J.P.Morgan

North America Equity Research
25 November 2008

Precious Thoughts #19

Commentary, ideas, charts and tables

- **Gold equities have been underperforming when gold investors were expecting more.** In this note we conclude that the gold equities face challenges that explain their weakness and our preference for the metal. However, the tighter gold supplies and counterparty risk could give gold (and thus indirectly the equities) a lift through year end.

- **The gold miners face a tough Q4.** Even though fuel costs are falling, so are base metal credits. On the Q3 conference calls, mining companies were coy about the benefits of lower fuel costs since they still face cost pressures elsewhere.

- **While current market moves are consistent with 1930s deflation, the very aggressive stimulus packages raise a new issue of currency stability.** In the 1930s the dollar was so strong that the government repriced gold in an attempt to devalue the currency. Excessive liquidity expansion was essentially an elixir that extended economic growth and now may threaten confidence in the dollar. The rise in the CDS on the 10 year Treasury is, in our opinion, an indicator to watch as "fire alarm" for investor sentiment toward the dollar.

- **Is it safe to go back in the water?** The gold equities are correlated with both gold bullion prices and the general markets. We suspect they have been (at least in part) depressed by general market weakness. While we continue to recognize the difficulties the gold miners face, we feel they have probably underperformed enough for now, and we'd be buying the gold space for the run into the holidays.

Global Gold and Precious Metals

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Gold & Precious Metals Sector Suggestions:
Overweight: Agnico-Eagle (AEM), Compania de Minas Buenaventura (BVN), Kinross (KGC), Goldcorp (GG), Newmont (NEM), Silver Wheaton (SLW), Randgold Resources (RRS), Harmony (HMY), Newcrest (NCM).

See page 24 for analyst certification and important disclosures, including non-US analyst disclosures.

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Investment Thesis

Where's the next Homestake? The gold bugs enjoy pointing to Homestake as one of the best-performing Depression-era stocks, rising 500% as the Dow crashed to about 40% of its peak level in 1929. Gold has shown two faces to the market: gold equities have underperformed the S&P500 since the beginning of this financial crisis, but gold bullion has outperformed the general markets handily. We continue to feel this results from the operational challenges the gold miners face as a group but points to upside potential for gold prices as mine supply continues to fall and now central bank sales diminish. Long-only funds can't *eat* relative performance, and we can understand frustration with gold's performance. Work we did on gold's performance in the 1930s shows how gold was a strong relative performer. With hindsight, the best decision in the 1930s would have been to liquefy investments and hold dollar cash, and many seem to be expecting this outcome now with the rush to US government debt.

History doesn't repeat, but it does rhyme. The dollar benefited in the late 1930s and beyond as 1) it took over from the pound as the world's currency; and 2) the US economy boomed, helped by strong demographics and technological leaps stemming from WWII. It's difficult to know now how the current stimulus packages will be paid for as US demographics drive a switch toward consumption over investment and also as the technologies of growth are commoditized and their use is exported to reduce cost.

In the current environment, capital flows into the dollar make sense with carry-trade unwinds and generalized fear, and our favorite technician feels the dollar could strengthen further. However, gold should not be simplified to being the dollar-not. Gold does diverge from its relationship with the dollar as it did in the late 1990s and, more recently, in late 2005-early 2006. We believe this occurs when the supply demand fundamentals of gold overcome the prevailing (price) relationship with the dollar. We see mine supply continuing to fall and now, with central banks depleting planned sales quotas, we expect official sector sales to fall quickly. Given the very large above-ground gold stocks, falling supply does not guarantee stronger pricing, but it does, in our opinion, create the right environment for stronger prices.

We believe gold normally trades as a commodity, and its price potential is buffered by value-driven Asian demand. However, from time to time investors lose confidence in currencies (as they did in the late 1970s). Given the much larger size of the currency markets, only a small reallocation of funds into gold is needed to enliven the space. Already the confidence of enough small investors has been lost such that gold's coin and small bar market has seized up. Barrick's CFO reported in answer to our question that some banks had withdrawn funds from the lending market, and this may have lifted the cost of borrowing gold. Our chart of the rolling correlation between gold and the dollar is (in our opinion) beginning to show potential for a breakout. We'd be buying some gold for our Christmas stocking and Hanukkah gifts. We like the pure play on gold itself and also our Overweight stocks Agnico-Eagle (AEM), Compania de Minas Buenaventura (BVN), Kinross (KGC), Goldcorp (GG) and Newmont (NEM).

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In more detail

Homestake did well in deflation
Gold bug lore says that gold equities are strong performers during deflation because of Homestake's record in the 1930s. Homestake was very successful, rising 500%, but we are wary of sample sizes of one. Homestake benefited from the 50% upward repricing of gold in 1934, which was essentially an attempt at a 1930s stimulus package by devaluing the dollar against gold.

Our research suggests that Homestake was helped in the 1930s by higher grades, a new mining method and a compliant labor force. Homestake reported higher grades in the 1930s, which was due to better grade ore, an improved mining method or a combination of the two. Additionally, Homestake benefited from a very motivated labor force. There are stories from the time about how, at shift's end, miners were confronted by a line of hungry men applying for job openings.

Might deflation lower costs?
From the peak in 1929 the CPI fell about 40% at the low point in 1933. For most sectors this was not very helpful since both revenues and costs declined. Homestake benefited because of the fixing of gold at the higher level and the higher grades that (we understand) were mined.

Mine costs can be broadly broken down into labor 50%, energy (electric and diesel) 25%, consumables 15% and other 10%.

Sharply lower oil prices should help the gold miners after the painful energy price rises of the last two years, but is it enough? Over the last few years the sharp rise in cash costs came from a ~10% rise in input costs and a ~10% decline in grades mined. The biggest cost category is labor, and after several decades of underinvestment, labor shortages should support prices if this economic downturn is short lived. However, in an extended downturn, there may again be a line at the mine gate (or a waitlist on the website).

Copper bottoms. Majors Barrick, Goldcorp and Newmont have significant copper operations at Zaldivar, Alumbrera and Batu Hijau, respectively. With copper 60% off its peaks, this business is likely to depress gold company results. If deflation looms, then the table of relative performance in the 1930s suggests that copper could depress results for a while. Of note, the silver producers are also exposed to base metal credits and though seldom mentioned, reduced credits are likely to lead to higher reported costs.

Gold equities' recent performance has been disappointing
Far from outperforming in a period of economic weakness, the gold equities have disappointed against gold and the S&P. What's going on?

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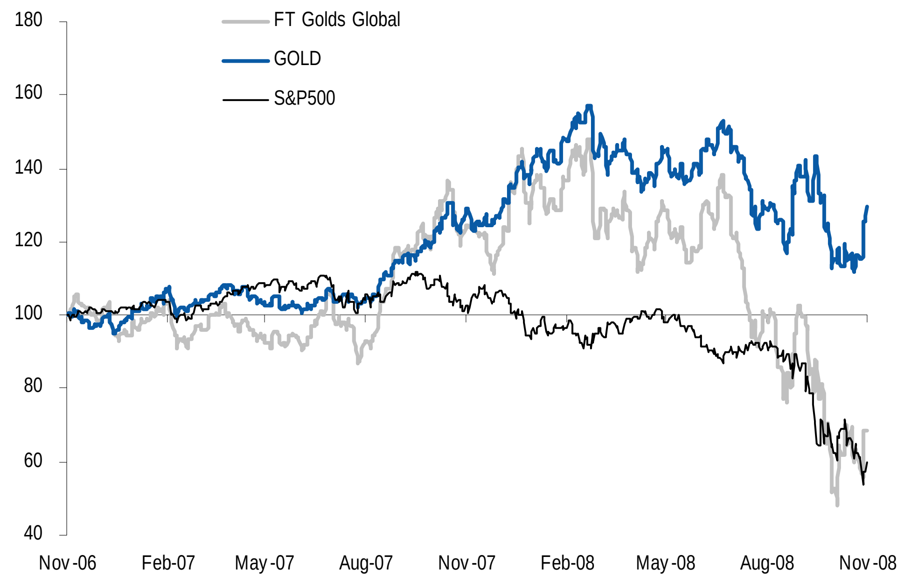
Figure 1: Relative Performance of Gold, Gold Equities and S&P500



Source: Bloomberg.

We continue believe that gold equities trade as a type of gold option. The size of the option is the amount of gold that underpins each share, and the exercise price of the option is the ongoing cost of production, which includes cash costs, maintenance capex and essential G&A. Of course, the last five years have seen cash costs grow 119%. Option pricing models show that the exercise price is a key part of the value.

Option price = Stock price*Probability – (Exercise price, Time Probability)

Peter Munk (chairman and founder of Barrick) on his company's AGM webcast earlier this year highlighted the challenges facing the industry, pointing to 1) the difficulty of finding new deposits, 2) environmental opposition that was making new mine development more difficult and 3) resource nationalism threatening to take projects away. And these comments come from the industry leader.

We have one takeaway from the industry's problems, and that is that the gold price must increase

Between the mid-1980s and the mid-1990s the gold miners found organic growth easy. In the late 1990s the gold majors (with hedge books) were often able to maintain a growth profile by buying smaller companies. Hence, using the options analogy, there was no apparent expiry date on the option and for the better gold companies the option covered an increasing number of ounces.

As Peter Munk highlighted, it is reasonable to assume that the option value that the gold companies represent will deteriorate via a rising exercise price (cash costs) and/or falling ounces produced. We have one takeaway from the industry's problems, and that is that the gold price must increase. We believe the price of gold was artificially low starting in the mid-1990s as physical oversupply from the mines, central banks and forward selling pressed down on prices. The lack of new discoveries suggests to us that higher prices are needed to bring on new supplies.

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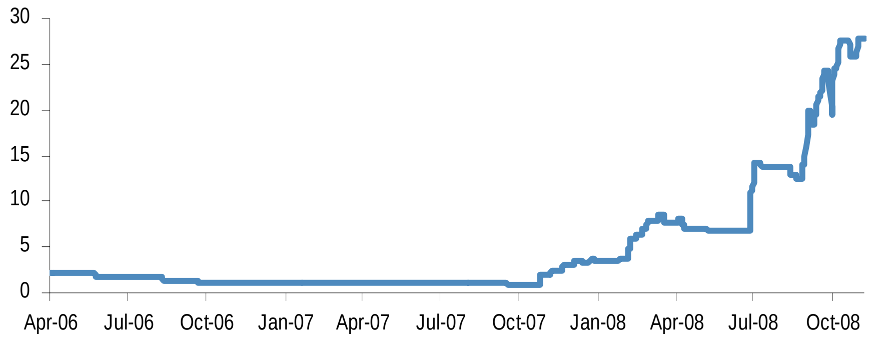
Alan Greenspan thought he had found the elixir for aging economies

Pass the juice please. Oh, it's empty.
Europeans came to the Americas seeking the elixir of youth, an ancient fabled drink that would end aging. Alan Greenspan thought he had found the elixir for aging economies when, even as he solved the Asian and the dotcom crises with easy money, interest rates remained low.

