

# PRICES & FUTURES MARKETS

## PLATINUM

Platinum traded at an average price of \$1,256 during the first nine months of 2007, almost 10 per cent higher than in the same period of 2006. Its peak was \$1,377 at the end of September. However, in volatility terms, the platinum market was relatively calm compared to the previous year.

Concern over platinum supplies, in the form of smelter problems at Lonmin, Russian export licence delays, and protracted wage negotiations in South Africa supported the price. Eventually, these combined with a weak dollar to push platinum to its September peak. Once the price rose above \$1,200 in February, it rarely dropped below that level.

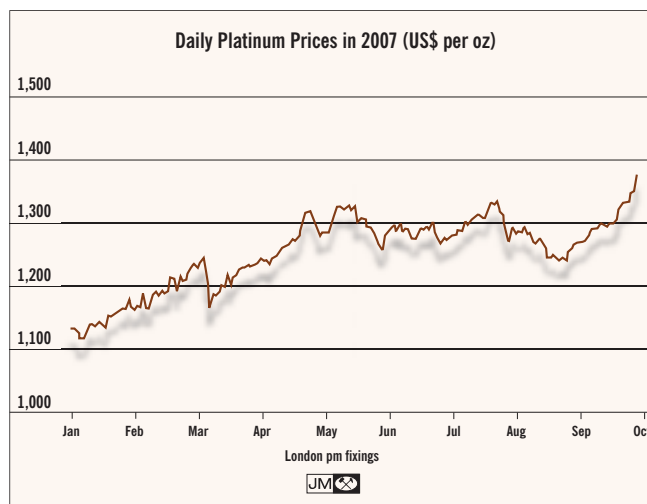
Platinum started **January** at \$1,136 and softened to a low for the first nine months of 2007 of \$1,112 on the 8th. News emerged of lengthy delays in the implementation of new Russian regulations which were intended to simplify the export of pgms. With platinum shipments from that source temporarily suspended, Chinese demand drove prices up. News that Lonmin was to close its No. 1 furnace at Marikana for a rebuild helped the price to a month-end \$1,169.

The price kept climbing in **February**, rising almost 5 per cent during the month. The announcement of a strike at Implats caused some market jitters although it ended quickly. Delays in the rebuild of Lonmin's furnace saw platinum firm further. Heavy buying on TOCOM on the 26th took platinum to a record ¥4,748 per gram and a fix of \$1,242. A sudden fall on the Shanghai stock market pummeled gold prices but left platinum unaffected, supported by supply concerns.

The growing problems in the US sub-prime mortgage

sector came into global focus in early **March**. Many funds reacted nervously and sold commodities to offset losses in the equity markets. Gold fell sharply and platinum followed, losing \$45 between the afternoons of the 1st and the 2nd, and falling to a monthly low of \$1,165 on the 5th.

At this point, short-covering helped the price rebound. Additional upward pressure came from tight availability of



platinum sponge (much had been converted into ingot following November 2006's price spike) and the price bounced back over \$1,200 in New York on the 8th. It did not fall back below this level. Supported by a lack of Russian exports and the scarcity of sponge, platinum climbed to end March one dollar up overall, at \$1,244.

**April** started with rumours of the launch of an exchange traded fund (ETF) in platinum. Physical buying in response to this took the price up to \$1,251 before Easter. As platinum escaped from its previous range, investors pushed it up to \$1,269 on the 13th. Late that day, the Zürcher Kantonalbank (ZKB) announced that it would indeed launch a platinum ETF. Platinum rose to \$1,282 the following day before Norilsk Nickel revealed that it was meeting its commitments for platinum supply despite lacking an export licence.

Net long NYMEX speculative positions climbed 77,000 oz in a week. Lease rates failed to tighten as had been expected, and the price retreated to \$1,268. Buying on TOCOM provided support as the price rose above ¥5,000 per gram. On the 19th, news emerged of the forthcoming launch of a second platinum ETF in London. Platinum shot to a monthly high of \$1,325 on the 24th as trading started in the first ETF to launch.

