

# Prices & Futures Markets

## Platinum

The platinum price reached \$645 in January 2001, its highest level for almost 14 years. The rise was driven both by strong physical demand and the palladium price, which soared in reaction to actual and potential shortages of Russian metal. However, persistent selling by investors on TOCOM and funds on NYMEX pushed platinum down to \$555 by early April.

From mid June the poor economic situation in Japan, the weakening US economy and the falling palladium price stimulated heavy selling of platinum futures. Consequently platinum dropped \$160 in just two months, slipping under \$430 in mid August and then hitting a low of \$406 in October. A recovery began in late November as the US economic outlook started to improve, and market sentiment became more positive. This, coupled with talk in December of delayed Russian export quotas for 2002 plus steady physical demand, carried platinum up to \$477 by the end of the year. Platinum entered 2001 with a fix of \$610 on **January** 2nd. A rush of physical buying, followed by speculation that Russian pgm export quotas would be

delayed until February, pushed the price to \$645 by mid month – its highest level since April 1987. Sentiment was buoyed by the palladium price soaring over \$1,000 and by reports that General Motors expected to increase its platinum consumption in autocatalysts. However, funds and investors on NYMEX and TOCOM then moved to take profits and several rounds of selling eroded the price to \$604 by the end of the month.

Selling on the New York and Tokyo exchanges continued into early **February** but was mitigated by good physical demand and platinum edged up to \$608. Conflicting reports about when Russian pgm export quotas would be signed and a fall in the palladium price then triggered fund selling of platinum, dragging it down to \$592 by the 13th. By the 28th, however, the closure of short positions and continued solid physical demand had moved the price up to \$610.

Platinum slumped to \$576 on the 5th of **March**, US funds selling platinum futures as the palladium price plunged. Consumer buying briefly lifted platinum back above \$600 but anecdotal evidence of Russian spot sales pushed it down to \$590 on the 15th. Faltering equity prices plus the weakening US economy then set off further fund selling. With palladium still sinking, strong consumer buying

could not prevent platinum retreating to \$563 on the 30th.

**April** started with funds going short in New York and platinum ended on the 2nd at \$555. That, however, concluded a three week bout of selling. Driven by rising loco Zurich lease rates and physical demand, the price climbed over the next two weeks, peaking at \$630 after Easter. It then softened as short-term lease rates (which had reached 35 per cent) began to abate and offers of Russian spot material were reported, platinum ending the month at \$594.

As Russian sales dried up at the beginning of **May**, short covering was followed by investors re-establishing long positions on NYMEX and platinum advanced to \$622. These gains, however, were quickly relinquished and platinum traded around \$605 until the middle of the month. Further speculative purchasing and a rally in gold helped platinum climb to \$622 on the 29th. The rise was short-lived as fund selling in the USA plus a strengthening of the yen against the dollar precipitated selling on TOCOM, and the price fell to \$607.

Sales by the general public on TOCOM were reflected by a fall in London to \$594 on **June** 1st and were followed by stop-loss liquidation of long positions in New York. After settling

### Average PGM Prices in \$ per oz

Average	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2000	544.92	681.74	1,998.00	415.00	129.83
2001	529.02	603.25	1,603.89	413.01	132.11
Percentage Change	-3%	-12%	-20%	0%	2%

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



between \$585-593 for a week, platinum spot sales grew and traders speculated that investor liquidation of long positions on TOCOM might be imminent. Market sentiment became bearish and the price slid to \$574 on the 13th. Selling on the London fixings started to outweigh physical demand, while the slowing US economy and expectations of a further fall in Japanese demand added to the downward momentum. The price slipped to \$558 at the close of the month.

The first half of **July** was unremarkable; physical demand counterbalanced moderate selling pressure and the price floated between \$550-560. The market came to life on the 18th when Japanese investors, who had become unsettled by the poor short-term prospects for platinum demand, rushed to liquidate long positions. By the time the TOCOM daily price limit had been reached, over 100,000 oz of platinum futures had been sold by the general public. US funds subsequently closed out long positions on NYMEX and the price dropped over \$25 to end the day at \$520.