It's tempting to try to seek a template to apply to this recession from history. As expectations decline, we have to cast our net wider for comparables. Some are gravitating to the 1930s now. Though we don't claim to be historians, we don't know of any time in history when commerce has been optimized to use huge quantities of credit, and then the credit was taken away. Given the unique character of this crisis, we are inclined to be conservative in asset allocation, and this points to gold.

Is the CDS on the 10 year Treasury a bad sign?

Figure 2: US CDS Spread



Source: J.P. Morgan.

Supply demand
Most of the time, gold trades in its normal (arithmetic) inverse relationship with the dollar. We believe there are times when tight or sloppy physical markets force a repricing of gold against the dollar.

Mine supply
After the ramp in mine supply in the late 1980s and 1990s, mine supply has been falling, and this is a trend Barrick expects to continue.

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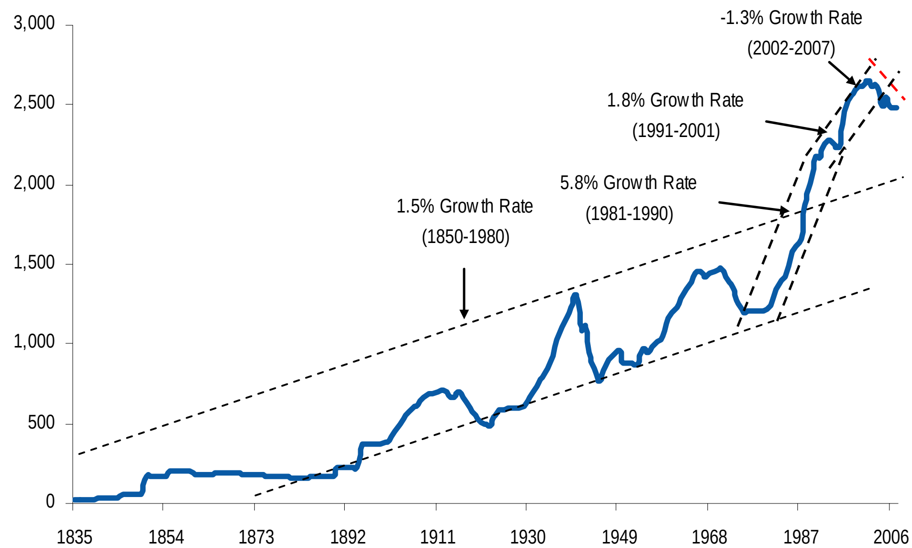
Figure 3: Gold Production



Source: USGS, Adolph Soetbeer, Bureau of the Mint (US), Joeseph Kitchin (Union Corporation), GFMS Ltd.

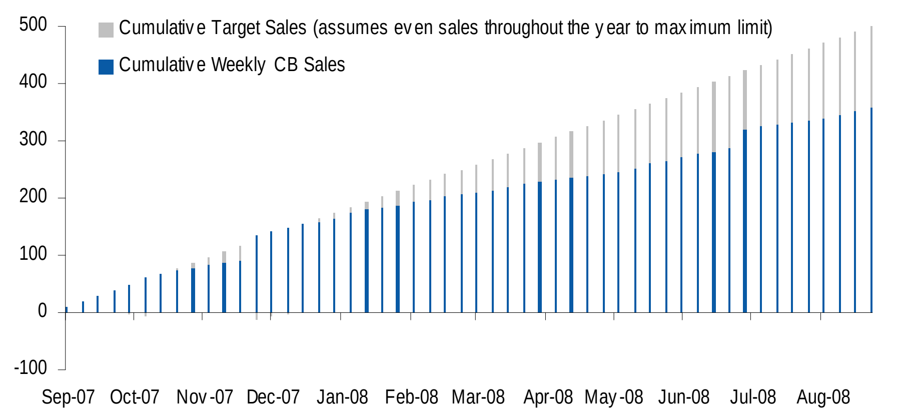
"We expect central bank sales to collapse" – GFMS

Central banks

Dollar strength and bold growth plans from the gold miners encouraged central banks to sell gold aggressively in the late 1990s. These two factors contributed to gold's fall to the $250/oz level in 2001. The banks then decided to curb their sales to 400 tonnes with the first agreement in September 1999. The banks are now close to ending a second agreement that limits total sales to 500 tonnes pa and with Germany, Italy and France unwilling to sell, we expect gold supplies from this source to fall.

Figure 4: Central Bank Gold Sales in CBGA2, Year 4

Metric Tonnes



Source: ECB Weekly Financial Statement; Bloomberg and JPM estimates.

Note: Assuming that gold sales by Switzerland and Sweden are evenly spread throughout the year.

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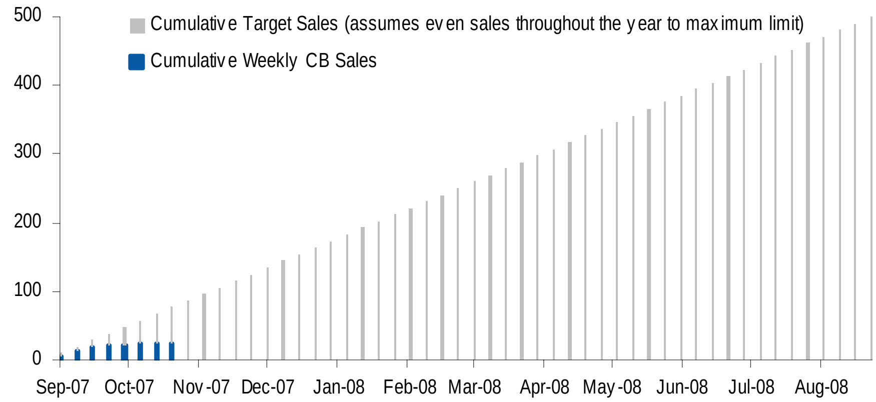
Figure 5: Central Bank Gold Sales in CBGA2, Year 5

Metric Tonnes

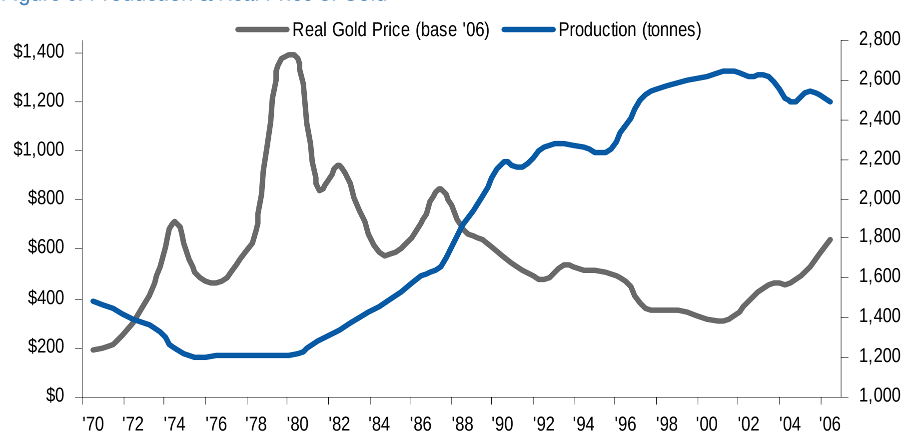


Source: ECB Weekly Financial Statement; DataStream and JPM estimates.

Note: Assuming that gold sales by Switzerland and Sweden are evenly spread throughout the year.

The following chart suggests a textbook inverse relationship between gold supply and price. Yet how does this fit in with the large above-ground stocks? Our conclusion is that central banks have leveraged this relationship with their large (30,000-tonne) holdings. We do know that in the late 1990s, with miners promising increasing supplies and the dollar rising, the banks were sellers. Now, with supplies falling (and a weaker dollar), the bank sales are slowing.

Figure 6: Production & Real Price of Gold



Source: GFMS Ltd. and Bloomberg.

The gold coin and small bar market has seized

Coins and bars have normally represented a small part of the gold market, but with interest in gold growing, demand has grown. Supplies from the mints that produce these products have lagged. Tight coin supplies could have added to the panic of

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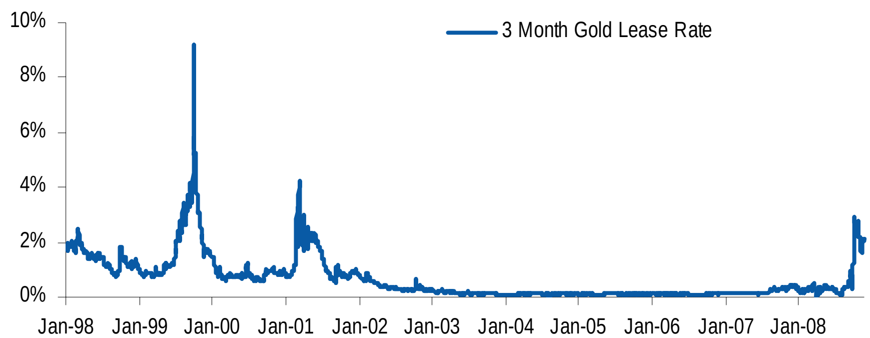
some buyers. Yet the gold price has been stable, and larger bars are still readily available.

Gold lease rates

The gold lease rate is a measure of the availability of gold. Lease rates fell as gold miners' hedge books were paid down over the last few years and gold demand declined. However, lease rates have picked up recently in an echo of the tightness in the coin market. Jamie Sokalsky, CFO of Barrick Gold, said that this might be due to central banks withdrawing gold from the leasing market. We also understand investors are switching holdings from unallocated gold (a general liability of the bullion banks) to allocated gold (a more secure custodial holding).

If central banks' liquidity injections and initiatives are successful, then worries about counterparty risk should decline. However, if further problems develop, it's quite possible that counterparty risk could migrate into the gold market.

Figure 7: Gold Lease Rates



Source: Bloomberg.

Gold dollar correlation

Gold normally tracks its inverse correlation with dollar as shown in the chart below. However, from time to time gold diverges from this understandable relationship. We feel these excursions stem from variations in the availability of gold. In the late 1990s gold was abundant, and its price had to decline in real terms to reflect this. In late 2005-early 2006, we believe a tightening gold supply contributed to the positive divergence that led gold to its ~$700/oz peak. Of note, the 27% move in gold price couldn't be explained by the 5% decline in the dollar over this period.