The restart of Lonmin's furnace drove platinum down. Good buying on the Shanghai Gold Exchange (SGE) was seen, even above \$1,300, but a rallying dollar led to fund sell-offs: platinum ended April at \$1,286.

Platinum immediately started firming in **May**, as NYMEX positions rose strongly, negating the closure of the Chinese and Japanese markets for Golden Week. When trading reopened in Asia, the price leapt

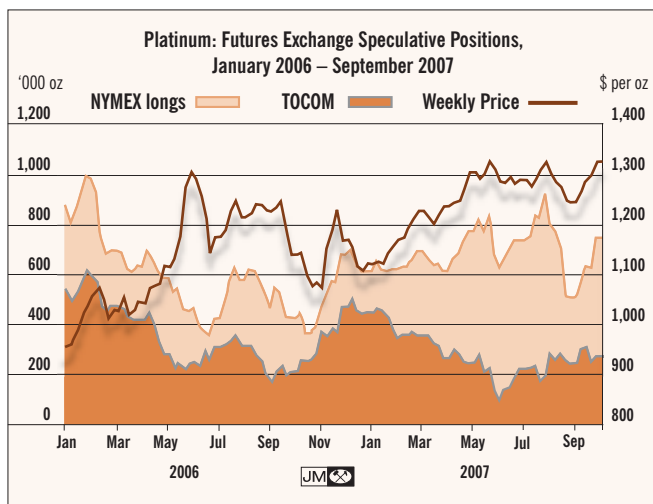
*The platinum price grew by almost 10 per cent in the first nine months of 2007 to a peak of \$1,377 at the end of September.*

Average PGM Prices in \$ per oz (Jan-Sep)

	2006	2007	Change
Platinum	1,146.86	1,256.47	10%
Palladium	319.64	353.00	10%
Rhodium	4,401.20	6,069.14	38%
Ruthenium	153.17	601.97	293%
Iridium	333.04	445.96	34%

*Platinum and palladium prices are averages of London am and pm fixings. Other pgm prices are averages of Johnson Matthey European base prices.*





*Net long speculative futures positions on NYMEX and TOCOM showed significant growth in April and early May in expectation of the launch of two exchange traded funds.*

to \$1,331 on the 8th. Strikes at Aquarius's Kroondal and Marikana properties and a continued lack of Russian metal helped platinum to a high of \$1,336 on the 9th.

The dollar paused in its decline and put pressure on platinum just as ZKB launched its ETF. The price reached \$1,336 again on the 14th before retreating under fund sales, although net long NYMEX positions continued to increase. The strengthening dollar took the floor from under the platinum price which fell before finding support near \$1,300 on the 17th. Lower than feared trading in the two ETFs drove sell-offs of futures positions. Further dollar strength depressed commodity prices. Selling on TOCOM added a final touch and platinum fell to \$1,257 on the 30th.

Awareness of potential supply disruptions from South Africa then surfaced with the news that the National Union of Mineworkers, or NUM, had rejected a pay offer from Anglo Platinum. This caught the market unprepared: short-covering forced the price back close to \$1,300. Producer dehedging in gold then helped lift platinum over this mark on the 7th of **June**.

While there was much speculation over the progress of South African wage talks given the tight platinum market, movements in the price mainly related to those of gold and the dollar. Platinum softened to \$1,266 on the 27th, which brought out purchasing on the SGE, with 164 kg snatched up that day.

Platinum reached a record average monthly price in **July**. A weakening dollar and the possibility of South African strikes were both bullish signals and funds bought accordingly before encountering resistance near \$1,300 on NYMEX ahead of US Independence

Day. When New York reopened, the October contract moved serenely above the \$1,300 mark.

The sub-prime mortgage contagion reappeared and weakened the dollar. The NUM and the Solidarity union declared disputes against Anglo Platinum but, more importantly, both Anglo Platinum and Lonmin cut full year sales forecasts substantially.

