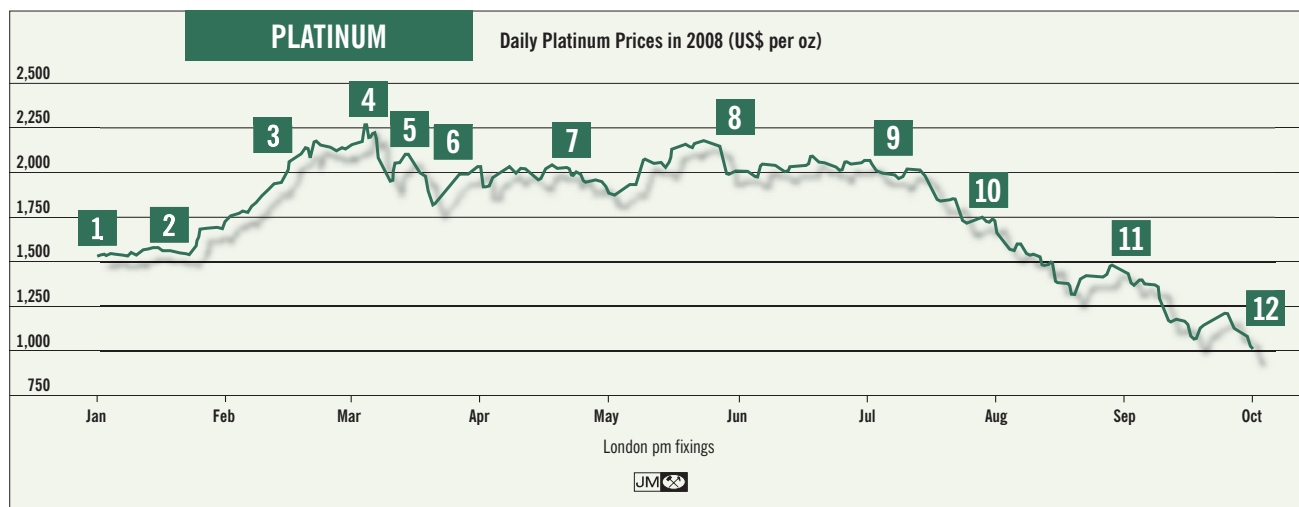


PRICES & FUTURES MARKETS



Movements in the platinum price in the first nine months of 2008 perfectly illustrated the importance both of supply and demand fundamentals and of speculative interest.

Platinum traded at an average price of \$1,811 during the first nine months of 2008. The price performed strongly in the first half of the year, driven by tight fundamentals: supply disruption drove platinum to a record \$2,276 in March and the price remained highly volatile. Later, spreading global financial problems weakened the commodity sector and drove heavy fund sales, forcing the price sharply lower. Platinum dropped to less than half of its peak and ended September 34.4 per cent below where it had been at the start of 2008, at \$1,004.

1 Platinum started the year at \$1,530, just below its December 2007 record price of \$1,544. Weakness in the US Dollar supported commodity prices and platinum hit its first record for the year, \$1,555, on the 9th of **January** as a result. Physical buying of platinum on the Shanghai Gold Exchange (SGE) remained strong, powering platinum

to a peak of \$1,589 on the 14th. A sharp fall in equities forced a sale of platinum to cover some of these losses and the price fell to \$1,522 on the 22nd. The next day, Anglo Platinum announced that torrential rains in South Africa had flooded its Amandelbult mine, causing its temporary closure and the loss of 50,000-70,000 oz of platinum output. In a tight market, the price leapt back to \$1,591 on the 24th.

2 On January 25th, Eskom, the South African electricity utility, proved unable to guarantee uninterrupted power supply to its customers, including mining companies, due to lack of generating capacity. With unscheduled power cuts ever more frequent, the industry suspended all mining and processing operations except for essential activities. Platinum leapt \$90 to a new record of \$1,681 that day.

