

17 September 2008 | 19 pages

Gold Commodity Update

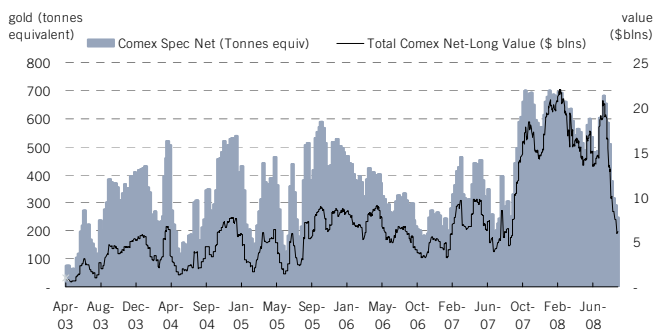
Opening the "New Gold Window"

- **Gold finally responds to systemic risk** — After languishing amid de-leveraging, distress selling, and disinflation, Gold is finally displaying classic safe-haven attributes and de-coupling from basic materials and energy. We see it benefiting in both "Gloom & Doom" and "Muddle-through & Monetization" scenarios.
- **Selling pressure shifts to short-covering** — Liquidations of Comex speculator longs plus outflows from ETF's have been ~500 T since mid-July, worth \$17 bln. With nearly 90% of the unwind on Comex, shorter term traders have dominated. The spike in Gold lease rates suggests new shorts, which are now being covered.
- **While physical offtake remains brisk** — Indian imports recovered solidly in Aug, up 56% YoY. Anecdotal reports suggest Dubai merchants have had difficulty keeping Gold in stock, while demand for coins has been brisk, particularly the US Gold Eagle, Cdn Maple Leaf, and Krugerrand. Chinese and Russian fabrication demand is growing due to wealth creation and petrodollar flows, bucking the trend in mature Indian/Asian Gold markets. We examine 1H/08 GFMS data.
- **Secular and seasonal factors favor Gold in 2H/08** — We remain positive on Gold based on macro and supply/demand factors. A powerful new phase of investment is riding on top of seasonally-strong fabrication. Gold may regain \$1,000/oz by end-08. Longer term we would not be surprised to see it double or triple.
- **Favorite names** — Buy-rated Barrick, Peter Hambro, Lihir, and Newmont.

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Figure 1. Comex Net Long (in tonnes and \$ blns)— Source: Comex and Citi



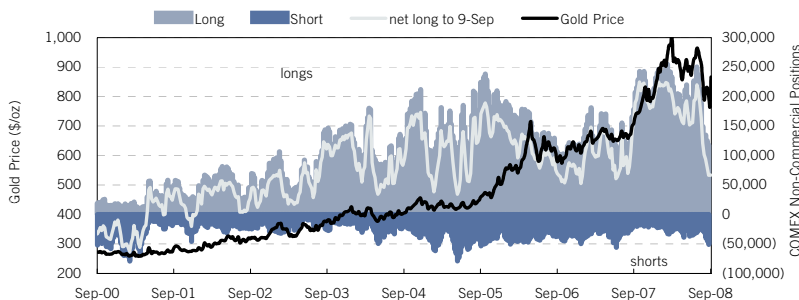
See Appendix A-1 for Analyst Certification and important disclosures.

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Finally De-Coupling from Basic Materials

Gold is finally responding to macro events. Gold has shaken from its slumber, rallying over \$80 per ounce, the largest dollar amount in a single day. This is comes off recent lows of \$740/oz. Looking back, Gold enjoyed a period of stand-out investment demand from late-07 into 1Q/08, and then labored through a period of investor selling during a seasonally-slack period for Indian/Asian fabrication offtake. Gold appears to be entering a powerful new phase of investment demand tied to safe-haven and monetization themes.

Figure 2. Comex Non-Commercial Gold Positions and Pricing Data



9/17/08	Current	QTD ave	YTD ave	YTD chg	2007 ave
Gold Prices (\$/oz)	867	868	898	5.6%	697
	Spot	Dec-08	Dec-09	Dec-10	contango
Gold Futures (\$/oz)	867	781	800	850	4.3%
Citi Forecasts		906	950	1000	
	1-Month	2-Month	3-Month	6-Month	12-Month
Lease Rates (%) ¹	0.78%	0.82%	0.89%	1.05%	1.00%
	09/09/08	12-m high	Date	12-m low	Date
Net Long/Short ²	66,799	224,784	10/16/07	66,799	9/9/08

Notes: 1: LIBOR minus G0F0; 2: COMEX Commitment of Traders, Contract = 100 oz

Source: LBMA, COMEX and Citi Investment Research

Gold has been despondent amid turmoil in Financials and overt systemic risk.

We have been surprised that Gold has been so heretofore quiet, and have expected a much stronger and more immediate response to the government takeover of GSE/mortgage and insurance entities, and broker-dealer bankruptcies. It is notable that the hard-core goldbugs have been proven correct in the decade-long contention that an overwhelmingly vast and complex pool of nested financial derivatives would ultimately result in cascading defaults and ruin for major portions of the banking system. Frankly, we're surprised that Gold is not already at \$2,000 per ounce.

Dollar rally and dis-inflation ... So what. Our sense is that Gold has been temporarily depressed by a series of ephemeral, short-term trading dynamics that served to mask strong physical off-take in what is ultimately a tiny market. Factors such as the rebound in the dollar, dis-inflation due to the energy-driven easing in the CPI, and spillover from industrial commodities dampened by the economic slowdown are meaningful from the perspective of day-to-day Gold trading flows but are unlikely to be deterministic over the longer term. Gold correlations with other asset classes are notoriously unstable, as shown in Fig 15. We continue to regard Gold as a barometer in the grand battle between hard assets and paper assets.

The contest: Safe-haven demand vs de-leveraging, the Dollar, and dis-inflation.

We see Gold as a tiny market, with motivated Indian/Asian and Mid-Eastern buyers and few sellers of size.

Net investment demand in all forms of physical Gold in 1H/08 was a mere \$11.8 bln.

Selling pressure switches to short-covering. In recent weeks, Gold has seen major long-liquidation on the COMEX plus a reduction in metal held in the ETFs as shown in Figs 4 and 5, while contending with a far-reaching wave of investor de-leveraging and distress selling. The spike in Gold lease rates since late-Aug also suggests short-selling. There is little doubt that short-covering played a role in yesterday's massive \$86/oz rally.