Further heavy selling by US funds and Japanese investors had depressed the London fix to \$490 by the 30th. On the 31st TOCOM again went limit down, and with little interest from industrial buyers, platinum fixed at \$476 having fallen over \$80 in 12 days of trading.

Thin trade between \$470-480 marked the first days of **August**. Between the 6th and the 8th, however, Japanese investors resumed their liquidation of long positions, selling heavily as pessimism about the outlook for demand grew. This, tied to a dearth of physical buying, pushed platinum down to a 19 month low of \$435 on the 9th. The belief that most substantial long positions on TOCOM had been eliminated then helped the price rebound to over \$450 but a second bout of selling on TOCOM caused a fall to \$422 on the 16th.

A new Russian presidential decree (No.742) covering trade in precious

metals and gemstones became effective on the 25th and briefly caused a hiatus in pgm exports. The regulation stipulates that the State Assay Chamber must certify shipments prior to export. However, the necessary administration had not been implemented in time, and exports were subsequently held up in customs. This triggered dealer short covering and lifted platinum over \$460.

On the 29th, however, Japanese importers reported that Russian pgm were still being delivered under annual contracts and concern eased. The poor short-term prognosis for the Japanese economy then triggered another round of selling on TOCOM, and the price subsided to \$446 on the 31st. During August almost 5 million contracts were traded on the Japanese exchange, equivalent to over 47 million oz of platinum.

The metal traded in a tight \$440-446 range until 11th **September**, with just light physical sales. Platinum made small gains in London in the immediate aftermath of the terrorist attacks on the USA, stepping up to \$455 on the 12th. A more significant rally started on the 14th when continuing delays to Russian shipments (compounded by the disruption to air traffic) led to a run of borrowing, and short-term lease rates rose to 16 per cent – the London fix climbed almost \$20 to \$474 as a result.

### Platinum Prices in 2001

London am and pm fixings

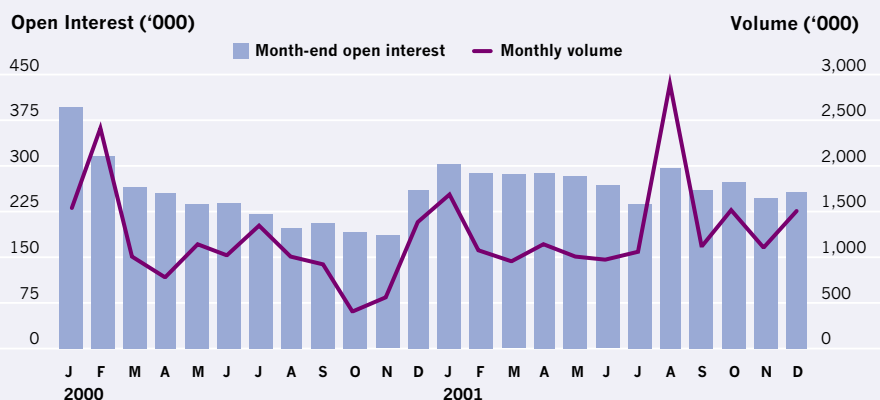
\$ per oz	High	Low	Average
Jan	645.00	602.00	621.51
Feb	613.00	592.00	601.20
Mar	609.00	563.00	584.99
Apr	630.00	555.00	594.87
May	622.00	598.00	609.95
Jun	596.00	558.00	579.42
Jul	560.00	473.00	531.38
Aug	482.00	422.00	451.31
Sep	495.00	429.00	458.13
Oct	462.00	406.00	431.67
Nov	443.00	416.00	429.61
Dec	480.00	450.50	461.33



Platinum reached the month's high of \$495 on the 20th before growing expectations of a significant slowdown in the US economy and talk of Russian sales in London triggered a plunge to \$447 on the 25th. Investor selling on TOCOM, in response to deepening concern about the Japanese economy, then reduced the price to \$429 at the month end.