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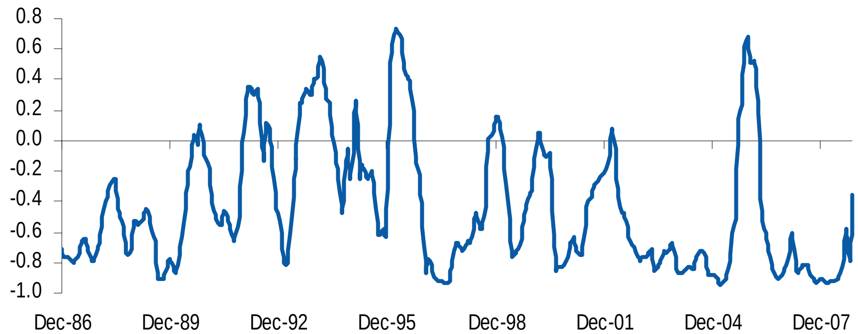
Figure 8: Annual Rolling Correlation over Monthly Data



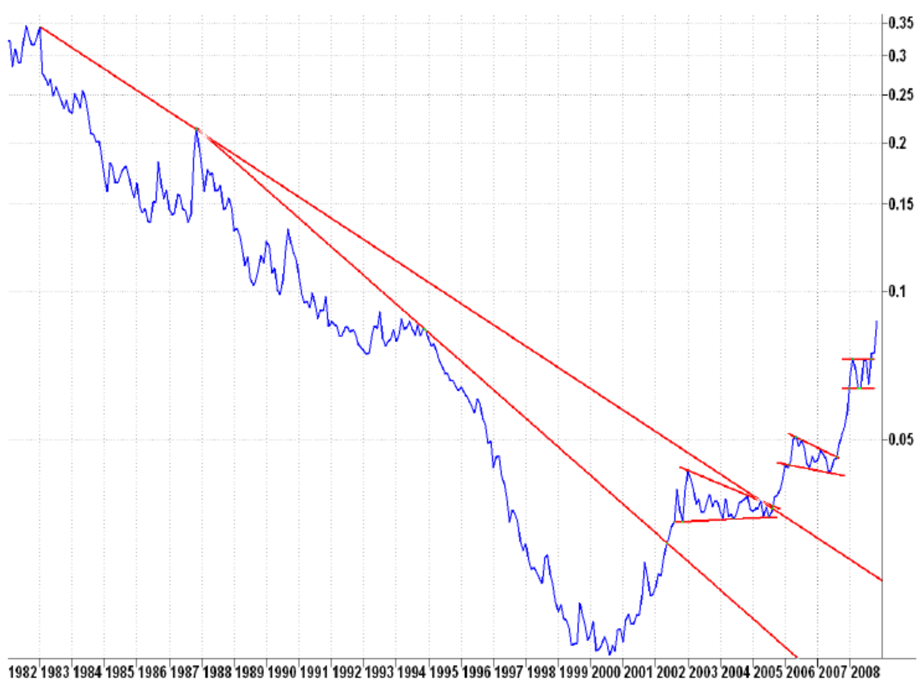
Source: Bloomberg.

Concluding

Gold has been competing with the dollar as a relatively safe haven for investors as stock markets have fallen. Initially, gold and the dollar performed well, but it's wrong to compare dollar strength with the performance of the dollar-denominated gold price since, as the dollar rises, it slows the upward movement of *dollar* gold. In the less volatile Swiss Franc, gold achieved a new all-time high about one month ago. Until the fear-driven flows into the dollar slow, the dollar could continue to rise, but gold's improved visibility may be preparing gold for strength into the year end. We would like to see gold perform in absolute terms, but we are very happy with gold's outperformance of the S&P 500 as seen in the following chart.

Gold has had a stealth bull market against the S&P so far

Figure 9: S&P500 Index per Ounce of Gold – Long Term (Log Scale)



Source: J.P. Morgan (published by JPM's technical analyst, Murray Morrison).

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Coverage List

Table 1: J.P. Morgan's Global Precious Metals Coverage List

Company	Ticker	J.P. Morgan Recommendation	Analyst	Share Price US$ 21-Nov-08	Short Interest 21-Nov-08	Short Int Ratio 21-Nov-08
Gold						
North America						
Agnico-Eagle Mines	AEM	OW	Bridges	$32.31	2,292,112	0.42x
Barrick Gold	ABX	N	Bridges	$27.05	9,058,522	0.49x
Compania de Minas Buenaventura	BVN	OW	Bridges	$12.72	542,387	0.32x
Goldcorp	GG	OW	Bridges	$24.22	7,179,725	0.41x
Kinross Gold	KGC	OW	Bridges	$13.77	9,477,189	0.79x
Newmont Mining	NEM	OW	Bridges	$28.79	8,845,339	0.82x
Gold Reserve	GRZ	N	Bridges	$0.40	781,111	2.35x
Africa						
AngloGold Ashanti	AU	N	Shepherd	$19.61	5,406,391	1.77x
DRDGold	DROOY*	UW	Shepherd	$0.33	577,624	2.44x
Gold Fields	GFI	N	Shepherd	$7.30	9,400,354	1.19x
Harmony	HMY	OW	Shepherd	$7.16	6,407,748	1.94x
Randgold Recources	RRS	OW	Shepherd	$30.61	n/a	n/a
Australia						
Lihir Gold	LGL	N	James	$1.13	n/a	n/a
Newcrest Mining	NCM	OW	James	$13.50	n/a	n/a
Asia Pacific						
Zijin Mining Group Co	ZIJMF	N	Zhang	$0.26	632,687	23.84x
Silver						
North America						
Coeur d'Alene	CDE	N	Bridges	$0.50	54,304,431	4.28x
Pan American Silver	PAAS	N	Bridges	$27.81	1,386,632	0.63x
Silver Wheaton	SLW	OW	Bridges	$2.81	4,971,988	0.88x
Platinum Group Metals (PGMs)						
North America						
Stillwater Mining	SWC	UW	Bridges	$2.71	6,070,044	5.50x
Africa						
AngloAmerican Platinum	AMS SJ	N	Shepherd	$37.48	n/a	n/a
Aquarius Platinum Limited	AQP SJ	UW	Shepherd	$1.67	n/a	n/a
Eastern Platinum	EPS SJ	OW	Shepherd	$0.21	n/a	n/a
Impala Platinum	IMP SJ	OW	Shepherd	$9.34	n/a	n/a
Lonmin Plc.	LMI LN	N	Shepherd	$11.18	n/a	n/a
Northam Platinum	NHM SJ	N/A	Shepherd	$2.06	n/a	n/a

Source: J.P. Morgan estimates, Bloomberg.

Note: J.P. Morgan ratings: OW = Overweight; N = Neutral; UW = Underweight. "na" means not available. Short Interest Ratio = Short Interest divided by Average Daily Volumes.

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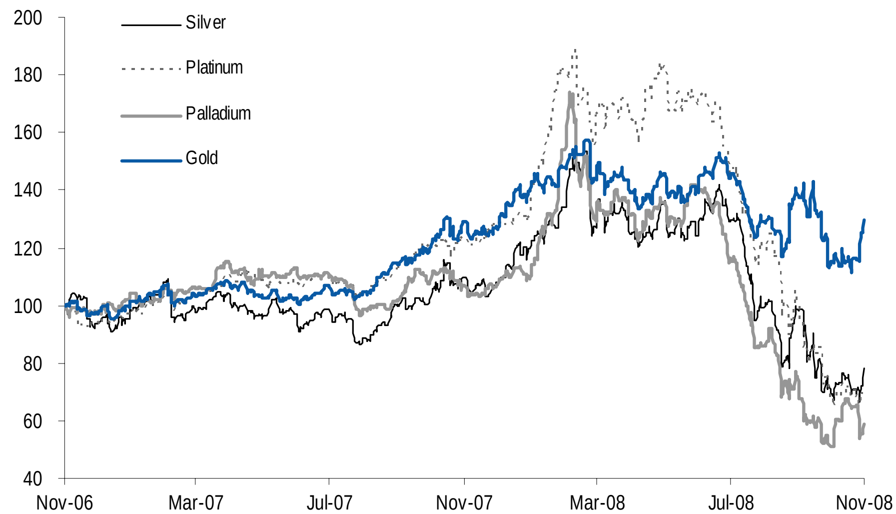
Metal charts

Gold has sharply outperformed its peer precious metals that have more industrial usage

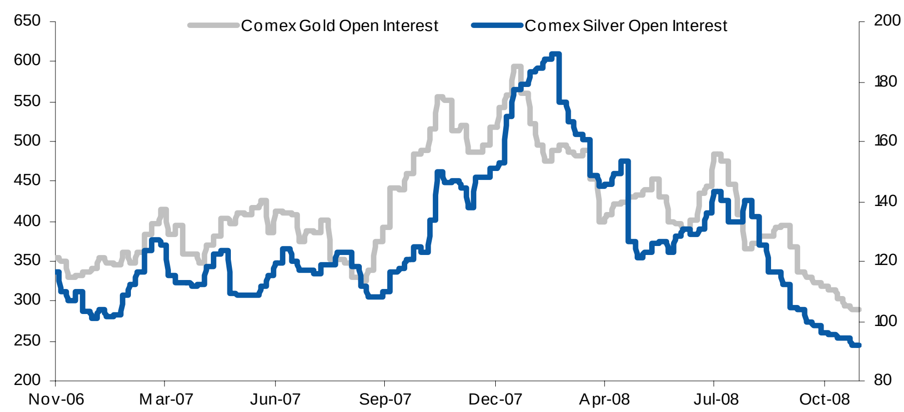
Figure 10: Precious Metals



Source: Bloomberg.

Lower open interest leaves investors with "dry powder" to support new purchases

Figure 11: COMEX Open Interest



Source: Bloomberg.

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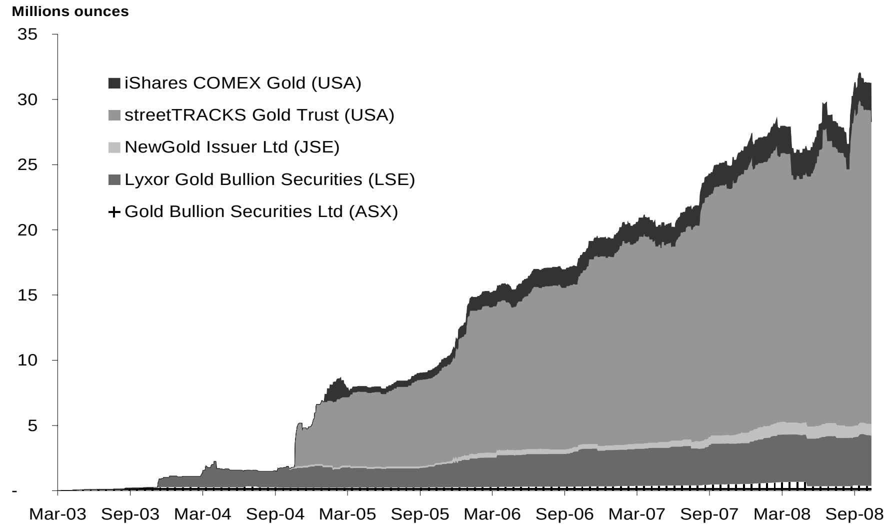
Although there have been some sell-offs, the growth trend continues

Figure 12: Gold ETF Holdings

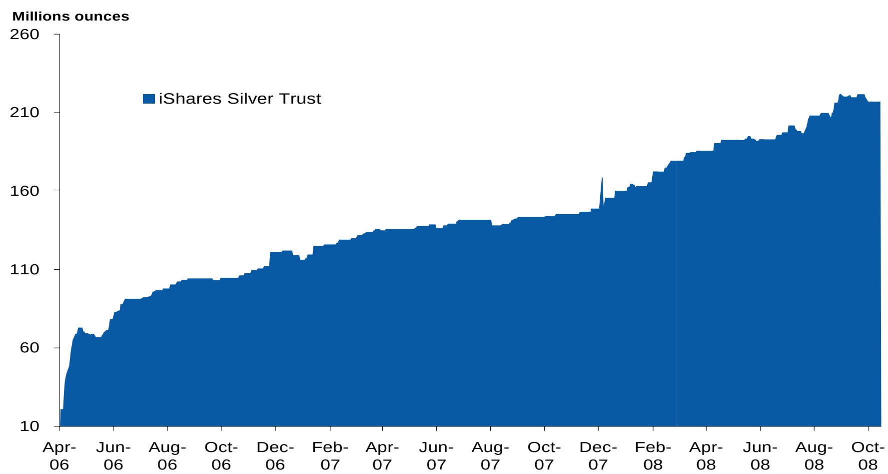


Source: www.iShares.com, www.exchangetradedgold.com & www.lyxorgbs.com

Note: We are tracking the GOLDIST ETF in Turkey and will include it in the above chart once it has meaningful gold volumes.

