

JM&B Monthly Gold & Silver Report

May 2007

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Introduction

The purpose of this report is to comment on developments in the gold and silver markets on a monthly basis. For more information about this report, please consult the Appendix. Johnson Matthey plc issues reports on platinum group metals:

http://www.platinum.matthey.com/publications/price_reports.html

Contents

- 1. Commentary
- 2. Gold
 - 2.1 News and Fundamental Considerations
 - 2.2 Technical Comments
- 3. Silver
 - 3.1 News and Fundamental Considerations
 - 3.2 Technical Comments
- Appendix More about this report

1. Commentary

Both gold and silver continued in short-term downward price trends in May. However, at the end of the month both metals looked like a rally in price was in progress.

This months report contains lots of interesting gold and silver news.

2. Gold

2.1 News and Fundamental Considerations

Selected News Items from the Month

Sydney, 3rd May 2007, (IHT) – The Russian economist Nikolai Kondratiev argued in the 1920s that commodities move in 50- to 60-year cycles. His analysis suggested prices would rise early this century. They did.

Now the investors Shane Oliver and Marc Faber are using his theory to back their bets that the five-and-a-half-year-old rally in commodity-related stocks is only just the beginning.

"The norm in financial markets is to look at very short-term cycles," said Oliver at AMP Capital Investors in Sydney. "I think that's wrong. Kondratiev allows you to view these things in a broader context." BHP Billiton, the world's biggest mining company, and Rio Tinto Group, the third largest, are among AMP's top 10 holdings.

Shares of companies that produce raw materials have leaped 173 percent and energy stocks have jumped 118 percent since October 2001, when commodity prices began rising. The two groups have had the biggest gains in Morgan Stanley Capital International's World index since then. Shares of BHP, based in Melbourne, have almost quadrupled, while those of Rio Tinto, of London, have almost tripled.

Oliver and Faber are among a new generation of "super cycle" proponents that also includes strategists at Citigroup, Deutsche Bank and Goldman Sachs. They say that supply shortages and growing economies in China and India will send prices higher for years to come.

Their intellectual ancestor, Kondratiev, founded the Institute of Conjuncture in Moscow in 1920. He argued in books and papers like "The Major Economic Cycles," published in 1925, that long waves in economies and prices are inherent in the capitalist system. Upswings are caused by increased capital investment, and downswings arise as those investments lose value. New markets and new technologies also push prices up during the expansionary phase.

He observed three upswings: 1789 to 1814, spanning the French Revolution and Napoleonic wars; 1849 to 1873, an era of European industrialization; and 1896 to 1920, when the United States emerged as the world's largest economy. Each was followed by a commodities decline of between 23 and 35 years. The average decline lasted 29 years, the average upswing 24 years.

Using Kondratiev's analysis to project forward, a 29-year slump was due from 1920 to 1949 - a span that includes the Great Depression and World War II. A full 53-year up-and-down cycle followed, making another upswing due in 2002.

"I agree that commodity prices move in long cycles," said Faber, whose money-management firm, Marc Faber, is based in Hong Kong. "The up wave of the Kondratiev cycle is likely to last for at least another 15 to 20 years."

Faber owns mining stocks, which he declined to name, as well as gold, rare metals and agricultural land. He is reluctant to hold bonds, which he said do not perform well in a rising Kondratiev wave.

The best-performing commodity-related stocks since the rally started include Freeport-McMoRan Copper & Gold of Phoenix, up 505 percent; Valero Energy of San Antonio, up 647 percent; Korea Zinc, of Seoul, up 988 percent; the German steel maker Salzgitter, up 1,247 percent; and the Indonesian coal exporter PT Bumi Resources, up 2,100 percent. The MSCI World index is up 67 percent in the same period.

The Reuters/Jefferies CRB index of 19 commodities has surged 139 percent since October 2001, but it has slipped 10 percent from its May 2006 high. But proponents of super cycles say the pullback is just a blip in a longer rally. The Australian central bank shares their optimism.

"The rapid growth in world demand for metals and other resources appears to be showing little sign of abating," the Reserve Bank of Australia wrote in its monthly bulletin published April 19.

"There are good reasons to believe that strong demand, from emerging economies in particular, may continue for several decades."