TOCOM buying on the 13th moved platinum to a new record high of ¥5,127 per gram in the far-dated June 2008 contract. More futures buying took platinum to a monthly high of \$1,333 in London on the 24th as NYMEX positions peaked at their highest for 10 years.

Nissan then announced that it could reduce metal loadings in some of its catalysts. Funds took this opportunity to realise profits and platinum lurched lower to \$1,284 on the 27th. A remarkable 278 kg of platinum changed hands on the SGE in one day in response, the start of a prolonged spell of buying.

Platinum crept higher to an early-**August** peak of \$1,296 before the sub-prime crisis returned to disturb the market. As equity prices fell, funds sold off commodities. While there was support for the price from short-lived strikes at several mines, macroeconomics were now dominant. Amidst the deepening gloom, the European Central Bank injected €100 billion into the banking system, driving the Euro lower and cutting precious metal prices.

These fund sales of platinum, including a reduction of 156,000 oz in a week on NYMEX, outweighed very healthy Chinese physical purchasing and the price spiralled down to a monthly low of \$1,237 on the 22nd. Slowly, though, the selling pressure disappeared and platinum ended the month strongly at \$1,268.

Poor US payroll data sent the dollar to a 15 year low in **September** and helped platinum to \$1,295 on the 10th. It edged over \$1,300 before the US Federal Reserve's decision to cut interest rates by more than expected depressed the dollar and boosted precious metal prices. Gold neared a 28 year peak: platinum rose too, to fix at \$1,307 on the 19th. Support was firm at \$1,300 and platinum rose to \$1,336 on the 21st.

More negative US housing data came out on the 27th and the dollar fell. Platinum lease rates inched higher, reflecting nervousness about metal availability. In the perfect storm of disappointing supply, strong demand, high oil prices and a weak dollar, platinum climbed to fix at \$1,377 on the last trading day of September.

## PALLADIUM

The palladium market was quiet in the first three quarters of 2007 compared to last year. The price averaged \$353, 10 per cent more than in the same period in 2006. Price movements largely followed those of platinum and gold rather than being influenced by palladium's own fundamentals.

Continued activity from institutional and fund investors drove the price. Palladium started the year at \$332 and did not stray too far, peaking at \$382 in April and falling no lower than August's \$320. \$343.75 was the final fix of this period, 3.5 per cent above where it started the year.

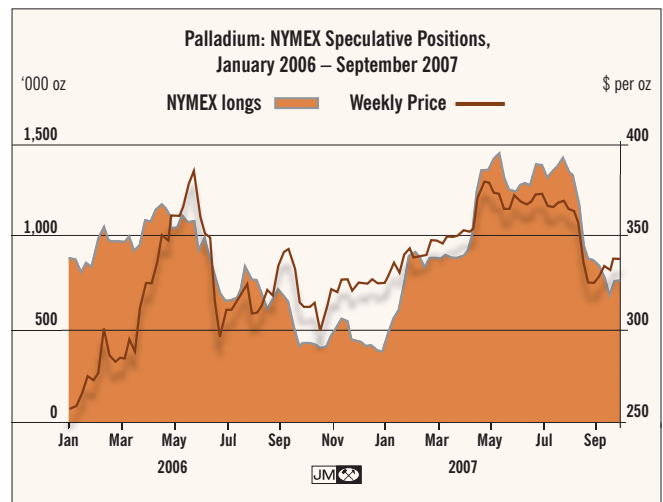
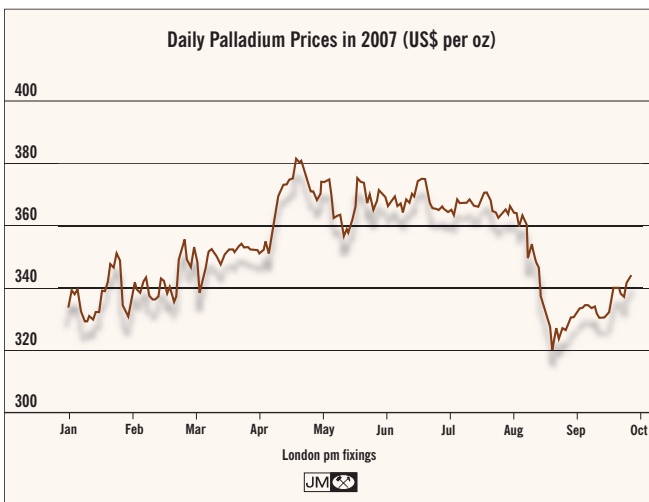
A rising platinum price influenced palladium in **January**. Palladium began the year at \$332 and started climbing, driven by speculators and investors, particularly on the futures exchanges. It reached \$343 on the 5th. The realisation that palladium exports from Russia were unaffected by export licence issues caused a change in sentiment, and palladium fell back to the month's low of \$328 on the 11th.