As physical offtake remains brisk. Indian imports recovered solidly in Aug, up 56% YoY. Anecdotal reports indicate that Dubai merchants have had difficulty keeping Gold in stock, while demand for coins has been brisk, particularly for the U.S. Gold Eagle, Canadian Maple Leaf, and Krugerrand. This is playing out against a backdrop of persistently strong demand in China due to wealth creation and penetration effects, and Russia plus the Mid-East due to petrodollar flows.

Benefiting in "Gloom & Doom" and "Muddle-through & Monetization" scenarios. Should the US lapse into deep recession with spillover to BRIC countries, we believe Gold and precious metals would prove to be one of the few safe havens for capital preservation particularly given likely low to negative real interest rates in such a scenario. In this case we would expect Gold to double or triple from current levels. A more likely macro outcome involves slow-growth accompanied by the monetization and socialization of derivatives losses. Actions such as the US takeover of GSE/mortgage and insurance entities and lending/guarantees to derivatives-laden banks, replicated globally, are likely to act to the detriment of paper currencies relative to hard assets and Gold.

We remain bullish on Gold. As we have maintained for months, Gold seems to be badly mis-priced amid uniformly dour sentiment for industrial metals and Coal. We remain positive on Gold, based on a mix of macro and supply-demand drivers. The forces that have propelled Gold for the past 5 years are firmly in place, and policy prescriptions for the credit crisis seem powerfully and uniformly re-flationary. Prices are up in Euro, Yen, and Rupees, a critical credibility test. Gold is below constant-dollar peaks of \$1,800 – 3,000/oz, and has lagged bulk/base metals since the 2001 trough. Appreciation remains muted relative to other Metals and Oil. Ultimately, Gold is a small market with motivated Indian/Asian and petrodollar-fuelled buyers.

We expect Gold to work higher through 2009/10, and maintain year-average forecasts of \$950 / 1,000 per ounce. Should the macro environment deteriorate more seriously than Citi economists expect, we would not be surprised to see Gold climb to multiples of these levels. In the near term, we expect Gold to be highly sensitive to macro developments, given the potential for safe-haven investment demand to ride on top of seasonal strength in physical/fabrication offtake.

Supply & Demand: A Better Balance

Please see Aug-12 report for full analysis.

Industry consultant GFMS released its "Gold Survey 2008 – Update 1" publication, with further refinements to World Gold Council data previously examined in a detail Aug-14 report.¹

See Gold supply/demand model at the back of this report.

GFMS expects the Gold bull market to resume, with the market "poised for another wave of investment" and believes that prices could regain the \$900 – 1,000/oz range by late-08 or early-09. This is predicated on prospects for thin supply and safe-haven demand, rather than a resurgence in Crude or collapse in the Dollar. Key data from 1H/08 include:

- **Mine supply.** Mine supply in 1H/08 fell -6% YoY to 1,133 T. China continued in its newfound role as world #1 producer. Output fell in the US, Australia, Canada, and Indonesia, but rose in LatAm and Russia. GFMS expects volumes to tick up in 2H, but for totals to be down -2% from 2007. Average cash costs are running at \$449 – 458/oz. We see Gold mine supply as under secular pressure, and unlikely to grow.
- **Scrap.** Recycled gold climbed +25% YoY to 587 T in response to high prices and economic distress. This was just shy of records set in 2006. GFMS expects scrap to slow in 2H, and full-year levels of 1,057T up +9%. Much "close to market" scrap has been flushed out.
- **Central Banks.** Selling was a modest 167 T, down -26%. GFMS expects full-year net sales to be roughly 270 T, the lowest since 1995. The pending slowdown is due to completion of sales by the ECB, and modest accumulation outside CBGA II countries.
- **Hedging.** Mining company de-hedging continued at a rapid pace in 1H/08 at 255T. With the global hedge book now standing at a mere 585 T, the lowest since 1987, de-hedging would seem set to wane. Relative to past years, this has the potential to free up 200 – 300 TPY "excess" Gold.
- **Fabrication.** Off-take fell -21% YoY to 1,294 T, due to price elasticity effects and economic weakness. This should be viewed in the context of record 1Q prices driven by investment demand. China and Russia continued to buck the trend, with fabrication growing +3% and +7% respectively due to wealth creation and petrodollar flows.
- **Investment.** This is the mirror-image of Fabrication, and grew almost 9x YoY to 406 T including Bars, Coins, ETFs, Futures, and OTC derivatives. It should be noted that this amounts to a mere \$11.9 bln, heavily weighted to 1Q. Here again there seems to be an East vs West, physical vs paper dynamic, as Bars and Coins increased sequentially while the "Implied" category which summarizes ETFs, Futures, and OTC derivatives fell. We see Gold entering a period where robust investment demand driven by financial stress, is likely to ride on top of seasonally-strong physical/fabrication offtake tied to Indian festivals (Nov), Western holidays (Dec), and the Chinese New Year (late-Jan/Feb).

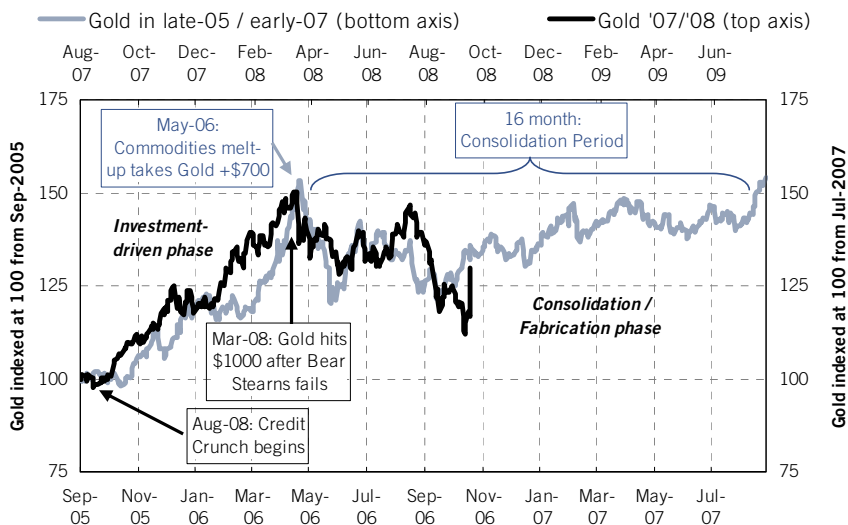
¹ See Gold Commodity Update: 2Q Data Suggest Gold Undervalued as Fundamentals Fill In
<https://www.citigroupgeo.com/pdf/SGL00386.pdf>