Platinum slid to the year's low of \$406 on the 2nd **October** after TOCOM futures fell by the daily price limit. A rise in loco Zurich short-term lease rates to over 25 per cent tugged the price sharply higher to \$446 on the 5th, and after

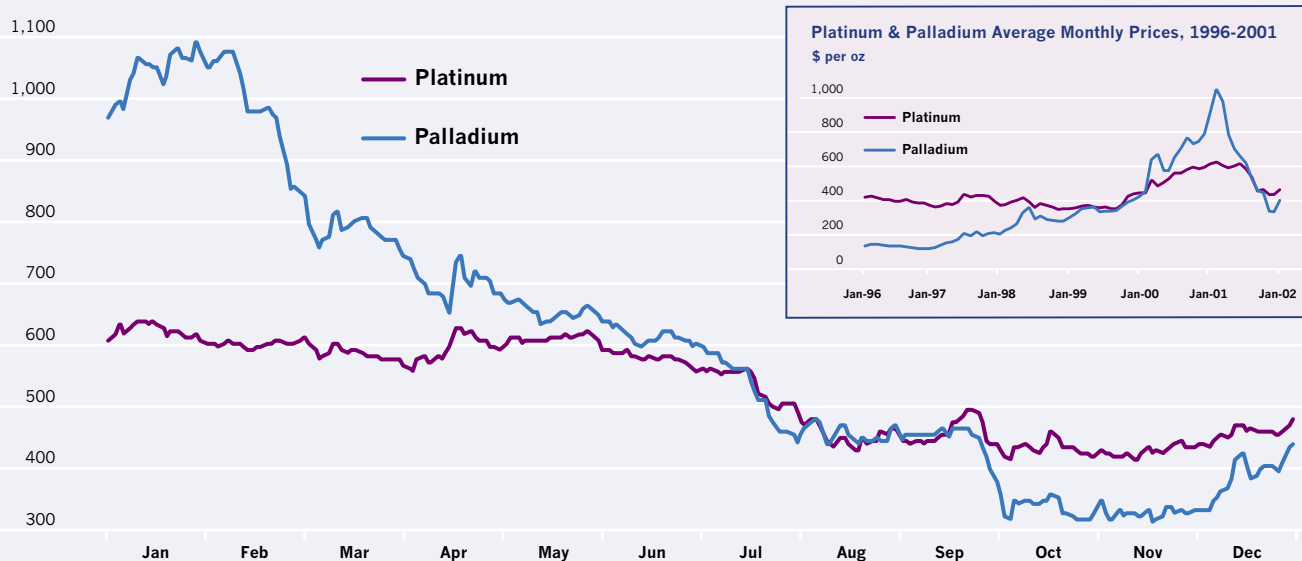
### TOCOM Platinum Futures Contracts in 2000 & 2001



## Daily Platinum and Palladium Prices in 2001



\$ per oz, London pm fixings



easing somewhat, another run of borrowing pushed one-month lease rates back towards 50 per cent. This sparked short covering on TOCOM, boosting platinum to \$462 on the 15th. Profit taking, falling lease rates and heavy selling in London then weakened the market. The price fell smartly to \$436 on the 17th and drifted downwards to end October at \$423.

The market was balanced in the first week of **November**, trading around \$420. Firm physical demand pushed platinum up to \$454 in London on the 12th, before a plane crash in New York caused the NYMEX January contract to spike to \$450 that afternoon. The crash, however, was not attributed to an act of terrorism and platinum shuffled back to \$424 on the 15th. After several quiet days, a strengthening of the dollar against the yen caused short covering on TOCOM and London fixed at \$443 on the 21st. The market edged under \$440 before improving sentiment about the economic prospects for 2002 carried platinum back to \$443 on the 30th.