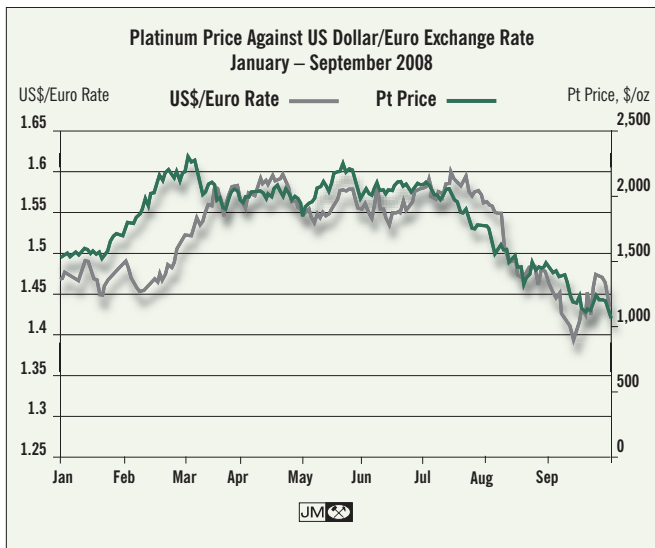
Mining resumed over the weekend but this brought little respite. Platinum climbed above \$1,700 on the 29th before Eskom announced it would supply 90 per cent of the mines' power requirements. On the 31st, news emerged that it could not even provide that much power and the price rose to a new high of \$1,731.

3 The price continued rising in early **February**, posting new records almost every day. Mining restarted in South Africa but power availability remained intermittent. Physical purchasing decreased but Japanese investors continued to gamble on a rising price. Platinum rose over \$1,800 on the 5th on TOCOM and moved up again on the 6th due to unfounded rumours that Russian exports could not meet contractual obligations.

On the 11th, Anglo Platinum lowered its 2008 production forecast prompting another price rise. Speculation that the power supply problems in South Africa might last until 2012 added more momentum, catapulting platinum through \$2,000 on the 14th. Heavy purchasing of metal through the Exchange Traded Funds further increased volatility and helped to firm the price. Anglo Platinum temporarily shut its Polokwane smelter, sending the price up to \$2,160 on the 19th.

Average PGM Prices in \$ per oz (Jan-Sep)			
	2007	2008	Change
Platinum	1,256.47	1,811.26	44%
Palladium	353.00	405.11	15%
Rhodium	6,069.14	8,163.21	35%
Ruthenium	601.97	358.49	(40%)
Iridium	445.96	451.45	1%

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



Movements in the US Dollar against the Euro go some way to explaining trends in the platinum price during the second and third quarters of 2008.

4 The introduction of new margin rules drove some liquidation on TOCOM and platinum slumped to \$2,073 on February 20th. However, the dollar remained weak and, as gold closed in on \$1,000, platinum climbed again. Amid widespread nervousness, it fixed at \$2,276 on **March 4th**. This was the peak for the first three quarters of 2008 and an all-time record.

5 Physical buying dwindled and investor activity became more important. Volatility increased hugely, with price swings of \$100 in a few hours common. Eskom announced (prematurely it later emerged) that it could now supply 95 per cent of the mines' power needs and platinum dropped, even as gold climbed towards \$1,000. Investors who had built up large platinum positions sold some of this metal and the price fell by over \$300 in two days to \$1,947 on March 10th. However, gold finally broke through the \$1,000 level on the 13th and platinum followed obligingly, rebounding to \$2,100 that day.

6 Equity prices dropped in mid-March as the scale of losses in the US mortgage sector began to become apparent. Funds sold large amounts of metals and other commodities to offset these losses, pulling platinum below \$2,000 on the 17th. The US Federal Reserve cut interest rates by 75 basis points. This was less than anticipated and the dollar firmed, depressing the price further. More fund sales dragged the price down to \$1,823 on the 20th before the US and European markets closed for Easter.

7 Platinum found strong support once the markets reopened, creeping over \$2,000 at the end of March. However, it fell \$102 to start **April** at \$1,938, driven by fund sales to cover losses in equities. The price quickly regained much of this lost ground. However, at the start of **May**, Eskom announced that it would suspend load-shedding, as it euphemistically termed its power cuts, and platinum fell sharply to \$1,855 on the 2nd. Consumer buying increased and the price firmed. News emerged on the 9th of the impending launch of a platinum Exchange Traded Note. Although this had no direct link to the physical platinum market, the price soared to \$2,082 that day. Even with physical interest low, investor momentum pushed platinum to a peak of \$2,192 on the 22nd.