Palladium rose to \$351 on the 25th but no sooner had it reached this important psychological point than profit-taking reappeared. The price dropped back to end January at \$331 under heavy selling on NYMEX.

The link between the platinum and palladium prices was cut at the start of **February**. The market surplus of palladium meant that investor interest in that metal was much lower. As platinum forged ahead, palladium settled into a narrow range, \$5 either side of \$340.

Good purchasing on TOCOM on the 22nd and

*The palladium price was supported by a weak dollar but more importantly by significant fund investment.*



23rd – driven by a weak dollar and a strong oil price – prompted a move to \$355.25 on the 26th. This attracted technical buying but liquidation of long fund positions followed and palladium closed the month at \$346.

The first effects of the US lending crisis emerged at the start of **March** although palladium dipped only to \$338. The weak dollar provided some encouragement and palladium quietly slipped back above \$350. Unlike before, fund sales did not cap the price here, paving the way for a further firming in **April**. Strong physical demand finally pushed the price over \$360 on the 11th for the first time since June 2006. NYMEX positions rose above one million ounces. However, palladium only reached \$373 on the 12th before hitting resistance.

Energy was injected into the market as ZKB detailed its plans to launch a palladium ETF. Investors responded and the price moved into a new range of \$370-\$380. The continuing growth of net long NYMEX positions and the announcement of a second ETF forced the price up to \$382 on the 20th. This marked its peak for the first nine months of 2007. However, as platinum fell back, palladium dropped too.

The palladium price again lost its link to platinum in **May**. Although platinum rose, palladium did not benefit. However, funds continued to invest. NYMEX net longs peaked at 1.44 million ounces before heavy fund long liquidation – almost a 130,000 oz reduction – followed in the second week of May. Palladium fell to a monthly low of \$356 before rebounding to \$375.50.

A strengthening dollar affected all commodities and a wave of negative sentiment washed over palladium. The price sank and closed the month at \$367, trading

*Long futures positions in palladium fell very heavily in August as investors responded to the spreading effects of the US sub-prime mortgage crisis.*

largely between \$360 and \$370 for the first half of **June**. Nonetheless, NYMEX positions started to grow again, reaching 1.27 million ounces before investment flows stalled. After palladium reached its low of \$363.50, limited support from strikes in South Africa provided just enough momentum to impel the price to \$375, the month's high, on the 21st. It closed June at \$365.