The positive sentiment flowed into **December**. Rising equities, better than

expected US car sales, and rallies in silver and palladium lifted platinum to \$470 by the 10th. Russian sales and a downturn in palladium then undermined the market somewhat but solid industrial and jewellery demand kept the metal above \$450. From \$454 on the 20th, platinum climbed towards the end of the year. Rumours about delays to Russian export quotas for 2002 elevated the price to \$470 on the 27th and platinum ended 2001 with a fix of \$477.

## Palladium

The delayed approval of Russian pgm export quotas and an illiquid market propelled palladium to a record London fix of \$1,094 in January 2001. However, a combination of weakening industrial demand, particularly from the automobile and electronics sectors, and persistent offers of physical metal then produced a collapse, the price slumping to \$315 by early October.

The market began a cautious rally in November as the lack of Russian spot sales, which had been

suspended since August, began to have an effect. With sentiment about 2002 becoming more positive, palladium climbed to end the year at \$440. Activity on NYMEX and TOCOM was very limited during the year; only 117,000 contracts were traded on the Japanese exchange.

With little physical metal available in **January**, the palladium price jumped from the year's opening fix of \$965 to breach \$1,000 on the 8th in thin trading. Rising lease rates and rumours of delays to the approval of Russian pgm export quotas boosted the price to a new high of \$1,085 on the 11th. Following a dip for profit taking, industrial buying helped the metal to a record peak of \$1,094 on the 26th, a premium of almost \$480 to platinum. Light selling followed and palladium faded to \$1,050 on the 31st.

On the 8th of **February** the price dropped to \$1,040 as rumours circulated that Russian export quotas would be signed shortly. Offers of spot material lowered the price to \$975 over the next three days, with most traders identifying Russia as the source of the sales (Norilsk

Nickel, the world's dominant producer, holds a 10 year export licence for palladium and so is not dependent on the annual quota negotiations). Consumer interest supported the metal around \$975 between the 12th and the 19th but then further spot sales in London on the 21st started a slide that would last virtually uninterrupted until October. The price fell to \$935 at the afternoon fix, dropped under \$900 the following day, and then ended the month at \$839 after heavy fund selling.

Spot sales continued to act as a dead weight in **March**. The price sank under \$800 on the 1st and tumbled to a four month low of \$750 on the 5th. Again, the consensus amongst traders was that the palladium entering the market was being sold on behalf of Russian interests. There was a short rebound as selling evaporated, palladium briefly touching \$860 on NYMEX, but physical metal returned to the market from the 20th onwards. The volumes offered, although small, were not easily absorbed and the price retreated to end March at \$738.

In early **April** the volume of physical sales increased, precipitating a further fall in price. The London fix dropped below \$700 on the 4th and sank to \$650 on the 12th. On the 17th, a dealer that had been a leading seller of physical metal started buying instead, causing a rebound on the London fixings. Traders

interpreted this as an attempt to support the palladium price above \$650. The sudden lack of physical metal in the market started a rapid rally, which was fuelled by some frantic short covering. The spot price jumped above \$700 and the afternoon fix reached \$735. The spike peaked at \$765 on the morning of the 18th but then quickly subsided. A different seller began offering material on the fixings, buying fell away, and the price slid back under \$700 by the 20th. With evident physical availability and weakening demand, palladium drifted down to \$682 on the 30th.

The first eight days of **May** were very quiet – light selling was balanced by physical demand and the price settled between \$670-675. It softened to \$652 on the 11th before an influx of metal on to the London fixings caused a sudden drop to \$630 on the 14th. The remainder of the month was uneventful: with only small volumes offered in London, palladium traded in a \$640-660 range.

Moderate physical sales and a lack of buying meant a lacklustre **June**; by the 13th the price had dropped below \$600. Industrial buyers were attracted back at this level and palladium rose to \$620 on the 20th. The downward momentum resumed on the 22nd with further small physical volumes offered persistently on the London fixings; the price slipped under \$600 again on the 28th.