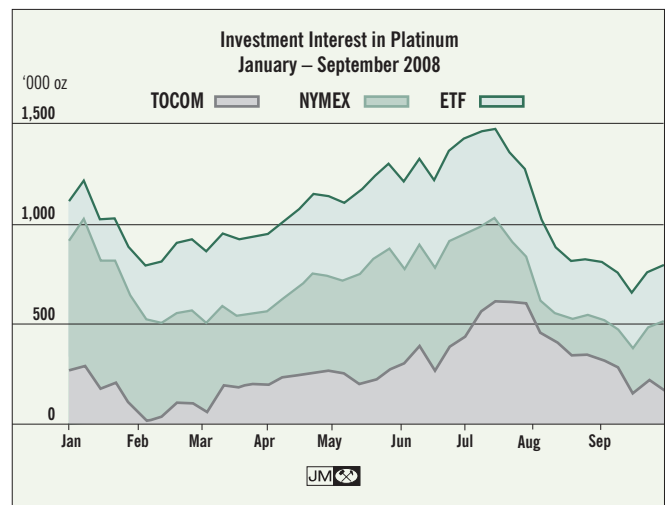
8 Speculation that a slowing US economy could damage industrial demand now dogged platinum. Investors sold positions on TOCOM and platinum kept falling, as gold tumbled below \$900, hitting \$1,976 on the 30th of May.

However, the price edged higher again on worries of further power cuts in South Africa. Sales on NYMEX were countered by growing TOCOM long positions and platinum traded out **June** range-bound, at \$2,064.

9 In **July**, investor sentiment turned sharply against commodities including the platinum group metals. The market ignored bullish news but, when poor US automotive sales data were released, the price fell as funds sold many of their investments.

Oil posted a new record price and fears intensified over future pgm demand. Platinum slipped to \$1,966

ETF and futures exchange positions grew quickly in early 2008 but dropped even faster in the third quarter, leaving the platinum price below where it had started the year.



on the 9th although buying intensified in Shanghai where volumes remained high for the rest of the month. Platinum firmed to \$2,040 on the 11th as credit concerns drove the dollar lower. Sales of 25,000 oz of metal from the ETFs reversed the tide and platinum started to weaken again. On the 15th, General Motors revealed cuts in planned vehicle output, forcing the price down to \$1,951 the next day. It did not rise back above \$2,000 again in the first three quarters of 2008.

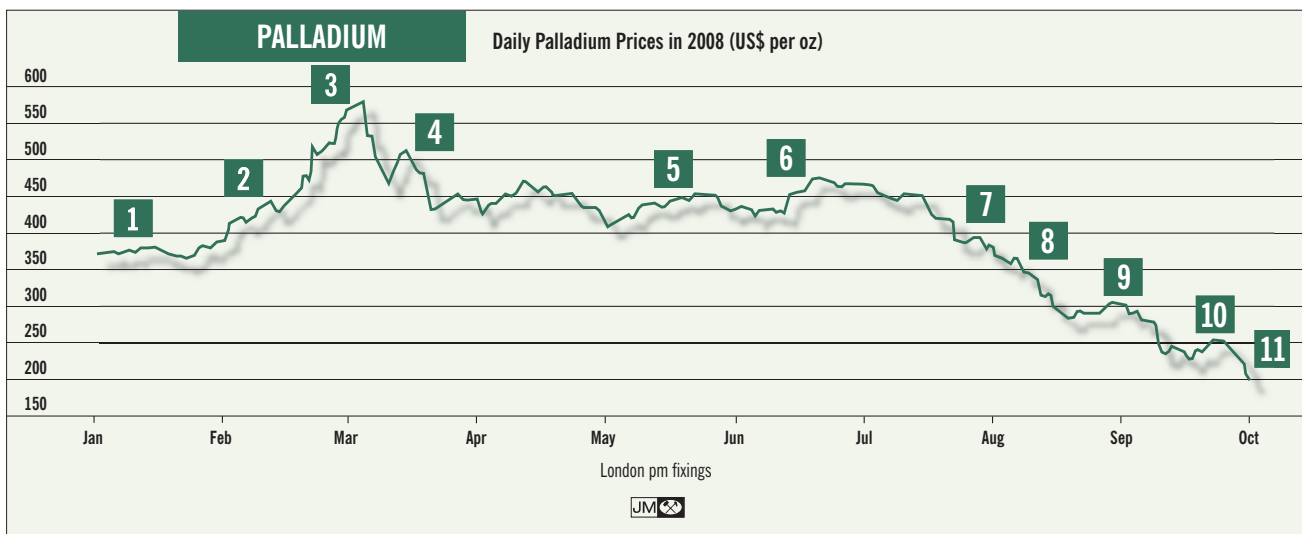
10 On the 17th of July, Eskom commented that it did not foresee further power cuts and the price lurched to \$1,893. A falling oil price pulled gold lower and platinum dropped spectacularly to \$1,771 on the 23rd. Ford revealed a huge quarterly loss, driving platinum lower again. NYMEX net long speculative positions continued to decrease from 510,000 oz at the start of July to only 241,000 oz by its end.