Like the performance of silver metal, the silver ETF is looking a little tired

Figure 13: Silver ETF Holdings



Source: www.iShares.com

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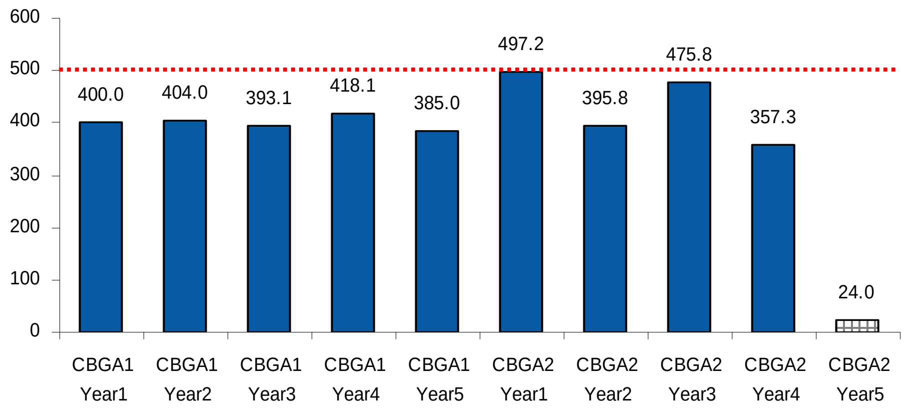
Gold sales seem to be headed lower

Figure 14: Gold Sales under the CBGA Agreement

Metric tonnes



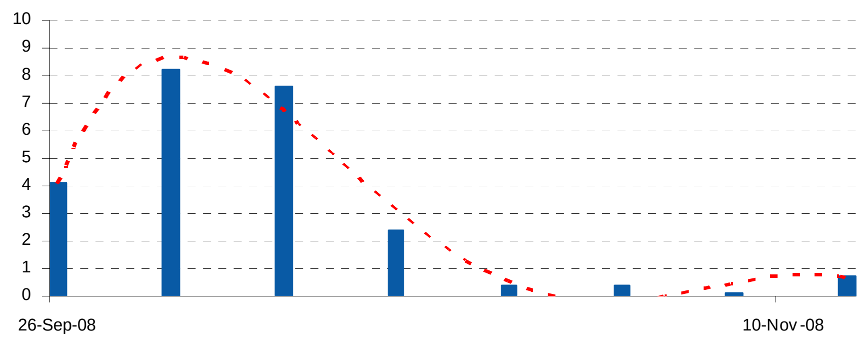
Source: IMF, International Financial Statistics, ECB Weekly Financial Statement, announcements and data from individual countries.

Note: CBGA year is different from calendar year and runs from 27th September to 26th September of the following year, the first Agreement year having commenced on 27th September 1999.

Sharp fall-off in gold sales equals a tighter market

Figure 15: Estimates of Weekly Gold Sales in the Current CBGA Agreement Year

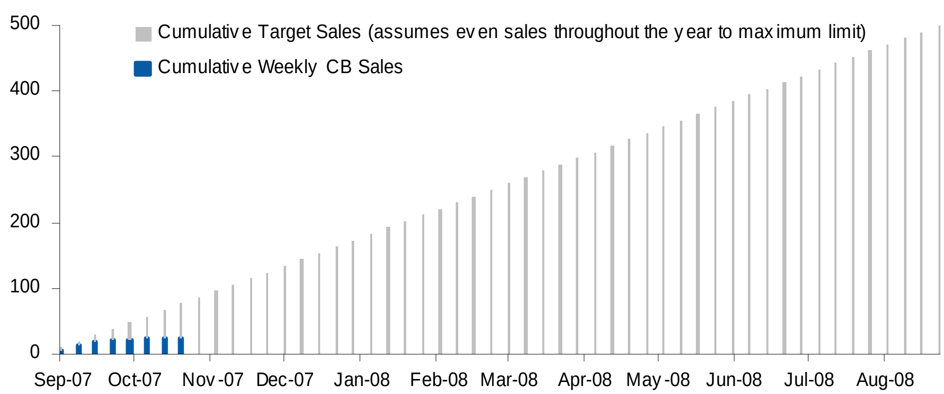
Metric tonnes



Source: ECB Weekly Financial Statement, Bloomberg and JPM estimates.

Note: Assuming that gold sales by Switzerland and Sweden are evenly spread throughout the year.

Figure 16: Cumulative Estimates of Weekly Gold Sales in the Current CBGA Agreement Year



Source: ECB Weekly Financial Statement; Bloomberg and JPM estimates.

Note: Assuming that gold sales by Switzerland and Sweden are evenly spread throughout the year.

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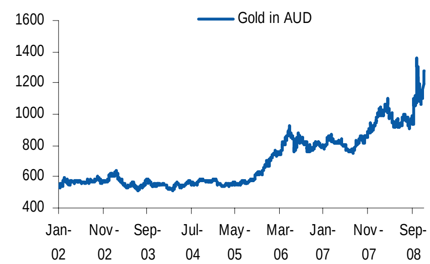
Gold in different currencies

Gold is only weak in USD

Figure 17: Gold in US Dollars

Source: Bloomberg.

Figure 18: Gold in Australian Dollars



Source: Bloomberg.

Figure 19: Gold in Canadian Dollars

Source: Bloomberg.

Figure 20: Gold in South African Rand

Source: Bloomberg.

Figure 21: Gold in Indian Rupees

Source: Bloomberg.

Figure 22: Gold in Swiss Francs

Source: Bloomberg.

Figure 23: Gold in Euros

Source: Bloomberg.

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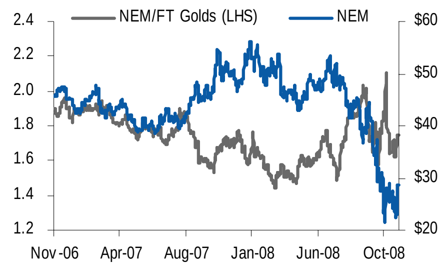
Precious Metal Companies

Gold

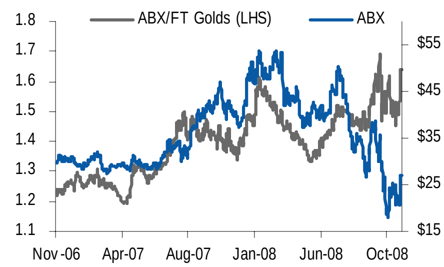
Kinross is delivering on our hopes, compared to its peer group

Figure 24: Newmont Mining



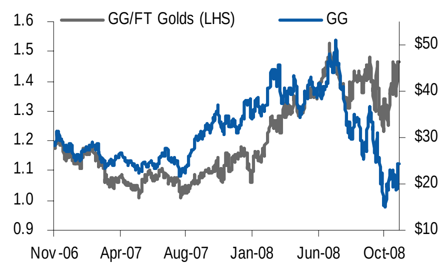
Source: Bloomberg.

Figure 25: Barrick Gold



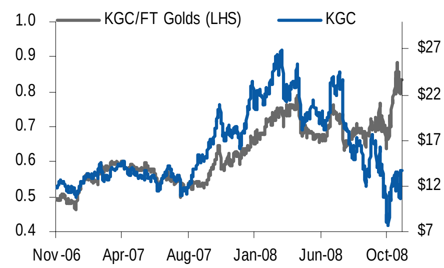
Source: Bloomberg.

Figure 26: Goldcorp



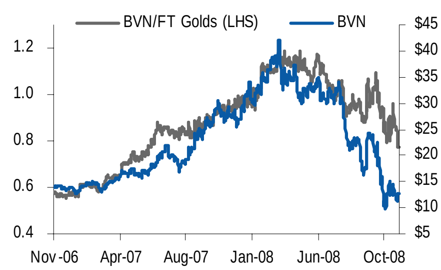
Source: Bloomberg.

Figure 27: Kinross Gold



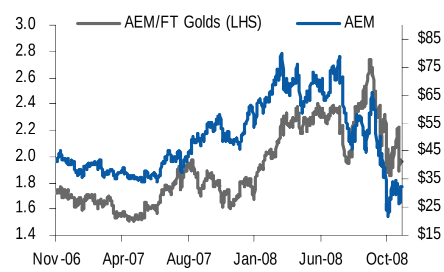
Source: Bloomberg.

Figure 28: Compania de Minas Buenaventura



Source: Bloomberg.

Figure 29: Agnico-Eagle



Source: Bloomberg.

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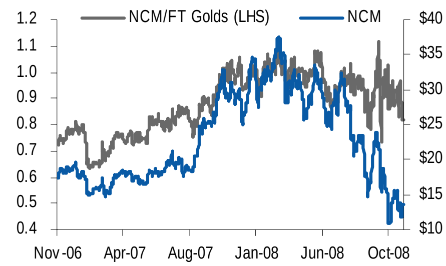
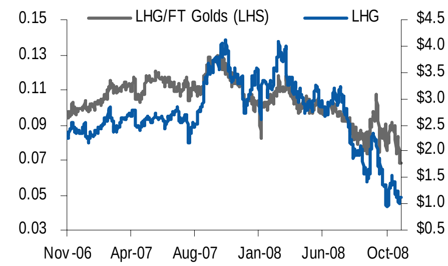
In Australia, Newcrest is outperforming Lihir

Figure 30: Newcrest Mining



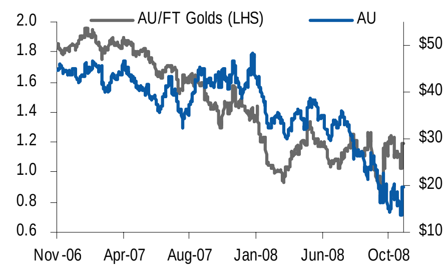
Source: Bloomberg.

Figure 31: Lihir Gold



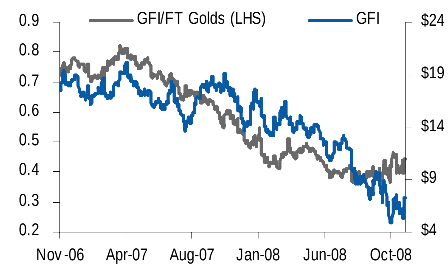
Source: Bloomberg.