Kondratiev himself did not profit from his analysis. He was convicted for championing private farm ownership in the 1930s and executed at the age of 46 during Josef Stalin's great purge in 1938.

London, 21st May 2007, GFMS

Key Points

De-hedging was boosted by buy-backs in the March quarter with a provisional 4.12 Moz (128 t) cut in the outstanding delta-adjusted hedge book.

Barrick's reduction in its corporate gold sale contracts and Gold Fields' elimination of the South Deep hedge accounted for roughly two-thirds of gross de-hedging.

At end-March, total outstanding producer positions on a delta-adjusted basis amounted to 39.89 Moz (1,241 t).

A 7% quarter-on-quarter improvement in the hedge book marked-to-market, despite a 5% rise in the spot price used to value the book, was explained by the impact of producer buy-backs.

Summary and Overview

Following a restrained six months of de-hedging in the second half of 2006, activity accelerated in the March quarter with the impact of two major buy backs, taking headline de-hedging to a substantial 4.12 Moz (128 t). In addition to the Barrick buy back and Gold Field's elimination of the South Deep hedge book, Buenaventura announced that it had bought back 25% of its outstanding commitments.

A further contribution was provided by AngloGold Ashanti who made a noteworthy reduction in the net delta hedge against its outstanding forward-pricing commitments, which together with the other three big changes in hedge cover outlined above, accounted for close to 90% of gross de-hedging.

Fresh hedging during the quarter included positions taken by Etruscan Resources, St Barbara Mines and View Resources. Strategies included zero cost collar structures, the purchase of put options and a forward sales programme. In total, these three players added (on a net basis) just over 500,000 ounces (16 t) to the global delta-adjusted hedge book.

Investor activity, once again, played a dominant role in the direction that the gold price traced out, which strengthened to record an average for the period of \$649.82, a 6% increase quarter-on-quarter. Average realised prices reported by producers did not, however, equal the gains in spot, with a more muted 3% rise.

The outlook for de-hedging in the June quarter is for another healthy cut in the outstanding delta-adjusted position. In the second half, however, de-hedging is expected to return to levels closer to the run rate of the book, which currently stands at around 1.0 Moz (31 t) per quarter.

2.2 Technical Comments

Long Term Technical Comments

The long-term price trend for gold remains up:



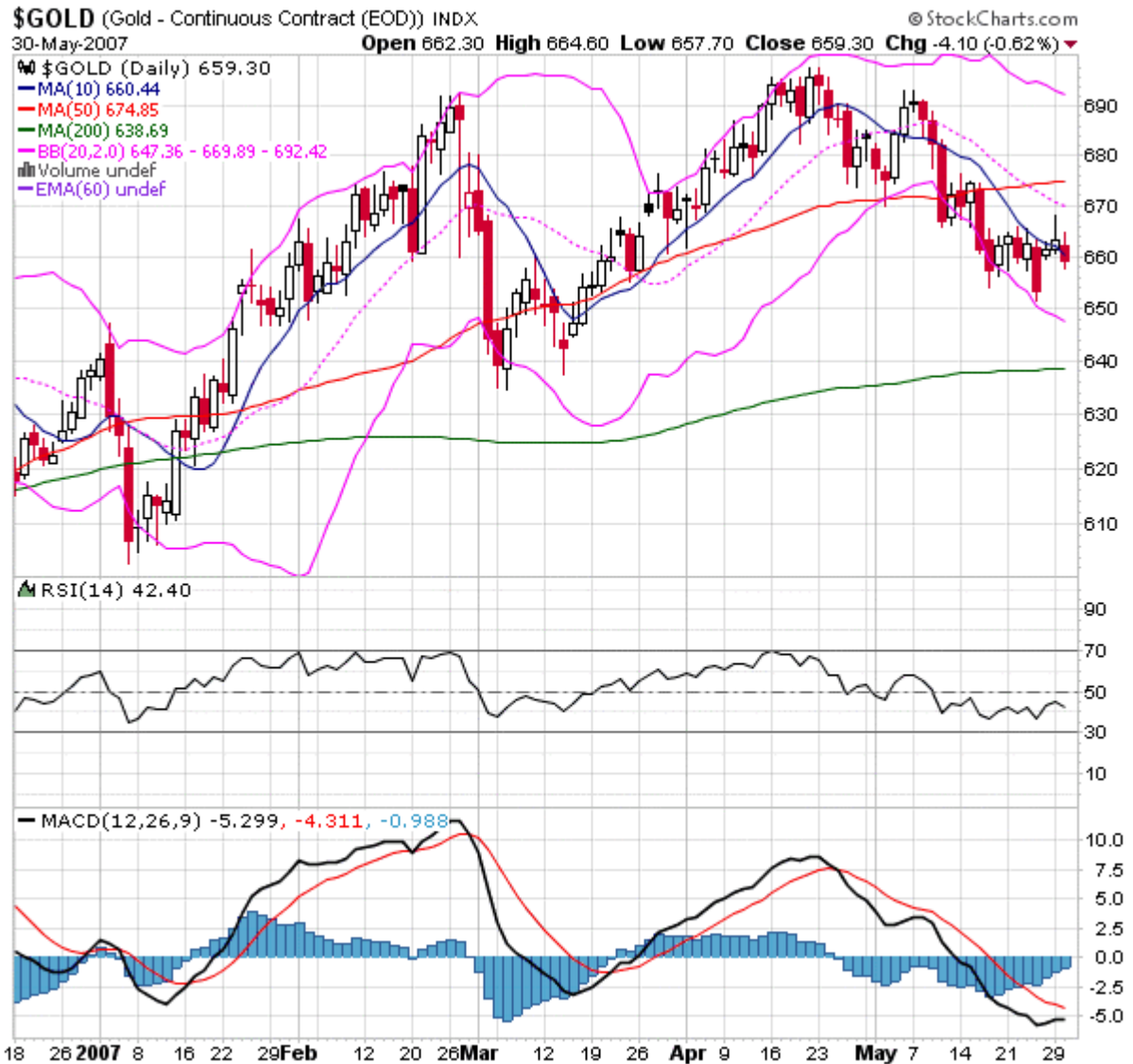
Daily/Weekly Technical Comments

London afternoon fix in USD/oz:

Open	High	Low	Close
1 st May	8 th May	30 th May	31 st May
673.6	684.3	652.7	659.1

London afternoon fix in €/oz:

Open	High	Low	Close
1 st May	4 th May	30 th May	31 st May
493.8	506.7	485.7	490.1



Although gold spent most of May declining in price, it appeared to be stabilising in price by the end of the month.

3. Silver

3.1 News and Fundamental Considerations

Australia, 1st May 2007, (Daily Telegraph) – Cheaper solar power could be available in a few years due to pioneering work by Australian scientists on an improved solar cell.

Researchers at the University of New South Wales ARC Photovoltaics Centre of Excellence have developed a means of increasing the cell's light-trapping ability by up to 50 per cent.

They say that apart from a home's cooking and hot-water heating needs, such improvement to an electric solar system could power an average house with panels covering 10 square metres.

"Overall, our new solar cells increase power generated by 30 per cent," said Dr Kylie Catchpole, co-author of the study.

As part of the process, UNSW researchers, led by Phd student Supriya Pillai, place a thin film (about 10 nanometres thick) of **silver** onto a solar cell and heat it to 200C.

The film breaks into tiny 100-nanometre "islands" of silver and raises its light-trapping efficiency.

With this the team can move from thick expensive silicon "wafers" to cheaper "thin film" cells with less silicon.

"Most thin-film solar cells are between eight and 10 per cent efficient, but the new technique could increase efficiency to between 13 and 15 per cent," Dr Catchpole said.

"If they're below 10 per cent efficient, then you can't really afford to install them, because it would take up too much of your roof area, for example, to power your house."

It can start to become commercially viable once the converting efficiency exceeds 10 per cent.

Silicon is a poor absorber of light. That affects the cost of solar technology, as up to 45 per cent of its cost is due to the cost of silicon.

Prices for an installed solar system for an average house could fall 25 per cent from \$20,000 to \$15,000 once the technology filters through, the researchers say.

There are only 30,000 Australian households – out of eight million – which have solar panels for electricity.

If this solar system is used with a solar heating system for water and cooking, the excess power generated can be sent back to the power grid.

"You connect with the electricity grid system where you have no batteries and then sell back your excess electricity," Dr Catchpole said.