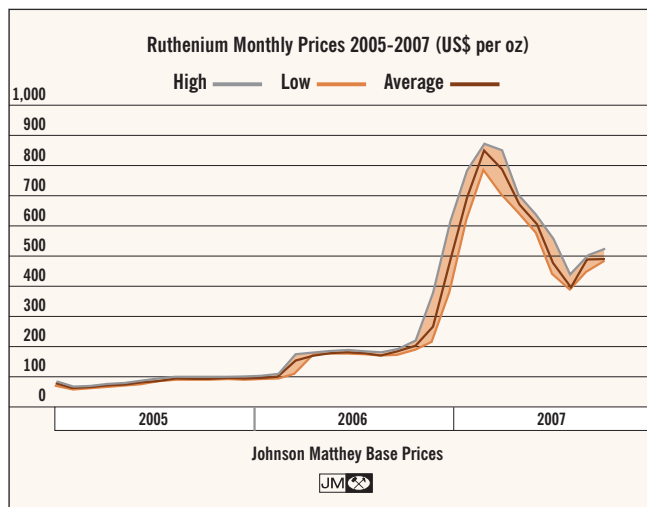
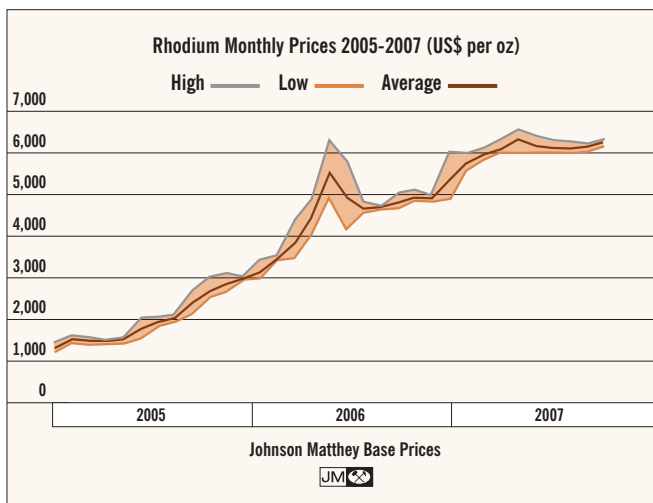
Platinum rose in **July** on concerns over South African supplies. However, this was not reflected in the palladium price which was virtually unchanged, staying almost exclusively between \$360 and \$370 throughout the month. Palladium entered **August** still range-bound but the effects of the sub-prime crisis continued to spread. Investment funds sought to realise money from their palladium positions and sold these off. NYMEX net speculative long positions dropped by more than 500,000 oz over the month.

Palladium initially tracked platinum and gold lower. However, in the growing credit crisis it dropped to \$320. Even when platinum rallied, palladium's oversupply prevented it from climbing back above \$330 until the end of August. The palladium market was little moved by the reduction in US interest rates in **September**. While platinum soared, palladium edged only slightly higher, to end the third quarter at \$343.75.

*Tightness in rhodium supply to the market supported the price above \$6,000 for much of the first three quarters of this year.*

### OTHER PGM

**Rhodium spent much of the first nine months of 2007 above \$6,000. It traded at an average price of \$6,069 during this period, compared to \$4,401 for the first nine months of 2006.**



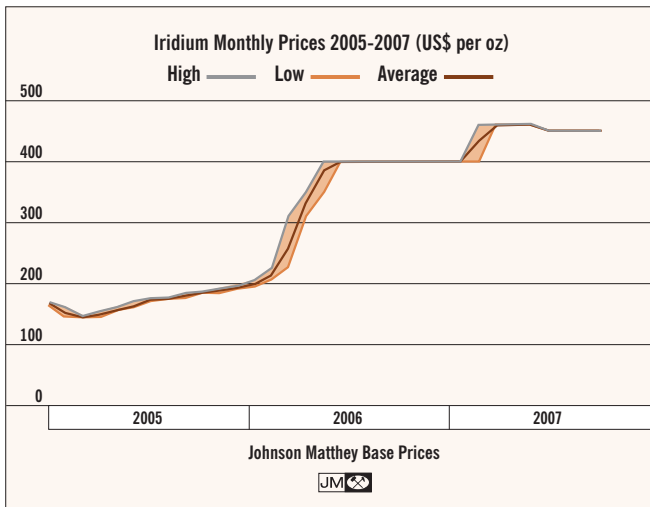
Rhodium started 2007 at \$5,550 and bidding drove it to \$5,875 by **January** 12th. Market offers increased and the price fell to \$5,600 before the cycle repeated. The price fluctuations decreased somewhat but buying took the price to \$6,000 for the first time this year on **February** 8th. Prices were supported by an absence of Russian shipments due to the lack of export licences.