Platinum crashed through \$1,600 on the 4th of **August**, coming to rest at \$1,550 on the 5th but the price rebounded to \$1,612 a day later on a one-day strike in South Africa. However, the dollar strengthened

and substantial ETF sales drove the price below \$1,500 on the 12th. This heavy liquidation continued and platinum slumped to a low of \$1,313 on the 19th.

11 Short covering in oil helped platinum back as high as \$1,494 on the 28th. In early **September**, Ospraie announced the closure of its flagship commodities hedge fund, sending platinum below \$1,400. The dollar continued to strengthen and, on the 9th, platinum plunged over \$100 lower to \$1,270. It kept on plummeting, following oil, reaching \$1,152 two days later. A spell of calm was interrupted by the bankruptcy of Lehman Brothers on the 16th. Amidst the chaos, platinum fell below \$1,100.

12 On the 22nd, South Africa's President, Thabo Mbeki resigned, lending support to platinum which bounced back to \$1,225 a day later. However, the respite was temporary: the US legislature rejected a proposal to spend \$700 billion to stabilise the financial markets and almost every market fell in response. Platinum ended September at \$1,004, its low for the year to date.



Investor interest drove the palladium price to a high of \$588 but evaporated in the third quarter under pressure from global events.

The palladium price averaged \$405 from January to September of 2008, 14.8 per cent higher than in the first three quarters of 2007. Palladium peaked at \$588 in March but gave up ground readily. It rallied briefly in June as information reached the market regarding Russian state stocks. However, it was hit by worsening investor sentiment, losing 26 per cent of its value in nine days in July. It fell further in August and although it bounced back over \$300

briefly, it ended September very weakly at \$199, 46.2 per cent below the first fix of the year.

1 Palladium started 2008 at \$370, close to its high for the previous twelve months but with little momentum. However, strength in the broader commodity markets helped the price climb to \$382 on the 14th of **January**. Late in the month, on the 25th, news emerged of the disruption to South African mining due to intermittent

electricity supply. As platinum leapt, palladium followed, moving over \$400 for the first time since May 2006 on the 1st of **February**. Investor interest drove palladium to a six-year peak of \$420 on the 4th.

2 Palladium broke through resistance at \$450 on February 18th. ETF buying interest, which had already been significant, suddenly accelerated with 130,000 oz of metal bought in the last two weeks of the month. This sped the price to a fix of \$484 on the 19th before funds took some profits from their NYMEX positions.

3 However, this was only a temporary setback. Investors nudged palladium higher, to fix at \$507 and \$519 on the 21st. While platinum slowed, palladium powered on. The dollar fell and forced the price higher. TOCOM buying finally drove palladium to a peak for the first three quarters of 2008 of \$588 on the 4th of **March**.

4 A brief fall in the oil price stopped palladium's rise and, suddenly, significant selling pressure developed with palladium falling to \$532 on the following day. A rising gold price did not help stem the fund profit-taking and the slide only stopped at \$463 on the 10th of March, a fall of over 20 per cent in less than one week.

