 1980s, early 1990s. I believe we are at or near the bottom of the current cycle, many value funds (those with a 5 year investment view) have already stocked up on platinum shares (especially the dividend paying ones like Implats). And no, it’s not different this time!