Figure 32: AngloGold Ashanti



Source: Bloomberg.

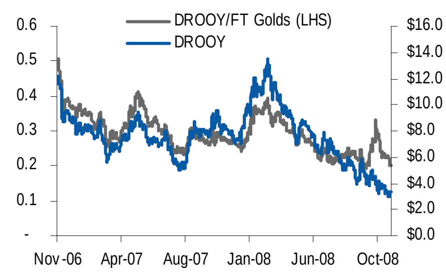
Figure 33: Gold Fields



Source: Bloomberg.

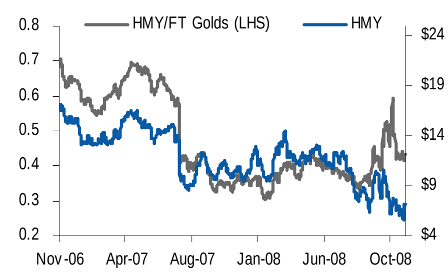
Although Randgold remains the relative standout, the weaker Rand has been helping the South Africans compared with the FT gold benchmark recently

Figure 34: DRDGold



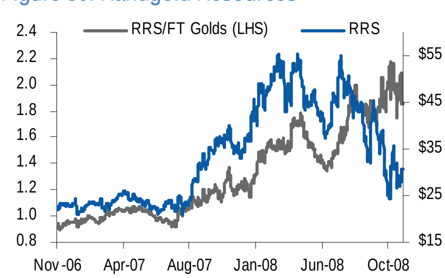
Source: Bloomberg.

Figure 35: Harmony Gold



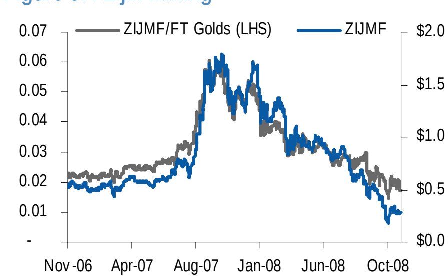
Source: Bloomberg.

Figure 36: Randgold Resources



Source: Bloomberg.

Figure 37: Zijin Mining



Source: Bloomberg.

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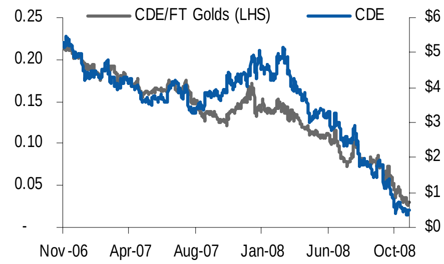
Silver

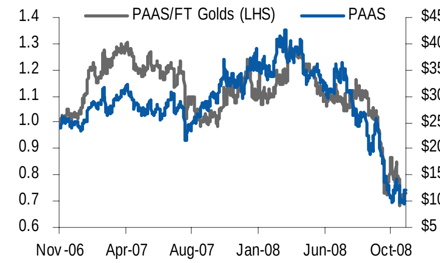
Times are tough in silver land

Figure 38: Coeur d'Alene



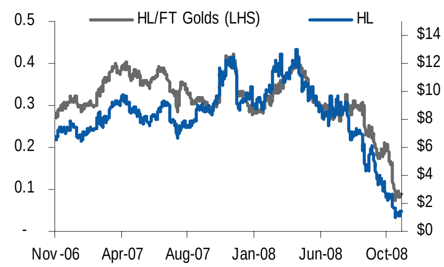
Source: Bloomberg.

Figure 39: Pan American Silver



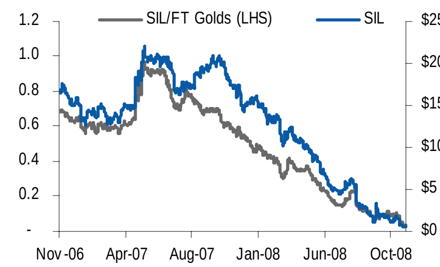
Source: Bloomberg.

Figure 40: Hecla Mining



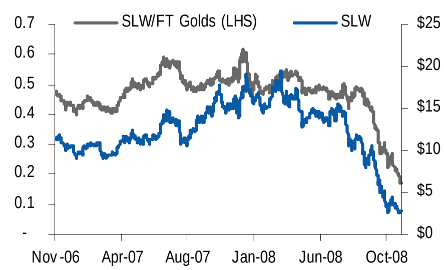
Source: Bloomberg.

Figure 41: Apex Silver



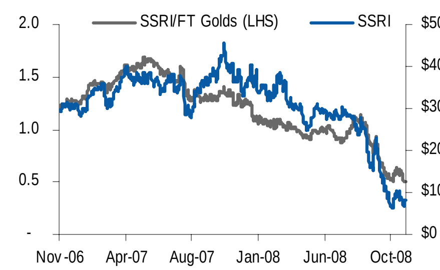
Source: Bloomberg.

Figure 42: Silver Wheaton



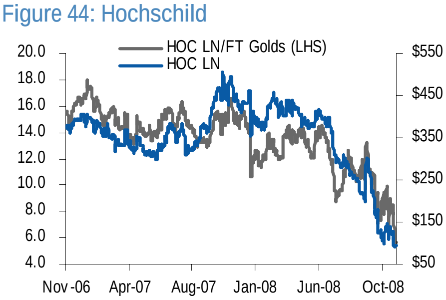
Source: Bloomberg.

Figure 43: Silver Standard Resources



Source: Bloomberg.

Figure 44: Hochschild



Source: Bloomberg.

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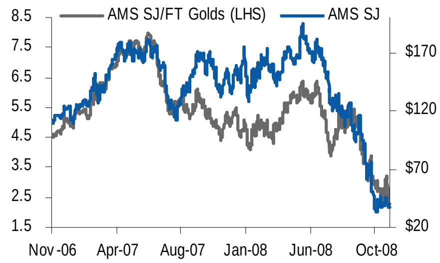
PGMs

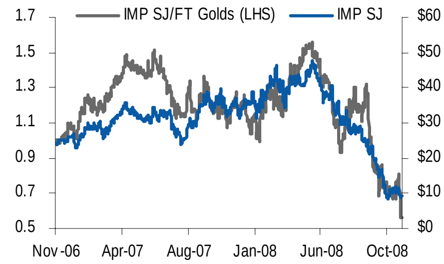
Sharply weaker industrial demand is hurting the PGMs, and this is exacerbated by the difficulty of closing productive capacity in South Africa

Figure 45: Anglo American Platinum



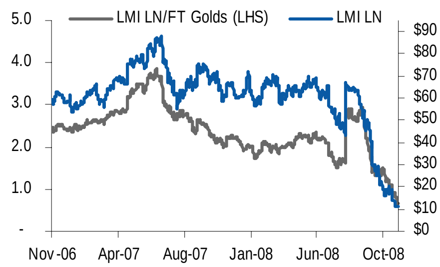
Source: Bloomberg.

Figure 46: Impala Platinum



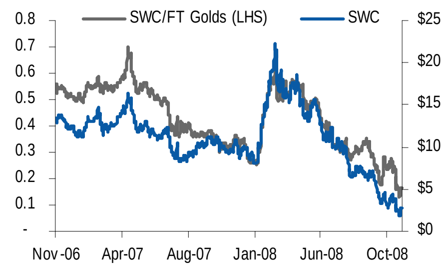
Source: Bloomberg.

Figure 47: Lonmin



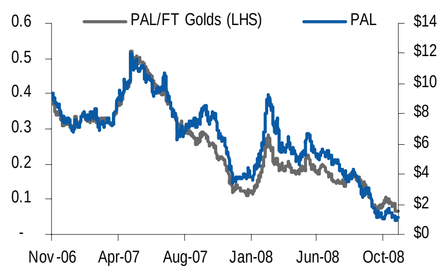
Source: Bloomberg.

Figure 48: Stillwater Mining



Source: Bloomberg.

Figure 49: North American Palladium



Source: Bloomberg.

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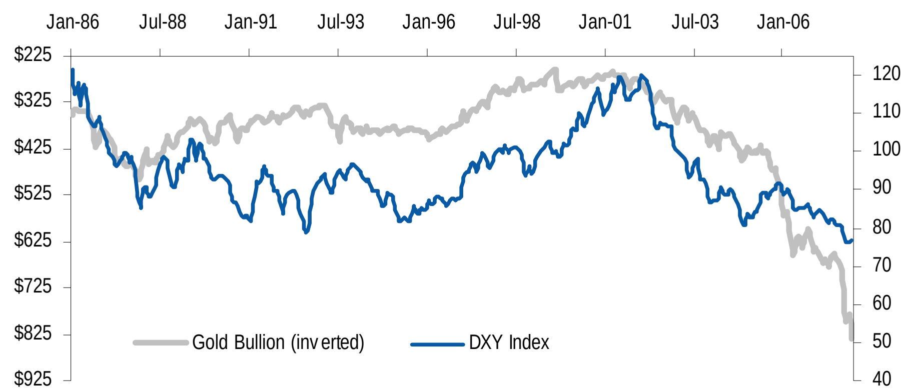
Macro charts

Gold might be in the early stages of a "disconnect" from the dollar

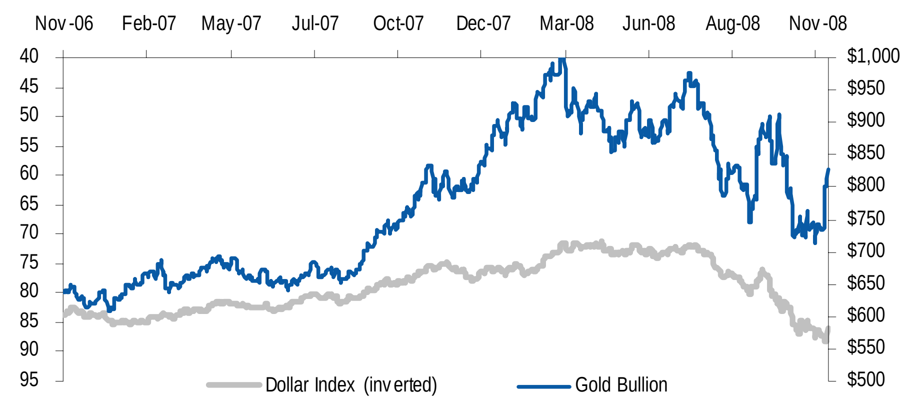
Figure 50: Dollar Index vs. Gold Price (inverted) in the Long Term



Source: Bloomberg.