Recalling the patterns of 2006 ... And 2007

Current supply/demand gyrations echo the spring of 2006 when investors briefly took Gold over \$700/oz during a commodity flight as geopolitical tensions simmered. For most of 2006, Investment demand dominated as Metals and Oil set intermediate highs. Gold peaked at \$714/oz May-12/06, fabrication promptly collapsed with Indian imports hitting zero at one point. Following 6 months of fretting possible permanent demand destruction and a \$30/oz correction, fabrication came roaring back from late-06 through 1H/07. This gave way to a period of lower prices and stand-out Fabrication. During this time, Western retail investors abandoned Gold, as seen in ETF outflows, while better-informed Asian/Indian and Mid-East players happily bought at bargain prices. The dawning of the credit crisis in mid-07 touched off 6-month period of record Investment demand that rode on top of seasonally-strong physical offtake to propel Gold above \$1,000/oz in March 2008.

Analogous to the 2006 consolidation period, the current dip below ~\$900/oz may prove an excellent entry point before the next phase of investment-driven demand

Figure 3. Indexed Gold Prices – From Jul-2006 vs From Sep-2008



Source: Citi Investment Research

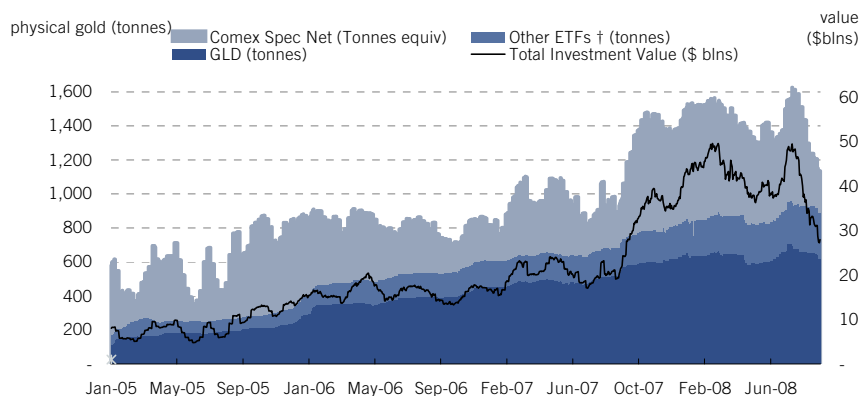
Recent data validates the patterns identified in our “Multiple Handoffs” series on Gold, with Western macro-driven investment demand taking prices higher, and Eastern jewelry/fabrication filling in during periodic pullbacks. The interplay between demographically distinct Western/Eastern buyers, typically over 6 – 9 month intervals, has defined Gold's stair-step ascent over the past 5 years. In our view, the 2Q/08 period represented a transition back to fabrication, with physical buyers emerging in force during 3Q. It now appears that synchronous acceleration of Fabrication and Investment may propel Gold higher during 4Q, in a dynamic nearly identical to 2007.

Standing up to selling pressure

Quantifying Speculator Liquidation – Long speculative interest in Gold appears to have peaked in mid July. We calculate a sum of Global ETF tonnage plus the Comex non-commercial long position hit an aggregate high of 1630 tonnes of Gold on July 22nd, 2008, equal to about \$50 bln at then prices of \$945/oz. This position has fallen 30% in tonnage terms to a net long plus ETF position of 1140 tonnes, valued at \$28 bln. Of the 490 tonnes unwound, 88% was on the Comex exchange with the balance flowing from ETF's. Such lopsidedness selling suggest to us that long term investment demand, represented by ETF's, remains firm while the shorter term effects of de-leveraging have been the key to the sell-off over and above that expected by recent USD appreciation.

Speculators have disgorged the equivalent of 490 tonnes of Gold holdings and net long positions since July peaks

Figure 4. ETF Gold and Comex Non-Commercial Net-Long Equivalent



Principal Gold ETF Holdings (End of Period in Tonnes)							
Location	2004	2005	2006	2007	1Q08	2Q08	9/12/08
SPDR Gold Shares (GLD)	45	263	452	628	642	644	614
Other †	62	101	150	193	228	230	273
TOTAL	106	365	602	821	870	874	887
% change (prev. period)	233.8%	29.8%	65.2%	36.2%	6.0%	0.5%	1.5%
Total Value (blns)	\$8.0	\$5.9	\$12.1	\$22.0	\$25.6	\$26.1	\$21.8
% change (prev. period)	34.9%	40.4%	104.9%	81.1%	16.5%	1.7%	-16.2%
GLD Ave. Daily Trading (mlns)	\$164	\$308	\$355	\$417	\$1,174	\$916	1,318

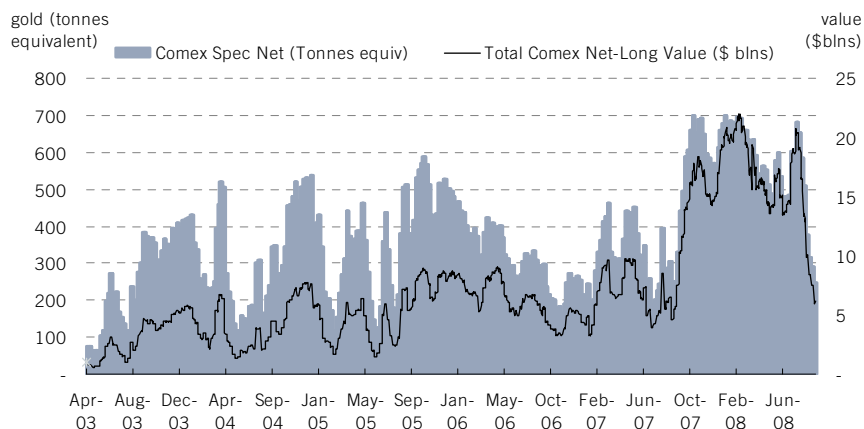
† - iShares and other internationally held funds on LSE, ASX & JSE

Source: Citi Investment Research

Reduction in the Comex net longs represent roughly 88% of the total "visible" speculative unwind

Anecdotal explanations include redemptions, de-leveraging and profit taking

Figure 5. Comex Net Long (in tonnes and \$ blns)