### Palladium Prices in 2001 London am and pm fixings

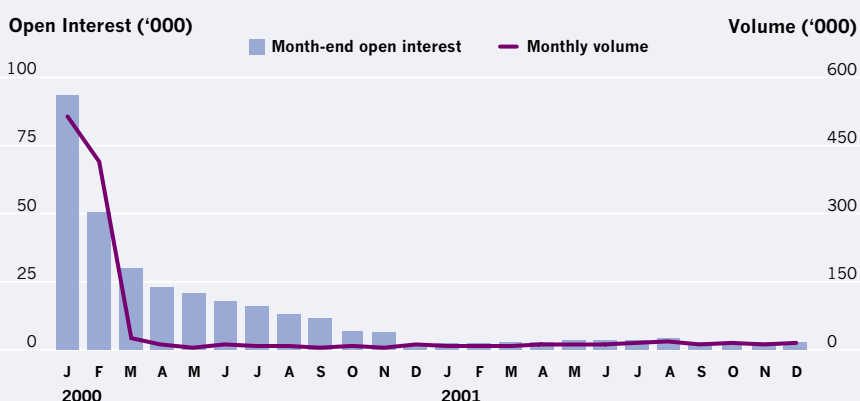
\$ per oz	High	Low	Average
Jan	1,094.00	965.00	1,040.75
Feb	1,081.00	839.00	973.43
Mar	828.00	735.00	780.86
Apr	765.00	650.00	697.21
May	675.00	630.00	654.98
Jun	645.00	594.00	613.92
Jul	598.00	438.00	525.30
Aug	485.00	438.00	455.18
Sep	466.00	360.00	444.15
Oct	360.00	315.00	335.24
Nov	347.00	315.00	328.65
Dec	440.00	355.00	399.25



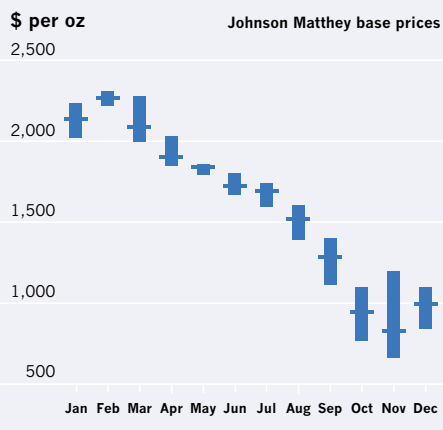
By the 13th **July** palladium had subsided to \$559 in subdued trading. Thereafter, the descent accelerated as physical metal from a variety of sources fed a market from which consumers were almost completely absent. Russian sales were joined by offers from Japanese traders as they sought to dispose of excess stocks, which had accumulated due to the weakness of domestic demand. Palladium slid to \$545 on the 16th – a discount to platinum for the first time since May 2000 – and dropped below \$500 by the 20th. With minimal buying and continued offers of physical metal, palladium hit an 18 month low of \$438 on the morning of the 31st, a drop of \$160 in a month. Short covering then provided a fillip, the price moving up to \$457 that afternoon.

Palladium recovered to \$485 on the 3rd of **August** as the persistent selling waned and buying interest returned. However, it dropped sharply to \$438 on the 7th as the platinum price plunged. On the 9th, news emerged that Norilsk Nickel intended to limit spot sales to help boost the price and the company subsequently withdrew from the spot market. The announcement fuelled a rebound to \$475 but the price soon

### TOCOM Palladium Futures Contracts in 2000 & 2001



## Monthly High, Low & Average Prices of Rhodium in 2001



retreated to trade between \$440-460 for much of the remainder of the month.

For the first three weeks of **September** the market was almost comatose, fixing in the narrow range \$450-466 between the 1st and the 21st. The price started to fall again from the 24th, following platinum down, and forceful selling on the afternoon London fix on the 26th caused a slump to \$400. Even at this level industrial demand remained weak and offers of small volumes were sufficient to weigh the price down to \$360 on the 28th.