A bear market rally or a breakout for gold? Time will tell

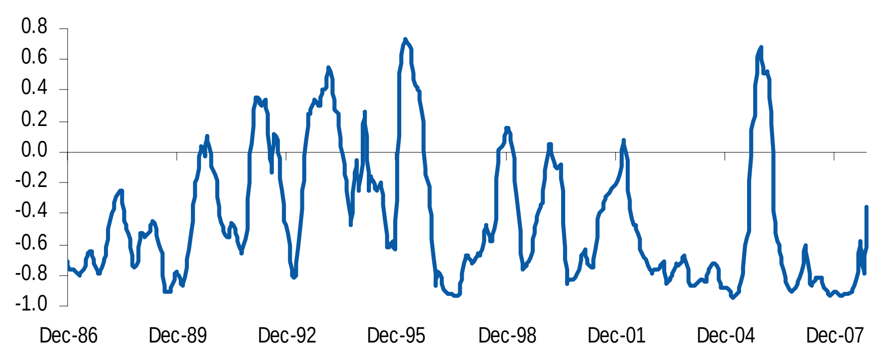
Figure 51: Dollar Index vs. Gold Price (inverted) in the Short Term



Source: Bloomberg.

As this chart shows, gold's breakout against the dollar has been violent so far

Figure 52: Annual Rolling Correlation between Gold and the US Dollar



Source: Bloomberg.

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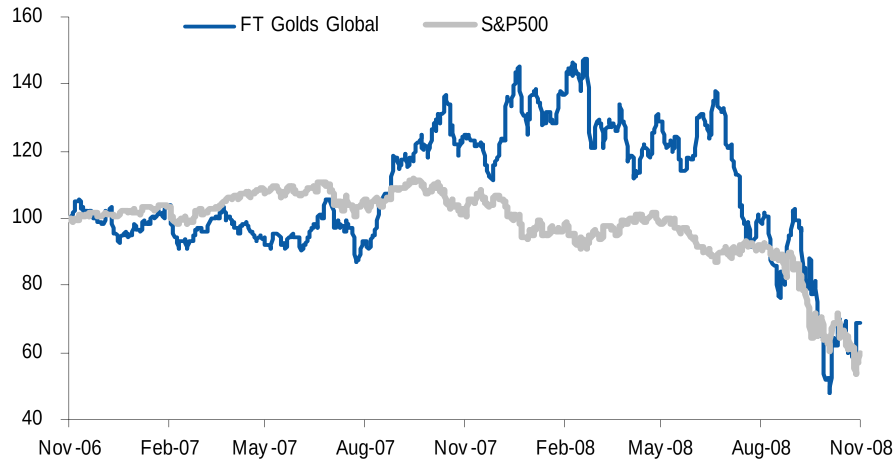
Are the gold equities basing?

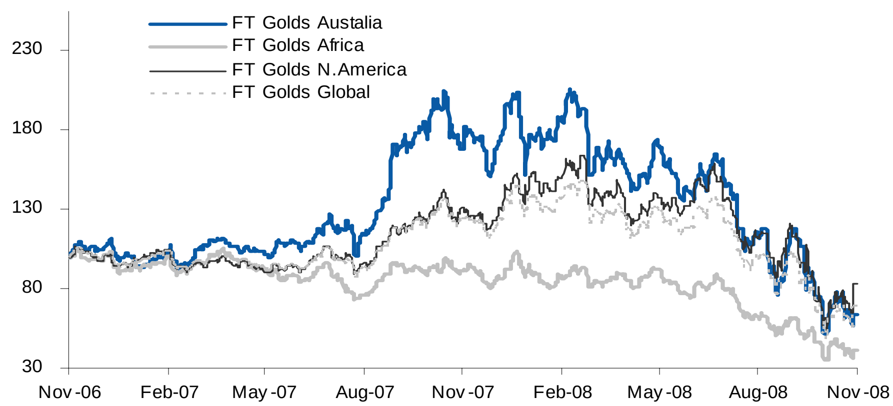
Figure 53: S&P 500 vs. FT Global Golds



Source: Bloomberg.

Capital flows into the North American gold stocks has made this group the best performer

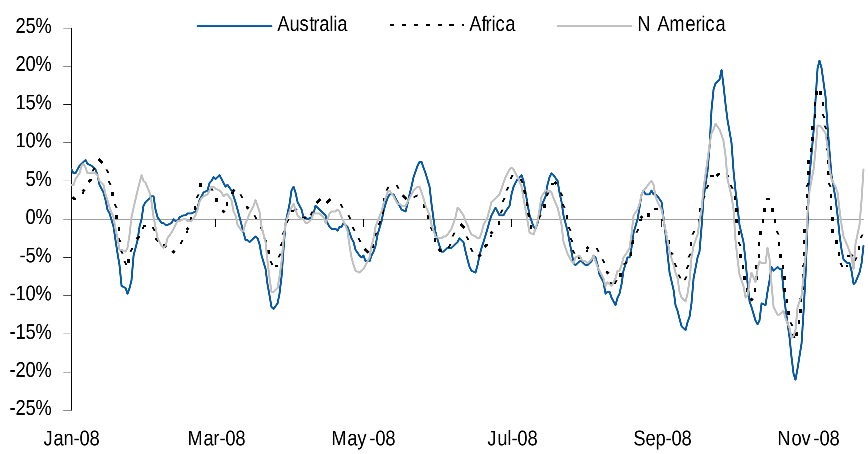
Figure 54: The FT Gold Indices



Source: Bloomberg.

North American golds are performing well

Figure 55: 5-day % Change in Regional FT Golds



Source: Bloomberg.

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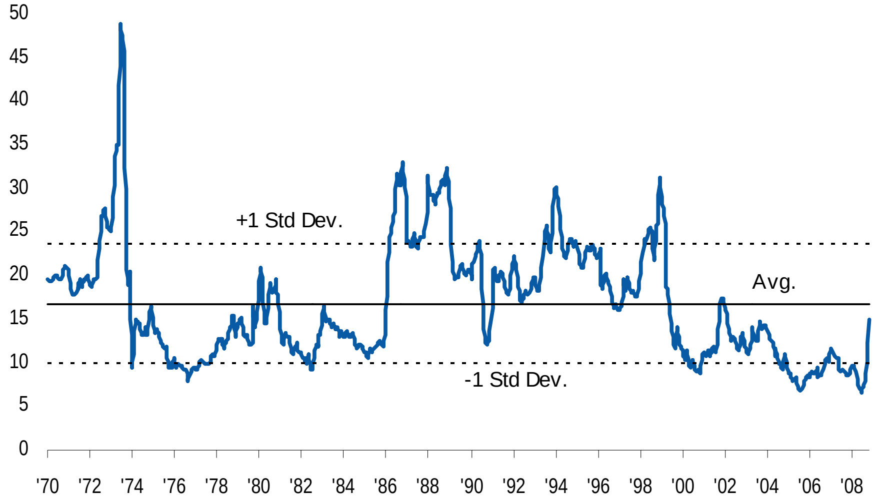
Gold's Purchasing Power

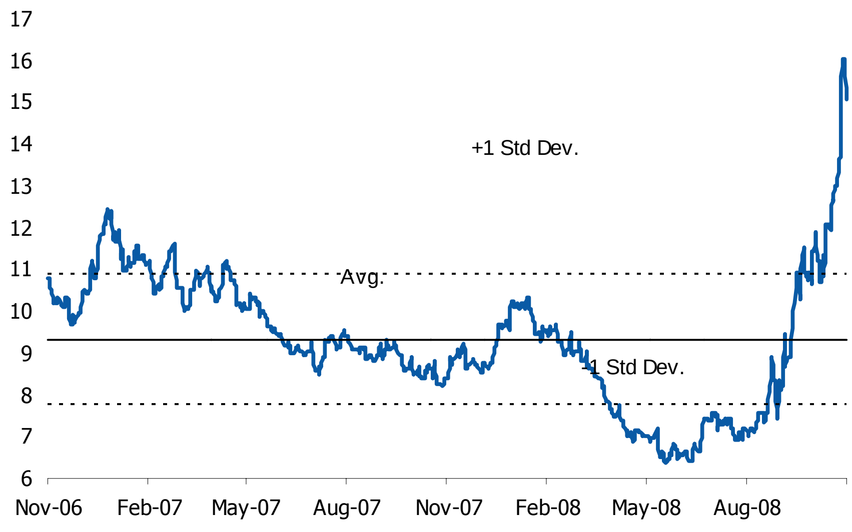
Figure 56: Barrels of Crude Oil an Ounce of Gold Can Buy – LONG TERM



Source: Bloomberg.

Lower-priced oil should help, but the lagged effect of higher oil prices on consumables is likely to slow the benefit

Figure 57: Barrels of Crude Oil an Ounce of Gold Can Buy – SHORT TERM



Source: Bloomberg.

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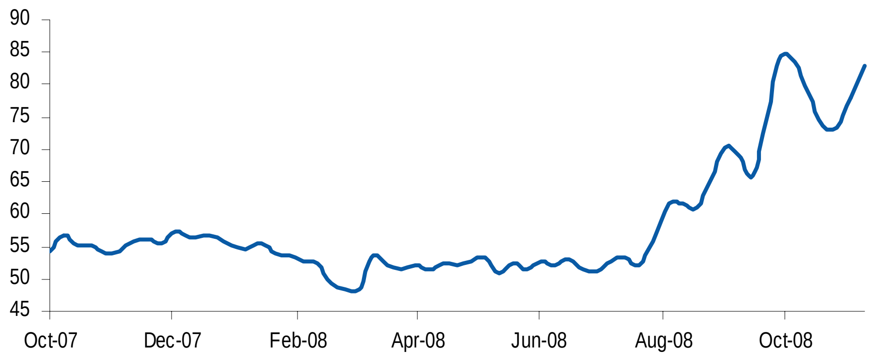
Silver underperforming long term . . .

Figure 58: Ounces of Silver an Ounce of Gold Can Buy – LONG TERM

Source: Bloomberg.

. . . and in the short term

Figure 59: Ounces of Silver an Ounce of Gold Can Buy – SHORT TERM



Source: Bloomberg.

More industrial platinum is also losing out to gold. And yes, when times are tough, gold does trade at a premium to platinum

Figure 60: Ounces of Platinum an Ounce of Gold Can Buy – LONG TERM

Source: Bloomberg, Inet, J.P. Morgan.

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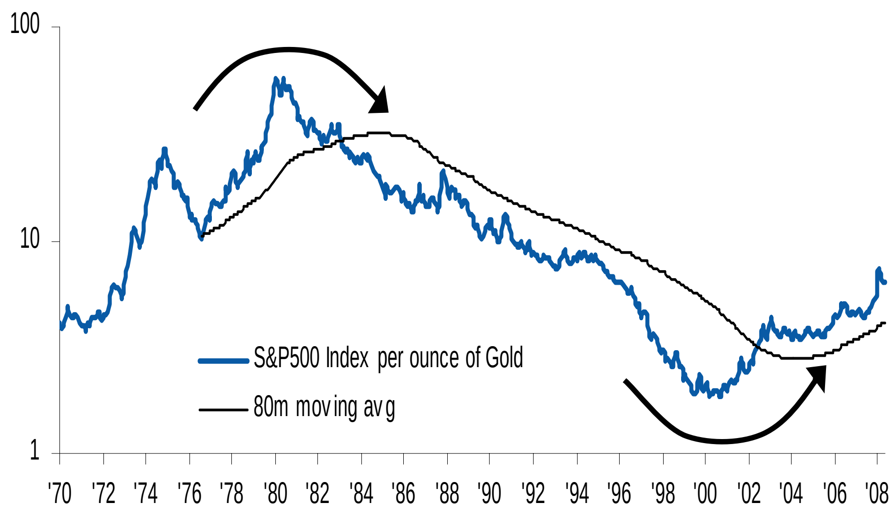
Copper has been losing out, too

Figure 61: Pounds of Copper an Ounce of Gold Can Buy – LONG TERM

Source: Bloomberg.