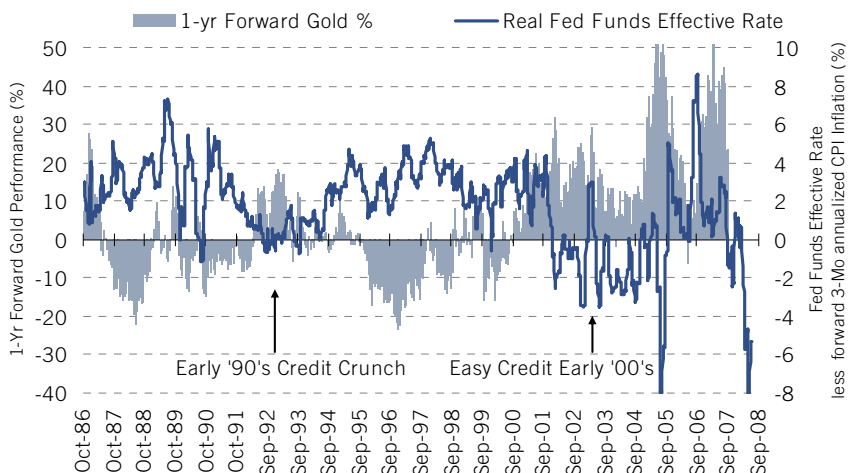
Source: Citi Investment Research

Pondering Macro Factors

Negative real rates have helped. With rock-bottom Fed rates and 5.4% YoY trailing CPI inflation, real interest rates in the U.S. have been strongly negative, inherently favoring hard assets and Gold. In an environment of difficult credit, wobbly financial institutions, and “securitization socialization,” low-rates are expected to persist, inherently favoring hard assets and Gold.

Measured by the Fed funds rate less forward CPI, real interest rates have been negative, inherently favoring hard assets and Gold. However, this impetus may be abating, given slowing inflation as seen in recent CPI figures.

Figure 6. Real Interest Rates and forward Gold Performance



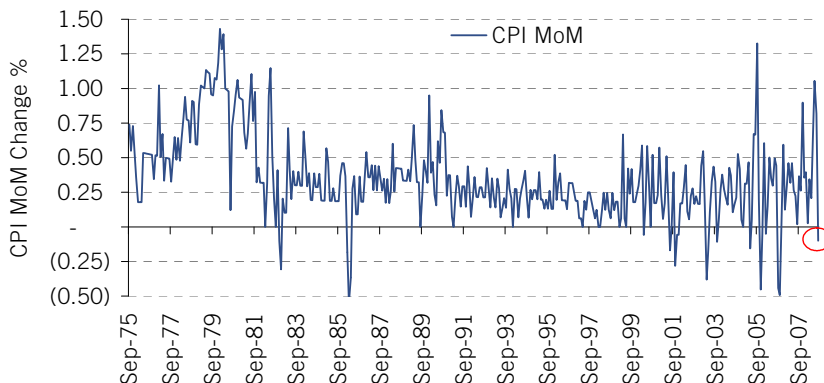
Source: Citi Investment Research

Yet, abating near-term inflation risks are a headwind. Citi economists suspect inflation risks are fading due to falling commodities, imports, consumer and producer prices amid slowing income, faltering demand and intensifying financial restraints. The August U.S. Consumer Price Index is a prime example with a 0.1% overall *decrease* largely due to falling energy. See figure 7. The combination of downside risk to inflation forecasts plus an apparent FOMC reluctance to reduce key rates despite intense systematic strains are both unresponsive for a continuation of the negative real interest rate trend.

Citi economists see inflation risks fading as prices moderate.

Key indicators for deflation to watch include: aggregate and asset prices, capacity utilization, and credit conditions

Figure 7. U.S. CPI MoM change

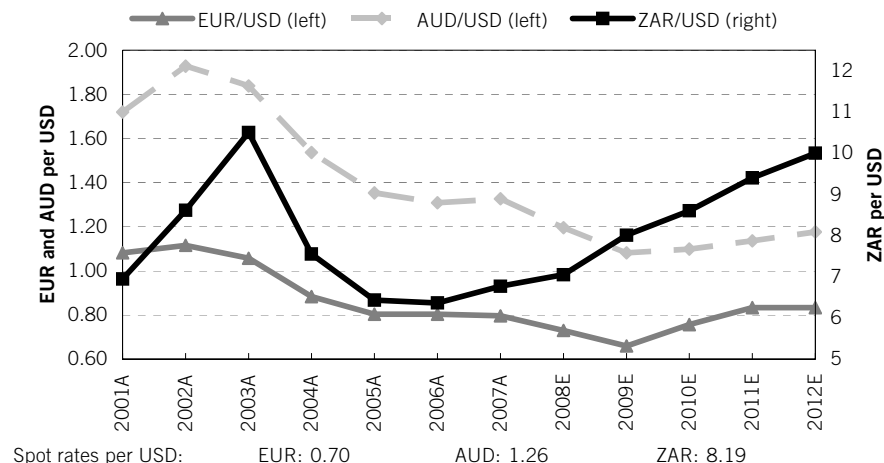


Source: Citi Investment Research

Citi currency strategists expect the USD to weaken further against the EUR, inherently positive for Gold prices

South African Gold producers would be relative beneficiaries in the base case scenario where the South African Rand weakens vs. the USD

Figure 8. EUR, AUD and ZAR Currency forecasts



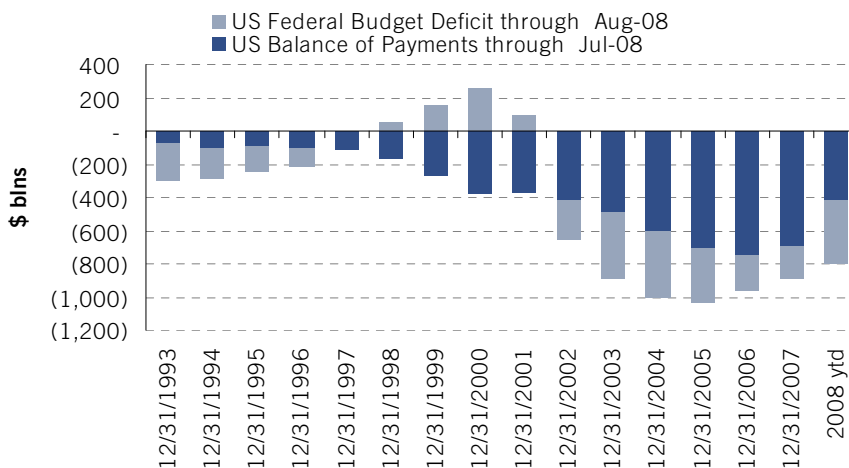
Source: Citi Investment Research

Government bailouts add to the mounting U.S. debt burden and increase the likelihood for a "Monetization and socialization" solution to the credit crisis.