"You are then not wasting any electricity, similar to Michael Mobb's house (in Chippendale, Sydney)," she said.

The report of the breakthrough will appear in the upcoming issue of the Journal of Applied Physics.

London, 24th May 2007, (Reuters) – Zurich Cantonal Bank's exchange traded funds (ETF) have attracted investment equal to 25,000 ounces of platinum <ZPLA.S> and 133,000 ounces of palladium <ZPAL.S> since their launch on May 10.

Oliver Holzer, head of ETF sales at the bank, told Reuters on Thursday that its silver ETF <ZSIL.S> had accumulated 2.5 million ounces worth 40 million Swiss francs (\$32.33 million).

"For us, it's a good start. Now we have a good feeling for it and we can pick up from here," Holzer said, adding the three ETFs had together attracted investments worth 141 million Swiss francs so far.

"People are more focussed at the moment on palladium."

Holzer told Reuters earlier this month the bank expected to attract investments equivalent to 70,000 ounces of platinum, 200,000 ounces of palladium and 20 million ounces of silver in a year from the launch date.

"I think we will definitely be higher in palladium and achieve platinum and silver (targets)," he said, adding the palladium fund might accumulate 250,000-300,000 ounces in a year, while platinum volumes might be 60,000-70,000 ounces.

He said there had been no withdrawal from the ETFs, listed on the SWX Swiss Exchange, so far despite a correction in metal prices in the past weeks.

Holzer said the bank launched a gold fund in March last year and investors had so far put in about 490 million Swiss francs, which was equal to 585,000 ounces of the metal.

New York, 23rd May 2007, (GFMS)

GFMS and The Silver Institute launched World Silver Survey 2007 at an event in New York City on 23rd May. The World Silver Survey contains the only truly global analysis of the world's silver markets and has been produced by the independent precious metals research consultancy, GFMS, on behalf of The Silver Institute in Washington since 1994. Below is a selection of highlights from the presentation given by Philip Klapwijk, Executive Chairman GFMS:

Market Moves

The rise in the silver price in 2006, basis annual averages, was an impressive 58%, with the \$11.55 achieved the highest ever bar 1980's average of \$20.98. The daily high within 2006, \$14.94 on 12th May, was a 25-year high.

The rise in average prices and the rally to the May high were both largely due to surging investment and, in particular, the launch of a silver exchange traded fund (ETF). However, resilient fabrication and a limited scrap response also contributed.

Supply Fundamentals

Global mine production rose just 0.1% in 2006 to 646.1 Moz (20,095 t), as growth in Peru, China, Chile and Mexico was countered by a dramatic fall in Australian output, largely the result of rehabilitation work at Cannington.

Scrap grew by less than 1% to 188.0 Moz (5,848 t), reflecting the price inelastic nature of industrial scrap and the countervailing behaviour of photographic scrap (down heavily due to digital inroads) and jewellery scrap (up notably due to the price).

Net government sales rose by 18% to 77.7 Moz (2,415 t), thanks mainly to higher Russian sales and ongoing Indian disposals.

Demand Fundamentals

Total fabrication was not far off unchanged in 2006, slipping only 0.9% to 840.5 Moz (26,142 t). This overall resilience was mainly due to industrial offtake, which rose by 6% to a record

430.0 Moz (13,375 t), thanks in the main to a strong electrical/electronics performance. Price strength, however, helped cause a 5% fall in jewellery demand, while, being burdened additionally with structural issues, silverware fell a stronger 11%. Losses to digital meant a decline for photographic fabrication of 10%.

Implied net investment totalled 64.5 Moz (2,006 t) last year. Much of the drive came from the launch in April of a silver ETF, plus a lesser contribution from net OTC buying. The motivation for buying in both arenas included strength in other commodities and dollar weakness. The 2006 implied figure was some 17% lower than in 2005, chiefly due to long liquidations on Comex.

Hedging swung to the demand side in 2006, to the tune of 6.8 Moz (211 t), partly due to greater use of purchase agreements.