Gold is established in its relative uptrend

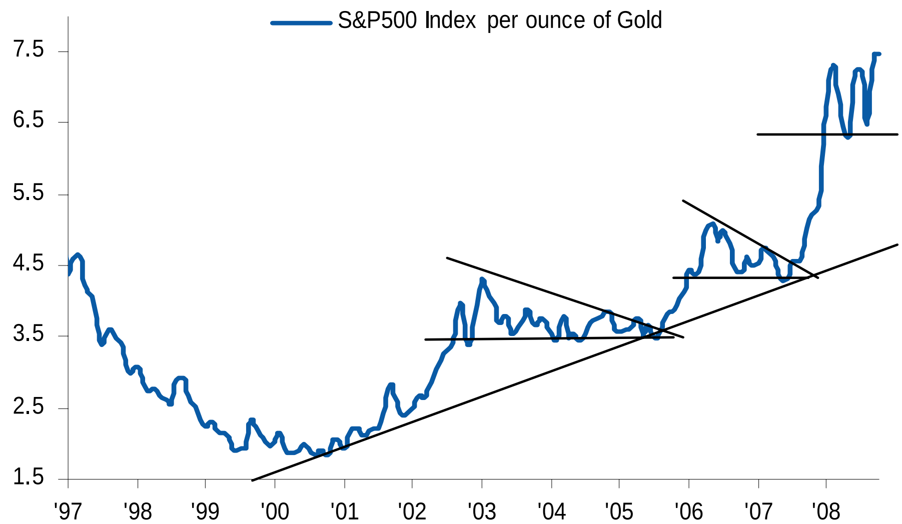
Figure 62: S&P500 Index per Ounce of Gold – Long Term (Log Scale)



Source: Bloomberg.

Stairway to gold investor heaven?

Figure 63: S&P500 Index per Ounce of Gold – Short Term



Source: Bloomberg.

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Companies Recommended in This Report (all prices in this report as of market close on 24 November 2008, unless otherwise indicated)

Agnico-Eagle Mines (AEM/$33.50/Overweight), Compania de Minas Buenaventura (BVN/$14.65/Overweight), Goldcorp Inc (GG/$25.60/Overweight), Harmony Gold Mining Co Ltd (HARJ.J/8,120c/Overweight), Harmony Gold Mining Co Ltd (HMY/$8.07/Overweight), Kinross Gold (KGC/$14.28/Overweight), Newcrest Mining (NCM.AX/A$23.60/Overweight), Newmont Mining (NEM/$31.49/Overweight), Randgold Resources Ltd (RRS.L/2,378p/Overweight), Silver Wheaton (SLW/$2.81 [21-November-2008]/Overweight)

Analyst Certification:

The research analyst(s) denoted by an “AC” on the cover of this report certifies (or, where multiple research analysts are primarily responsible for this report, the research analyst denoted by an “AC” on the cover or within the document individually certifies, with respect to each security or issuer that the research analyst covers in this research) that: (1) all of the views expressed in this report accurately reflect his or her personal views about any and all of the subject securities or issuers; and (2) no part of any of the research analyst’s compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed by the research analyst(s) in this report.

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- **ISE option specialist:** An affiliate of JPMSI is associated with a specialist or market maker that makes a market in the options of Silver Wheaton, and therefore such specialist may have a position (long or short) in the options of the issuer and may be on the opposite side of public orders in such options.
- **Lead or Co-manager:** JPMSI or its affiliates acted as lead or co-manager in a public offering of equity and/or debt securities for Kinross Gold within the past 12 months.
- **Client of the Firm:** Compania de Minas Buenaventura is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service and non-securities-related services. Goldcorp Inc is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company investment banking services, non-investment banking securities-related service and non-securities-related services. Harmony Gold Mining Co Ltd is or was in the past 12 months a client of JPMSI. Kinross Gold is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company investment banking services, non-investment banking securities-related service and non-securities-related services. Newcrest Mining is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company non-investment banking securities-related service. Newmont Mining is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company investment banking services, non-investment banking securities-related service and non-securities-related services. Silver Wheaton is or was in the past 12 months a client of JPMSI; during the past 12 months, JPMSI provided to the company investment banking services and non-securities-related services.
- **Investment Banking (past 12 months):** JPMSI or its affiliates received in the past 12 months compensation for investment banking services from Goldcorp Inc, Kinross Gold, Newmont Mining, Silver Wheaton.
- **Investment Banking (next 3 months):** JPMSI or its affiliates expect to receive, or intend to seek, compensation for investment banking services in the next three months from Compania de Minas Buenaventura, Goldcorp Inc, Harmony Gold Mining Co Ltd, Kinross Gold, Newcrest Mining, Newmont Mining, Silver Wheaton.
- **Non-Investment Banking Compensation:** JPMSI has received compensation in the past 12 months for products or services other than investment banking from Compania de Minas Buenaventura, Goldcorp Inc, Kinross Gold, Newcrest Mining, Newmont Mining. An affiliate of JPMSI has received compensation in the past 12 months for products or services other than investment banking from Harmony Gold Mining Co Ltd, Newcrest Mining, Newmont Mining.

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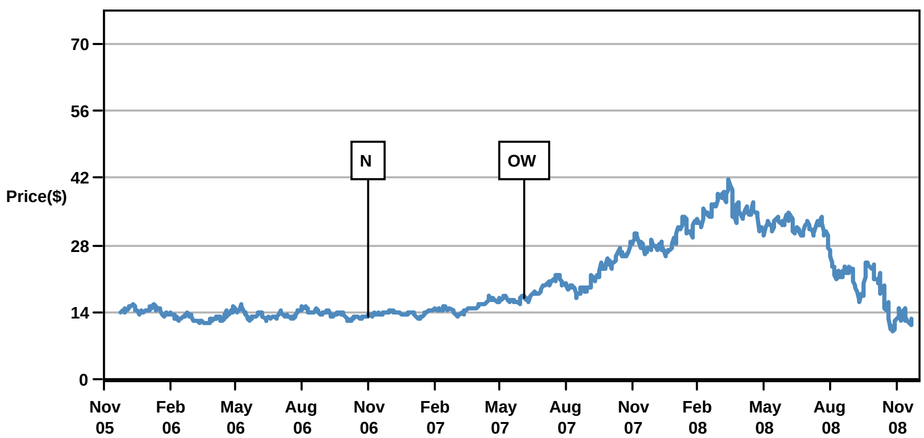
Agnico-Eagle Mines (AEM) Price Chart

Date	Rating	Share Price ($)	Price Target ($)
08-Dec-05	OW	17.17	-
31-Jan-06	OW	23.53	30.00
03-Apr-06	OW	30.45	34.00
20-Apr-06	OW	35.50	--

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Compania de Minas Buenaventura (BVN) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
02-Nov-06	N	13.19	--
06-Jun-07	OW	16.89	--

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

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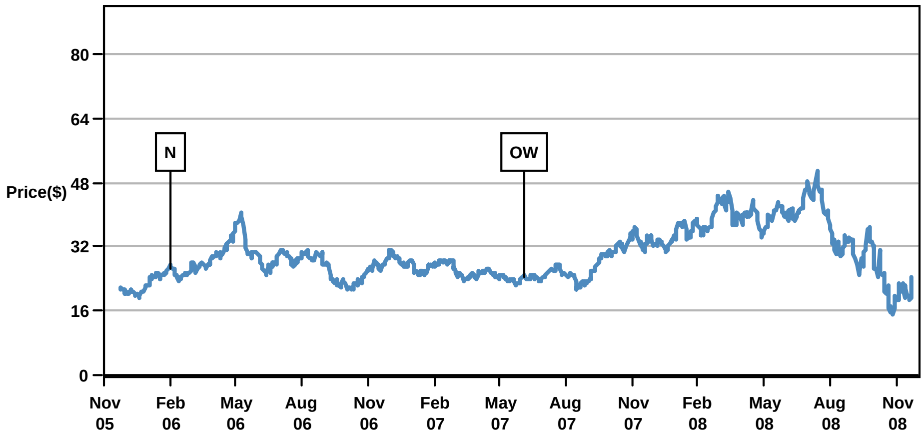
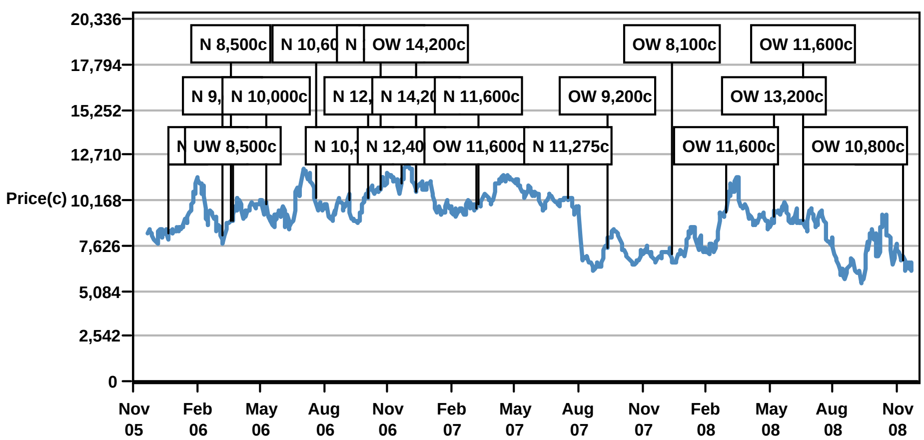
Goldcorp Inc (GG) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
31-Jan-06	N	26.50	-
06-Jun-07	OW	24.31	-

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

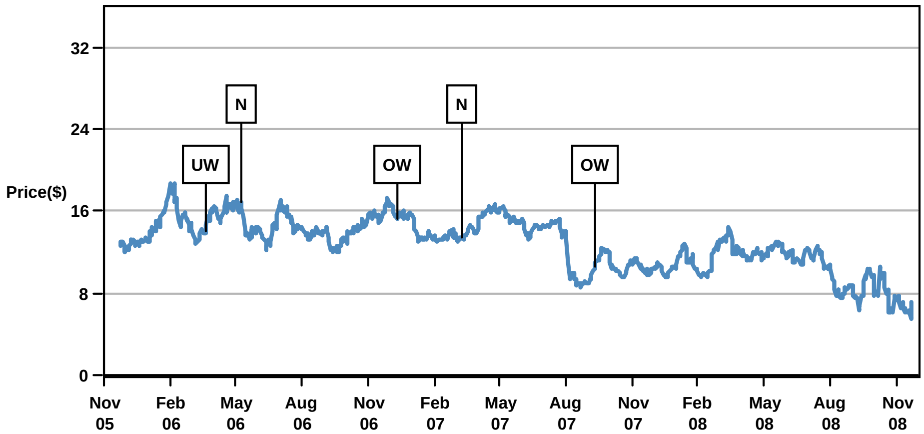
Harmony Gold Mining Co Ltd (HARJ.J) Price Chart