The IMF forecasts financial write-downs will total more than \$1 trillion, with about \$600 bln of that for banks²

The total U.S. public debt is currently estimated to stand at \$9.7 tln

Figure 9. US Federal Budget and Trade Accounts



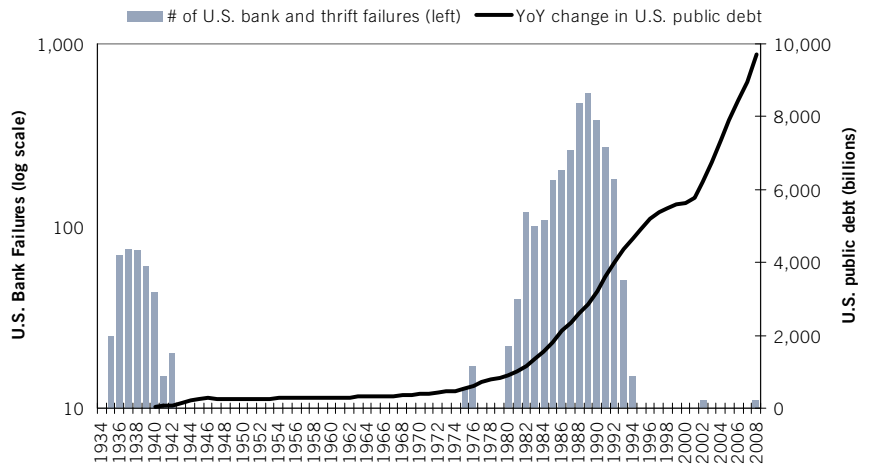
Source: U.S. Government and Citi Investment Research

² See Global Equity Strategy: A Downward Spiral, September 17, 2008

Bank failures to date remain limited in a historical perspective

Citi economists suspect "...weaknesses in significant parts of the financial system, combined with the poorly understood policy intentions and options, keep alive the risks of runs, both wholesale and retail."³

Figure 10. U.S. Bank and Thrift Failures and the National Public Debt



Source: FDIC and Citi Investment Research

³ See Economic and Market Analysis: State of the Crisis September 17, 2008

The Equities Mirror Investment in Physical

From the equity perspective, favorite Gold stocks globally are Barrick, Newcrest, Peter Hambro, Lihir, and Newmont. In Silver we like Fresnillo. See sector comp sheet Figure 22.

Gold Mining shares are down 30% in 3Q vs a drop of only 7% for bullion

Gold shares have languished as investors have flocked to ETFs, bullion and FCF-rich Bulk/Base miners

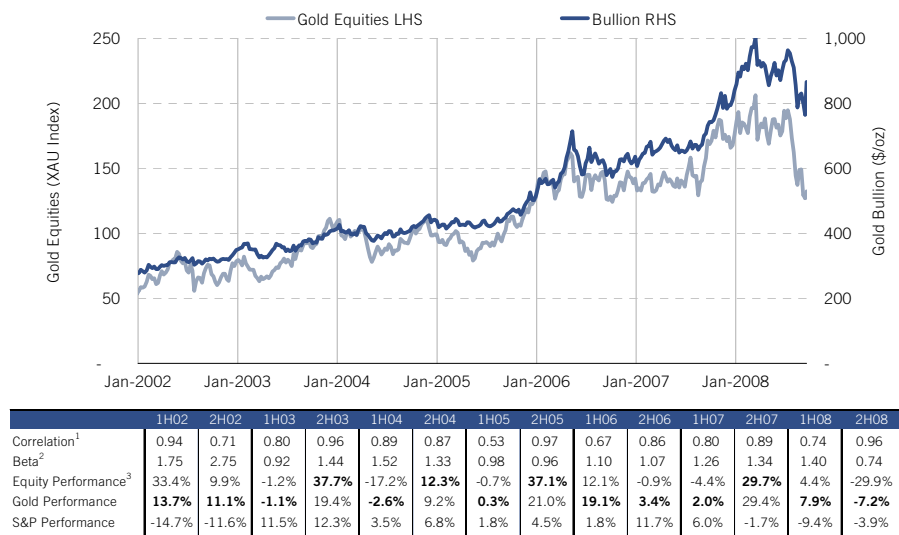
Gold equities remain near levels seen when gold was in the low \$600s

Lamentably, the equities have shown strong beta to falling Gold, and weak beta to upside moves.

Action in Gold equities tends to mirror Investment demand in bullion. Should retail investors return to Gold, the shares should participate.

Gold Equities have seen near-record volatility

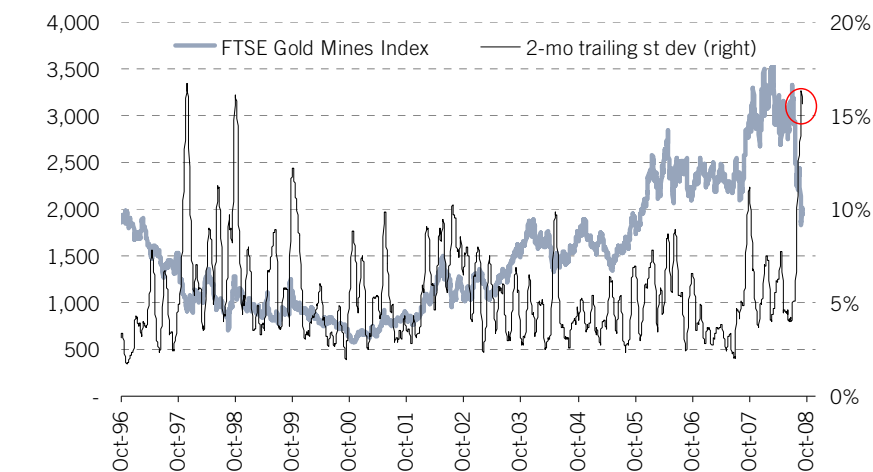
Figure 11. Gold Investment Performance – The Metal vs. the Miners