Palladium hit \$315 on the 2nd **October**, its lowest price for over two years, as sales of physical metal continued. Russian officials attributed the sales to US consumers reducing stocks, but some traders claimed that Russian material was also entering the market. Industrial buyers returned at this level and the price rebounded to \$349 as dealers covered short positions.

After fluctuating between \$340-360 until the 17th, palladium slipped backwards, in tandem with platinum, to end on the 22nd at \$317. Almaz, Russia's pgm marketing agency, caused the fix to jump to \$346.50 on the 29th by saying that it would not return to the spot market until prices recovered. But the rally evaporated rapidly and the price slid to \$320 on the 31st.

The market touched \$315 again at

the first fix of **November**, then firmed to \$331 on the 2nd as reports suggested that Russian palladium spot sales might not resume until mid 2002. For much of the rest of the month trading was very quiet around \$330. The final two days of the month saw palladium progress to \$347 following a platinum rally, albeit on small trading volumes.

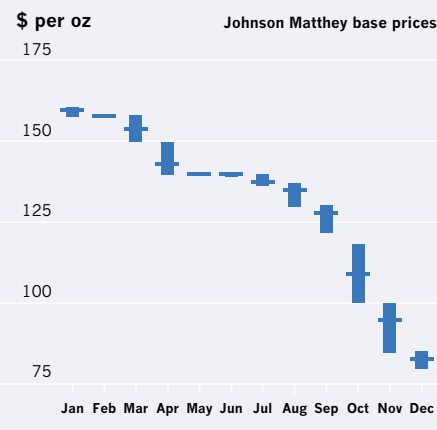
Palladium advanced by over \$80 in **December** on the back of modest industrial buying and the absence of Russian spot sales. From an opening fix of \$355 on the 3rd, the price climbed to \$423 on the 10th. Sentiment was helped by rising base metal prices and an improvement in some equity markets. Profit taking knocked palladium back to \$383 on the 12th and it traded close to \$400 until just before Christmas. Reports that delays in issuing 2002 Russian pgm export quotas were likely surfaced on the 24th and this speculation lifted palladium to \$440 at the year's final fix.

## Other PGM

A lack of Russian sales boosted rhodium to a six month high of \$2,300 in February 2001. Russian metal reappeared on the market from March onwards, and with industrial demand weak the price fell to \$675 by mid November. Consumer buying returned at this level and helped rhodium recover to \$950 at year end. With demand faltering and supply ample, the ruthenium price fell to \$80 during 2001. Process catalyst and electronic demand for iridium weakened during the year, and the price softened slightly in response.

A shortage of Russian metal pushed the Johnson Matthey rhodium base price from \$2,025 at the beginning of January to a high of \$2,300 in late February. Russian sales resumed in March, however, and by the end of April the price had retreated below \$2,000. With continued offers of metal from Almaz

## Monthly High, Low & Average Prices of Ruthenium in 2001



during the traditionally quiet summer months and reduced purchases by auto companies, rhodium was trading at a 20 month low of \$1,125 by the end of September.

In October and early November the market struggled to absorb more rhodium from Russia and the price sank to \$675, its lowest level since the end of 1998. Russian sales then abated and consumer interest returned, causing a rebound to \$1,250 on the 27th November. Further selling saw the price to slip back to \$850 by the 20th December, before the possibility of delays to Russian exports during early 2002 resulted in a moderate rally to \$950.

Over the course of 2001 ruthenium lost almost all of the gains made the previous year. Trading was quiet during the first six months of the year, the Johnson Matthey base price easing from \$160 in January to \$140 in June. Long liquidation by speculators and weak demand for ruthenium-based electronic components such as resistors resulted in the decline accelerating in the second half, the price touching \$100 by the end of October and ending the year at \$80.

The downturn in the electronics industry in 2001 (particularly the mobile phone sector) also reduced demand for iridium crucibles. The fall in demand was reflected in the JM base price, which faded from \$415 to \$395 in November.