*The upward pressure on the ruthenium price lasted until February before physical purchasing dropped off, allowing the price to fall back.*

Rhodium stayed close to \$6,000 until mid-**March**. Some market nervousness then appeared on questions of when Russian exports might restart. Rhodium peaked in mid-**April** at \$6,500 under pressure from a continued lack of Russian exports and heavy physical buying. Later, Lonmin restarted its furnace and Norilsk Nickel finally received an export licence. The price retreated to \$5,950 by **May**. Although this licence had been granted, no new metal was seen. The price rose to \$6,350 with the main spur apparently purchasing by an industrial company looking to repay metal leases.

This buying continued in **June**. Lease rates rose, encouraging companies to buy metal rather than lease it. This further reduced metal availability and reinforced the rise in the lease rate. With the price at \$6,250 at the start of **July**, purchasing slowed. The price softened but found support around \$6,100. Buying returned in greater weight in **September**, briefly pushing rhodium to \$6,250 but the last move of this period was a week-long decline in the price to a closing \$6,125.

The ruthenium price started the year at \$610. Although it had already risen by more than 600 per cent in 2006, this momentum continued into 2007. Buying by the electronics industry, supported by speculative interest, moved the price to \$870, the peak so far this



*Speculative investment in iridium could do no more than lift the price from an initial \$400 to a peak of \$460.*

year, on **February 9th**. Rumours of sales of ruthenium by speculators calmed the market and the price finally dropped by \$20 on the 26th, the first fall for seven months. The level of industrial buying dropped dramatically, causing the price to subside to its low of the year so far of \$380 in **July**. Later, the market firmed with some small bidding and the price moved back upward quickly, reaching \$490 in early **August**. Serious buying reappeared in late **September**. The price jumped from \$475 to \$520 at the end of the month with consumers displaying a degree of nervousness about potential price rises, rather than the panic seen at the start of the year.

Changes in the iridium price were less dramatic. It started the year at \$400, where it had been since mid-2006. Speculative buying pushed the price to a peak of \$460 in **February** before slowing. The price remained there from **March** to **May** with steady industrial purchasing. It dropped back \$10 in early **June** and remained at \$450 until the end of **September**.

### ETFs

**Although there was widespread speculation in November 2006 that exchange traded funds (ETFs) based on platinum and other platinum group metals could be launched, the first concrete indications that this would occur came in April 2007.**

Two different sets of platinum group metal exchange traded funds were announced within days of each other and were launched in April and May 2007 respectively. Each manager launched a fund in platinum and one

in palladium. None of these funds have any exposure to the minor platinum group metals. They work in a similar way with investors buying metal and swapping it with the ETF provider for shares in the ETF. The funds are therefore 100 per cent backed by physical metal and cannot lend or sell metal themselves.

These funds were intended to contain a combined 150,000 oz of platinum and 400,000 oz of palladium by the end of their first year of trading. The pension fund of Novartis, the Swiss pharmaceutical company, revealed its intentions to invest in the Swiss ETFs, providing some substance to these forecasts.

To date, progress has been quiet and the various ETFs contained a total of 60,000 oz of platinum and 255,000 oz of palladium at the end of September. These volumes were invested without causing undue levels of tightness or volatility, although this had been expected. In fact, volumes of purchases in all funds have been relatively low post-launch and we have even seen some redemptions of metal.

A gold ETF, backed by bonds rather than by physical metal was launched in Japan in the summer of 2007 but investment flows have been disappointing. There is a possibility that a physically-backed gold ETF could also be launched in Japan in 2008. Gold and silver ETFs already exist in the USA. However, there is no indication at the time of writing of any intention to launch a platinum or palladium ETF in these markets. We do not expect to see ETFs launched in either country within the next twelve months.

*Combined positions in exchange traded funds at the end of September reached 60,000 oz of platinum and 255,000 oz of palladium.*