1) Correlation of weekly gold equities prices to gold bullion prices
 2) Beta of gold equities performance to gold bullion performance; Formula = Covariance (gold equities % chg, gold bullion % chg)/Variance (gold bullion % chg)
 3) the Phlx Gold and Silver Sector
 Note: Weekly datapoints; % changes may not exactly correspond to calendar year results. Stock performance through week of: 9/17/08

Source: Citi Investment Research

Figure 12. Gold Mines Index and 2-mo standard deviation



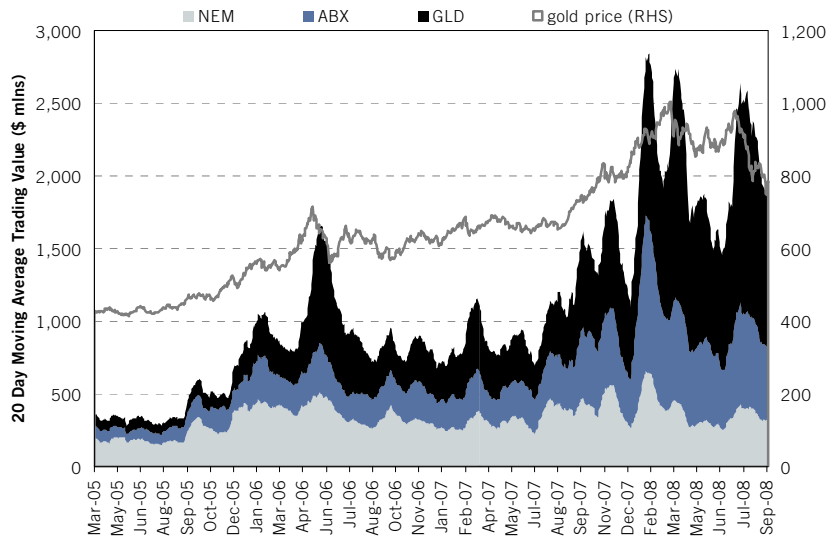
Source: Citi Investment Research

Additional Factors to Consider

Trading in Gold-linked securities has ballooned, representing strong investment demand

The value of traded volume in GLD, ABX and NEM is averaging about \$2 bln/day, double levels of last year

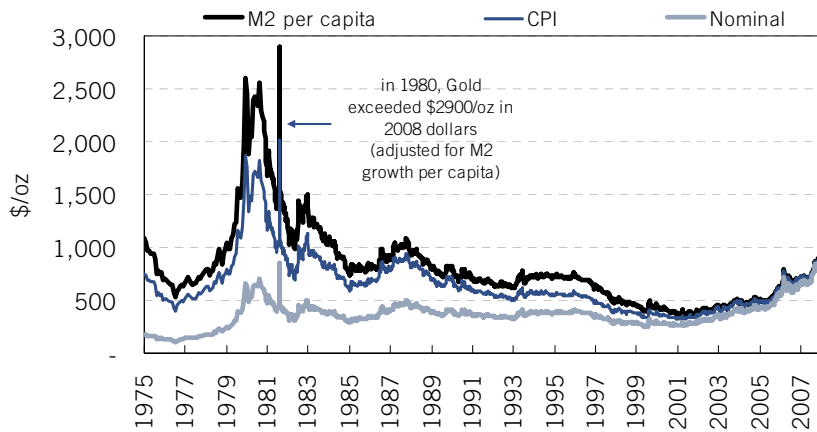
Figure 13. Cumulative Average Daily Trading Value of GLD, ABX and NEM



Source: Citi Investment Research

Adjusted for inflation Gold is still 1/3rd from prior peaks

Figure 14. Long-term Gold prices – Inflation Adjusted and Nominal



Source: Citi Investment Research

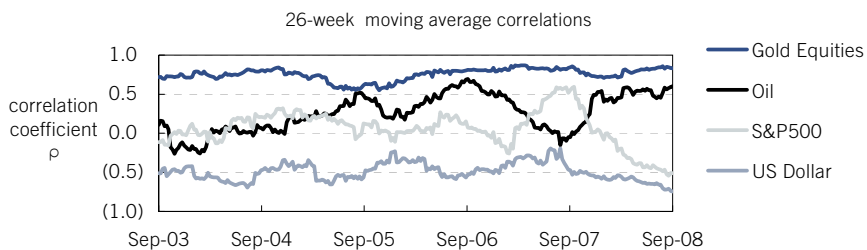
Gold correlations are notably firming on the positive side for Gold equities and on the negative side for broader equities and the USD

In recent days Oil correlations have been moderating

Historically unstable Gold correlations counsel caution against any/all single-factor macro models

Figure 15. Correlation Matrix -- Weekly Returns on Gold and Selected Asset Classes

	2005		2006		2007		2008 YTD		Since '99	
	Bullion	Stox	Bullion	Stox	Bullion	Stox	Bullion	Stox	Bullion	Stox
US Dollar ¹	(0.52)	(0.35)	(0.49)	(0.46)	(0.57)	(0.49)	(0.72)	(0.69)	(0.50)	(0.38)
Euro	0.52	0.33	0.48	0.46	0.58	0.57	0.71	0.71	0.47	0.37
CRB Index ²	0.48	0.30	0.74	0.72	0.63	0.55	0.65	0.66	0.49	0.39
WTI Oil	0.25	0.32	0.53	0.55	0.29	0.24	0.53	0.55	0.18	0.18
S&P 500	(0.00)	0.40	0.02	0.26	0.17	0.38	(0.44)	(0.25)	(0.04)	(0.01)
Gold Equities ³	0.63		0.81		0.76		0.82		0.72	



1 - Trade Weighted US Dollar (DXY)

2 - Index of broad commodity prices (CRB)

3 - Gold Equities: XAU Index

Note: Weekly Returns - Graph of correlation on weekly returns - 26 week moving average