Here are the key data:

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Supply										
Mine Production	520.0	542.1	556.8	590.9	606.2	593.8	600.7	622.2	645.7	646.1
Government Sales	-	33.5	97.2	60.3	63.0	59.2	88.7	61.9	65.9	77.7
Silver Scrap	169.3	193.9	181.6	180.7	182.7	187.5	184.0	181.5	186.4	188.0
Producer Hedging	68.1	6.5	-	-	18.9	-	-	9.6	27.6	-
Implied Net Disinvestment	78.9	45.2	42.0	83.5	-	8.3	-	-	-	-
Total Supply	836.3	821.2	877.5	915.4	870.8	848.7	873.4	875.2	925.6	911.8
Demand										
Fabrication										
Industrial Applications	319.5	313.2	336.1	371.3	332.4	336.5	346.8	364.2	405.8	430.0
Photography	217.4	225.4	227.9	218.3	213.1	204.3	192.9	181.0	162.1	145.8
Jewellery	150.6	140.6	159.8	170.6	174.3	168.9	179.2	174.8	173.8	165.8
Silverware	117.7	114.2	108.6	95.6	105.2	82.6	83.0	66.2	66.6	59.1
Coins & Medals	30.4	27.8	29.1	32.1	30.5	31.6	35.6	42.4	40.0	39.8
Total Fabrication	835.6	821.2	861.5	888.0	855.4	823.9	837.4	828.6	848.3	840.5
Government Purchases	0.7	-	-	-	-	-	-	-	-	-
Producer De-Hedging	-	-	16.0	27.4	-	24.8	20.9	-	-	6.8
Implied Net Investment	-	-	-	-	15.4	-	15.0	46.6	77.2	64.5
Total Demand	836.3	821.2	877.5	915.4	870.8	848.7	873.4	875.2	925.6	911.8
Silver Price (London USD/oz)	4.90	5.54	5.22	4.96	4.37	4.60	4.88	6.66	7.31	11.55

All data are in millions of troy ounces.

Data prepared by Gold Fields Mineral Services Ltd: www.gfms.co.uk for www.silverinstitute.org

3.2 Technical Comments

Long Term Technical Comments

No change in the long-term trend for silver:



Daily/Weekly Technical Comments

London fix in USD/oz:

Open	High	Low	Close
1 st May	8 th May	18 th May	31 st May
13.45	13.48	12.87	13.25

London fix in €/oz:

Open	High	Low	Close
1 st May	8 th May	17 th May	31 st May
9.86	9.94	9.54	9.86



Although silver spent most of May declining, technical indicators suggested a move to higher prices at the end of the month.

John Fineron, 1st June 2007

Appendix: More about this report

Purpose of the Report

The purpose of this report is to comment on developments in the gold and silver markets on a monthly basis. Johnson Matthey plc issues reports on the platinum group metals:

http://www.platinum.matthey.com/publications/price_reports.html

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<http://www.adobe.com/products/acrobat/readstep.html>

This report is prepared in the English language, as are the vast majority of contributions on precious metal markets.

Structure of Report

The report comprises two sections:

Fundamental Considerations

This section addresses aspects of supply and demand in gold and silver, which typically affect the market over periods of **several years**. Over the long term, the price of a commodity will rise or fall until natural supply and demand reach equilibrium. Completion of this process, can take many years and is significantly influenced by hoarding and dis-hoarding. For example, dis-hoarding of stockpiles to compensate for supply shortages can proceed over decades and thereby delay movement to a true equilibrium price.

Technical Comments

This section describes aspects of technical analysis in gold and silver, which can be used to assist in buy and sell decisions over periods of **weeks to months**. Traders often use technical analysis to trade or profit from price movements up or down. Because large traders, e.g. hedge funds, often use the same signals, price-movements are often amplified and technical signals become self-fulfilling prophecies due to the herd-mentality.

Learn more about technical analysis:

<http://stockcharts.com/education>

and the terms used:

<http://stockcharts.com/education/GlossaryA.html>

Learn more about candle charts:

<http://www.litwick.com/about.html>

All charts used are courtesy of Stockcharts.com unless otherwise stated.

Find out more about the Elliot wave principle:

<http://www.prognosis.nl/principle/index.html>

Please note that our technical comments will be purely technical in nature and will not attempt to rationalise or second-guess the reasons for price movements.

Advice on buying and selling precious metals

It is not the policy of Johnson Matthey & Brandenberger AG, to advise customers on specific buy or sell points. We are however prepared to assist customers in formulating views on precious metal markets and preparing strategies suited to their individual buying and selling needs.

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