Date	Rating	Share Price (c)	Price Target (c)
21-Dec-05	N	8289	9700
10-Mar-06	N	8245	9400
22-Mar-06	N	9060	8500
23-Mar-06	UW	9011	8500
11-May-06	N	10000	10000
21-Jul-06	N	10293	10600
06-Sep-06	N	10203	10300
05-Oct-06	N	10351	12300
23-Oct-06	N	10826	12000
20-Nov-06	N	11140	12400
12-Dec-06	N	10775	14200
13-Dec-06	OW	10700	14200
08-Mar-07	OW	9750	11600
12-Mar-07	N	9912	11600
17-Jul-07	N	10349	11275
13-Sep-07	OW	7515	9200
13-Dec-07	OW	7180	8100
28-Feb-08	OW	9480	11600
09-May-08	OW	9200	13200
20-Jun-08	OW	9050	11600
10-Nov-08	OW	6800	10800

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
Break in coverage Aug 15, 2003 - Sep 11, 2003, and Jan 28, 2004 - May 05, 2004. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

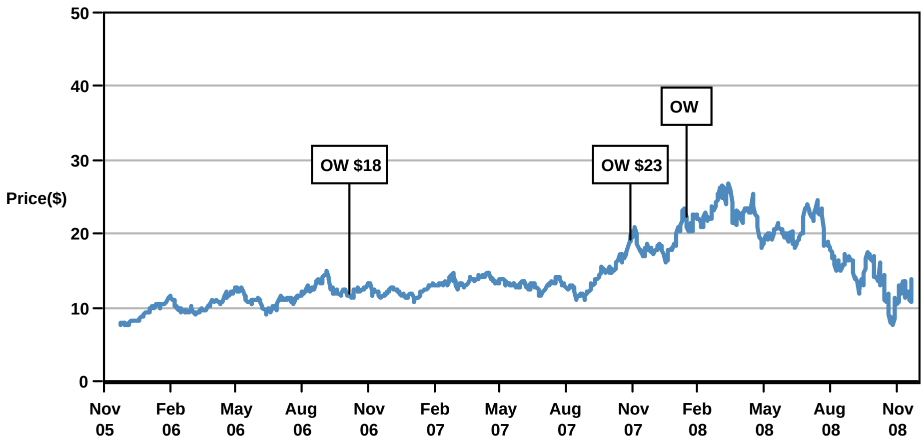
Harmony Gold Mining Co Ltd (HMY) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
23-Mar-06	UW	14.13	-
11-May-06	N	16.82	-
13-Dec-06	OW	15.33	-
12-Mar-07	N	13.42	-
12-Sep-07	OW	10.66	-

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
Break in coverage Aug 15, 2003 - Sep 11, 2003, and Jan 28, 2004 - May 05, 2004. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Kinross Gold (KGC) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
06-Oct-06	OW	11.98	18.00
30-Oct-07	OW	19.19	23.00
16-Jan-08	OW	22.33	--

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

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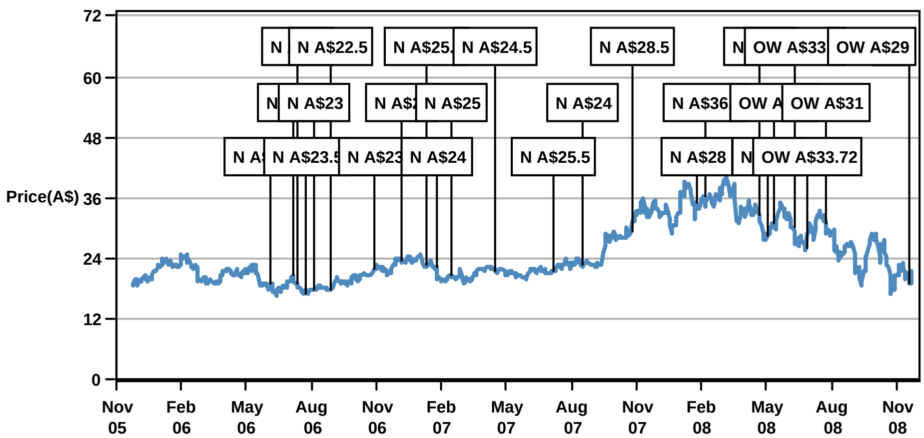
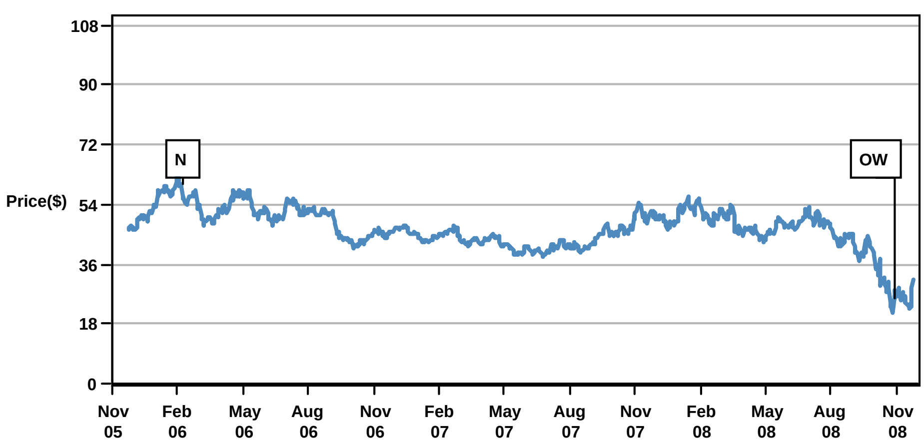
Newcrest Mining (NCM.AX) Price Chart



Date	Rating	Share Price (A$)	Price Target (A$)
05-Jun-06	N	18.82	23.64
07-Jul-06	N	20.48	23.00
12-Jul-06	N	18.84	24.00
24-Jul-06	N	16.98	23.50
07-Aug-06	N	17.53	23.00
28-Aug-06	N	17.85	22.50
30-Oct-06	N	21.68	23.00
07-Dec-06	N	23.60	24.00
10-Jan-07	N	22.88	25.20
25-Jan-07	N	22.11	24.00
13-Feb-07	N	20.49	25.00
18-Apr-07	N	21.61	24.50
08-Jul-07	N	21.35	25.50
17-Aug-07	N	22.62	24.00
26-Oct-07	N	29.11	28.50
24-Jan-08	N	34.90	28.00
05-Feb-08	N	36.09	36.50
22-Apr-08	N	32.61	36.00
05-May-08	N	28.30	37.00
13-May-08	OW	30.85	34.00
10-Jun-08	OW	29.95	33.80
27-Jun-08	OW	25.90	33.72
24-Jul-08	OW	31.12	31.00
19-Nov-08	OW	18.99	29.00

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Newmont Mining (NEM) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
07-Feb-06	N	60.48	--
30-Oct-08	OW	25.90	--

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
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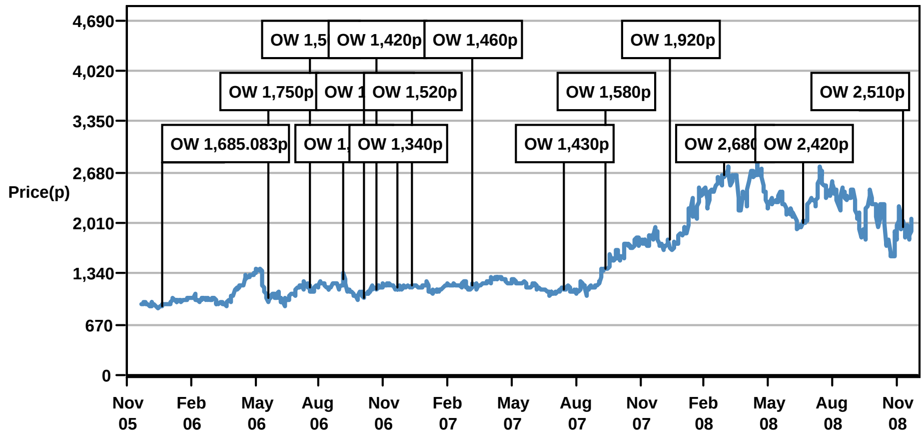
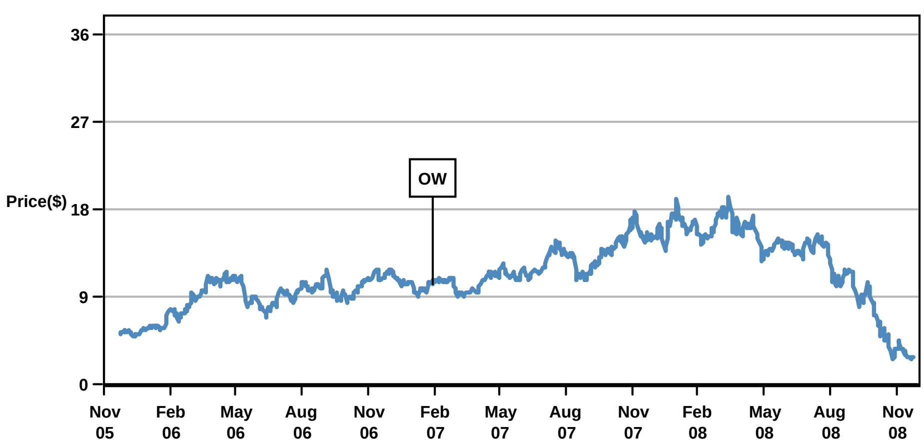
Randgold Resources Ltd (RRS.L) Price Chart



Date	Rating	Share Price (p)	Price Target (p)
21-Dec-05	OW	900	1685
20-May-06	OW	1014	1750
21-Jul-06	OW	1170	1500
06-Sep-06	OW	1260	1480
05-Oct-06	OW	1024	1490
23-Oct-06	OW	1121	1420
21-Nov-06	OW	1148	1340
12-Dec-06	OW	1187	1520
08-Mar-07	OW	1180	1460
17-Jul-07	OW	1143	1430
13-Sep-07	OW	1399	1580
13-Dec-07	OW	1780	1920
28-Feb-08	OW	2640	2680
20-Jun-08	OW	2001	2420
10-Nov-08	OW	1958	2510

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
J.P. Morgan ratings: OW = Overweight, N = Neutral, UW = Underweight.

Silver Wheaton (SLW) Price Chart



Date	Rating	Share Price ($)	Price Target ($)
29-Jan-07	OW	10.25	-

Source: Reuters and J.P. Morgan; price data adjusted for stock splits and dividends.
Initiated coverage Jan 29, 2007. This chart shows J.P. Morgan's continuing coverage of this stock; the current analyst may or may not have covered it over the entire period.
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IB clients*	53%	51%	43%
JPMSI Equity Research Coverage	40%	48%	12%
IB clients*	76%	70%	59%

*Percentage of investment banking clients in each rating category.
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