Source: Citi Investment Research

Figure 16. Long-Term Gold vs Oil Ratio



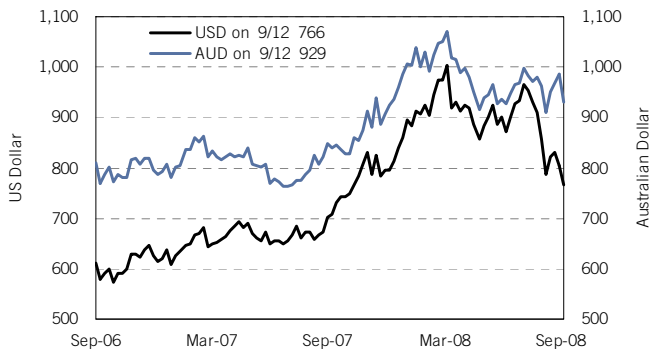
Source: Citi Investment Research

Figure 17. Long Term S&P500 vs Gold Ratio



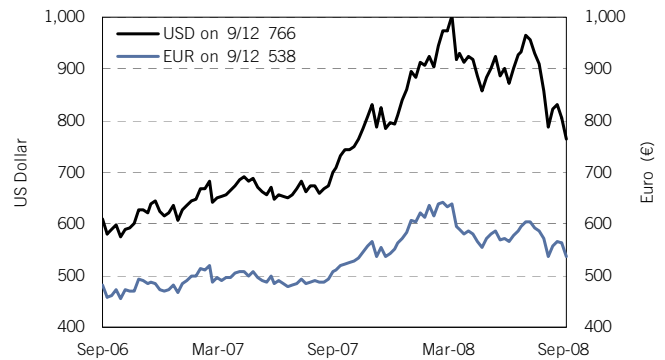
Source: Citi Investment Research

Figure 18. Gold Prices in US and Australian Dollars



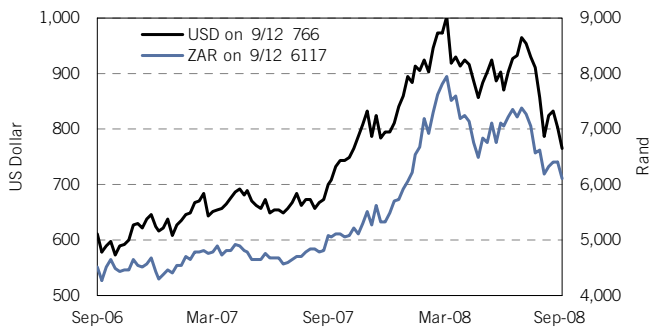
Source: Citi Investment Research

Figure 19. Gold Prices in US Dollars and Euros



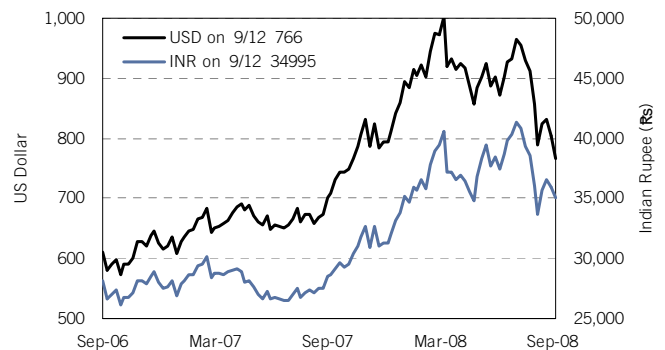
Source: Citi Investment Research

Figure 20. Gold Prices in US Dollars and South African Rand



Source: Citi Investment Research

Figure 21. Gold Prices in US Dollars and Indian Rupees



Source: Citi Investment Research

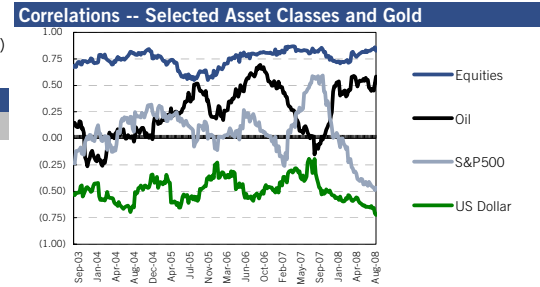
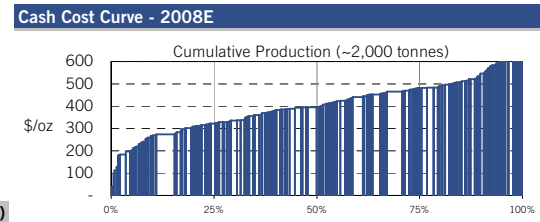
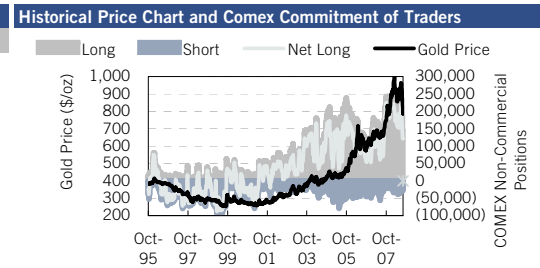
Figure 22. Gold and Precious Mining Equity Compsheet