Net speculative longs on NYMEX fell below one million ounces, the lowest level since the start of 2008 and palladium slipped into a range from \$450-\$460 before the Euro weakened against the US Dollar and drove precious metal prices down. Poor North American automotive production figures weighed on palladium too and it fell to \$406 on the 1st of **May**.

5 Slowly, the price started to rise again: oil reached an all-time high on the 6th of May, intensifying worries about the impact of high inflation on the global economy. This stimulated buying of gold as the traditional "hedge against inflation". Palladium followed despite its more industrial nature. Anglo Platinum, Lonmin, Norilsk and Stillwater all revealed palladium production below year earlier levels and the price rose to \$453 on the 19th.

6 The oil price dipped on inflation concerns and the prices of many industrial metals fell too in early **June**. Palladium found a new range of \$420-\$430. On the 12th of June, Russian comments on the likely trend in Russian state palladium stocks were reported. Little new

information was imparted but the speculation that these stocks could effectively be depleted within "one to five years" proved hugely positive for the price. Palladium fixed at \$450 on the 13th and rose to a peak of \$475 on the 20th of June on investor purchasing. Three days later, frantic selling hit gold but palladium proved remarkably resilient, dropping only into a range of \$460-\$470.

North American automotive output fell and investor sentiment worsened, driving palladium down to \$442 on **July** 9th. Net long speculative NYMEX positions dived from 1.10 million ounces at the start of July to only 535,000 oz at the month's end. Negative comments on the US economy from the Federal Reserve weakened commodity prices on the 17th. Palladium found support close to \$420 but lost over \$30 on the 22nd and 23rd as oil fell, triggering fund sales. Technical buying kept palladium close to \$380 in the last week of July.

7 The wave of fund sales restarted in **August**, driven by worries over the health of the financial markets. Physical metal, futures positions and ETF holdings were sold, overpowering low seasonal demand. Net long speculative NYMEX positions fell by 65,000 oz in the first week of August, driving palladium to \$349 on the 5th. The selling continued as the dollar strengthened: gold hit an eight-month low and palladium dropped to \$310 on the 12th before finding some support.

8 On August 15th, selling in Asia drove all the precious metals lower. Palladium fell over nine per cent between two London fixings, halting only at \$286. However, sales on the futures exchanges slowed and braver investors were able to recover some value as the price staggered back to \$304 on the 1st of **September**.

9 There were more sales in Asia on September 2nd as the dollar firmed. Poor US automotive data hit palladium and it slipped below \$280 on the 5th. A toxic cocktail of a strong dollar, a weak car market and heavy fund sales submerged palladium in the following days and the price fell to \$218 on the 11th.

10 Hope briefly re-emerged on the 17th as the Federal Reserve proposed a rescue package for US insurers, AIG. The US Treasury also gave its plans for helping the financial markets. A range of commodities benefited and palladium rallied to \$250 on the 22nd.

11 However, this was a false dawn: platinum and palladium both fell on the 25th. Market confidence dwindled and palladium slumped further before the US House of Representatives rejected the Treasury's financial rescue plan. Palladium fell to a final September fix of \$199, a decline of almost two thirds from its March peak.

OTHER PGM

The rhodium price has fluctuated wildly in 2008. It started at \$6,850 and climbed to a record \$10,100. Rhodium fell heavily in the third quarter, with South African production improving as demand weakened and metal sales by auto makers and speculators were reported. It ended September at \$4,350.

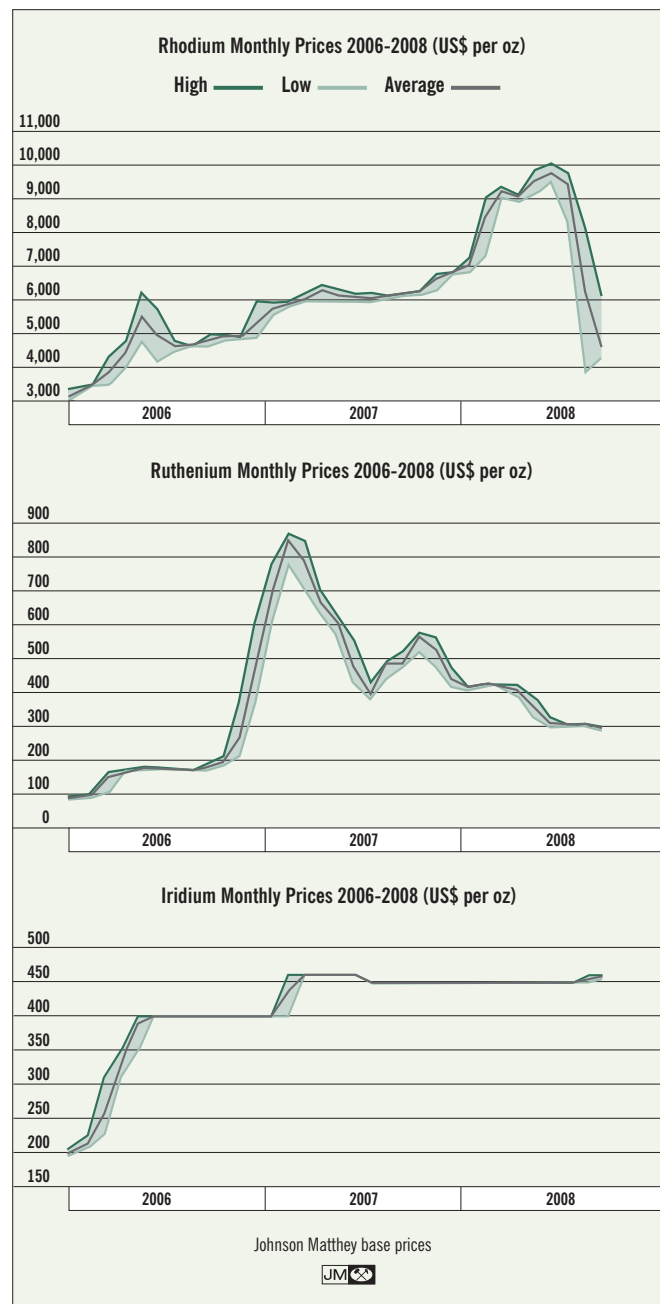
Rhodium began 2008 just below its previous record of \$7,000 (set in 1990) at \$6,850. Constant bids pushed it to a record price of \$7,025 on the 9th of **January**. Later in January, interruptions to South African mining drove the price upwards. These power supply issues combined with good end user interest to lift the price to \$9,425 on **March 7th** before buying dissipated and the price fell back below \$9,000. In early **April**, offers disappeared and the price rose to close to \$9,500 in mid-**May** – possibly driven by industrial users buying metal which they had previously been borrowing.

Although the price climbed to \$9,900 by the end of May, it dropped back to \$9,525 before finding support: physical purchasers quickly returned and the price rose to an all-time record of \$10,100 on **June 19th**.

Buying entered a seasonal slow period and rhodium slipped to \$9,600 by mid-**July**. However, market sentiment now changed as US vehicle output fell. There were widespread rumours of sales of rhodium stocks by the automotive sector and hedge funds. The price started inching lower but this turned into a rout, with rhodium hurtling below \$7,000 on the 12th of **August** and below \$5,000 a week later. The price finally came to a sudden halt at \$3,850 on the 21st.

Rhodium bounced sharply to \$6,200 at the end of August but US vehicle sales continued to worsen and Ospraie closed its flagship commodities hedge fund, draining any energy from the market. Rhodium ended the third quarter very weakly, at \$4,350.

Ruthenium started 2008 at \$415 and speculator and end user buying pushed the price up to \$425 in



February. It remained at this level until early **April**. However, a slowdown in purchasing meant that most demand could now be met by scrap recycled from hard disk production. The price dropped to \$300 in **June** but stabilised somewhat, ending **September** at \$290.

The iridium price remained at \$450 for the first seven months of 2008. However, it finally responded to steady buying and rose \$10 in **August** before falling back to end **September** at \$455.

The rhodium price varied wildly, even by its own standards, in 2008. Ruthenium and iridium were rather less exciting.