Companies	Ticker	Analyst	Rating	Price USD	Market Cap	EV	Gold Prod. (k oz)	Cash Cost	Cash Cost	EV/oz paid	P/NAV	Net Debt to EV	P/E Ratio			P/OCF ex minorities			EV/EBITDA														
				09/17/08	(US blns)	(US blns)	2008	2008	2009	2008	2007	07E	08E	09E	07A	08E	09E	07E	08E	09E													
Major Gold Producers																																	
Barrick Gold	ABX	John H Hill, CFA	1H	32.51	28.4	29.3	7,589	430	465	284	1.20	4.0%	17.5x	14.5x	12.5x	15.6x	9.5x	8.3x	12.6x	8.5x	6.7x												
Newmont Mining	NEM	John H Hill, CFA	1H	43.25	19.0	20.6	5,217	448	462	298	1.41	8.3%	30.4x	19.0x	13.9x	19.8x	10.8x	8.1x	11.2x	8.8x	5.9x												
Newcrest Mining	NCM.AX	Clarke Wilkins	1H	17.00	7.7	8.9	1,711	647	714	307		11.8%	37.2x	18.8x	17.2x	18.8x	9.1x	8.6x	10.6x	9.5x	9.0x												
Peter Hambro Min	POG.L	Liam Fitzpatrick	1H	11.01	0.9	1.0	368	252	294			14.4%	10.8x	6.9x	3.8x	22.9x	6.4x	3.7x	9.2x	5.6x	3.4x												
Randgold Resourc	RRS.L	Liam Fitzpatrick	2H	34.61	2.6	2.5						-11.5%	59.1x	31.6x	21.1x	31.9x	22.0x	16.0x	19.2x	14.7x	12.0x												
Lihir Gold Ltd	LGL.AX	Clarke Wilkins	1H	1.70	3.7	3.4	848	0	0	146		-5.2%	55.4x	18.4x	10.2x	28.9x	8.8x	5.1x	27.2x	9.0x	4.8x												
Median													33.8x	18.6x	13.2x	21.3x	9.3x	8.2x	11.9x	8.9x	6.3x												
Mean													35.1x	18.2x	13.1x	23.0x	11.1x	8.3x	15.0x	9.3x	7.0x												
Junior Gold Companies																																	
NovaGold Resourc	NG	John H Hill, CFA	2S	5.48	0.6	0.5	30					-19.2%	na	na	na	-10.3x	32.1x	25.8x	-5.9x	41.1x	27.2x												
Median													na	na	na	na	na	na	na	na	na												
Mean													na	na	na	na	na	na	na	na	na												
Platinum Group Metals																																	
Anglo Plat	AMSJ.J	Gerhard Engelbrecht	3M	103.10	24.5	24.6						1.9%	16.1x	8.9x	8.5x	12.2x	7.6x	7.0x	9.5x	6.0x	5.7x												
Impala Platinum	IMPJ.J	Gerhard Engelbrecht	3M	21.82	13.8	12.4						-2.4%	13.9x	9.1x	5.9x	9.0x	8.0x	5.4x	7.7x	6.2x	4.2x												
Northam Platinum	NHMJ.J	Gerhard Engelbrecht	3H	6.31	2.3	2.1						-6.9%	9.3x	8.0x	8.3x	9.9x	9.8x	7.1x	8.1x	7.4x	5.4x												
Median													11.6x	8.5x	7.1x	9.4x	7.8x	6.2x	7.9x	6.1x	4.8x												
Mean													11.9x	8.1x	7.0x	7.8x	6.3x	4.9x	7.2x	5.5x	4.2x												
Silver Companies																																	
Fresnillo	FRES.L	Liam Fitzpatrick	1M	5.51	4.0	4.1	376					11.0%	27.6x	11.4x	11.6x	79.0x	17.0x	18.2x	16.2x	8.4x	7.1x												
Hochschild Mining	HOCL.L	Liam Fitzpatrick	2M	3.71	1.1	0.9	221					-24.3%	12.9x	14.0x	17.3x	39.6x	19.9x	11.8x	7.6x	6.3x	6.5x												
Median													20.3x	12.7x	14.4x	59.3x	18.4x	15.0x	11.9x	7.4x	6.8x												
Mean													20.3x	12.7x	14.4x	59.3x	18.4x	15.0x	11.9x	7.4x	6.8x												
Diamond Companies																																	
Gem Diamonds	GEMD.L	Liam Fitzpatrick	1M	11.97	0.8	0.7						-22.3%	30.0x	21.7x	14.8x	13.5x	9.2x	9.3x	9.9x	5.5x	6.4x												
Median													30.0x	21.7x	14.8x	13.5x	9.2x	9.3x	9.9x	5.5x	6.4x												
Mean													30.0x	21.7x	14.8x	13.5x	9.2x	9.3x	9.9x	5.5x	6.4x												
Diversifieds with Byproduct Gold																																	
Anglo American	AAL.L	Heath R Jansen	1M	36.59	48.2	47.2						11.0%	8.4x	5.6x	3.8x	6.8x	5.5x	3.3x	5.7x	4.3x	2.5x												
Sumitomo Mtl Min	5713.T	Toshiyuki Johnno	1H	9.87	5.7	5.0						28.0%	4.9x	4.5x	6.4x	4.5x	4.4x	8.9x	4.2x	4.0x	5.9x												
Norilsk	GMKN.RTS	Daniel Yakub	2H	123.00	23.4	17.2	163					11.9%	3.2x	3.7x	4.9x	3.0x	3.4x	4.3x	2.5x	2.4x	2.7x												
Freeport Mcmoran	FCX	John H Hill, CFA	1H	65.41	25.1	31.7	437			858	0.77	17.6%	6.9x	6.6x	3.9x	5.8x	4.0x	2.7x	4.7x	3.4x	2.2x												
OZ Minerals Ltd	OZL.AX	Clarke Wilkins	1H	1.10	3.4	3.4	151					4.1%	6.4x	20.2x	5.8x	9.7x	39.4x	3.1x	7.5x	7.2x	2.6x												
Median													6.4x	5.6x	4.9x	5.8x	4.4x	3.3x	4.7x	4.0x	2.6x												
Mean													6.0x	8.1x	4.9x	6.0x	11.3x	4.4x	4.9x	4.3x	3.2x												

Source: Citi Investment Research

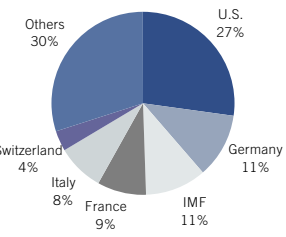
Figure 23. Gold Factpage

World Gold Supply/Demand									
Metric Tonnes (1 T = 32,151 troy oz)	2001	2002	2003	2004	2005	2006	2007	2008E	2009E
GOLD SUPPLY									
Mine Production	2,621	2,589	2,621	2,493	2,548	2,486	2,476	2,422	2,400
Old Gold Scrap	708	835	985	878	897	1,126	956	1,157	1,000
Gold Supply -- Mine Production & Scrap	3,329	3,424	3,606	3,371	3,445	3,612	3,432	3,579	3,400
GOLD DEMAND/Fabrication Demand									
Jewelry	3,016	2,667	2,482	2,613	2,708	2,284	2,401	2,164	2,200
Electronics/Dental Other	363	358	381	414	432	459	461	555	465
Subtotal, Fabrication Demand	3,379	3,025	2,863	3,027	3,140	2,743	2,862	2,719	2,665
Fabricated Surplus / (Deficit)	(50)	399	743	344	305	869	570	860	735
Investment Demand									
Official Coins + Medallions	111	122	133	142	147	188	210	209	210
Bar Hoarding	261	264	180	257	264	235	236	261	250
Other Retail Investment	2	(26)	(21)	(59)	(26)	(22)			
Physical Gold-Backed ETFs		3	39	136	208	260	251	0	0
Implied Western Investment (Disinvestment)	(46)	146	743	(91)	283	168			
Subtotal, Investment Demand	326	532	1,074	385	876	829	605	819	835
Total Demand	3,705	3,557	3,937	3,412	4,016	3,572	3,467	3,538	3,500
Commodity Surplus / (Deficit)	(376)	(133)	(331)	(41)	(571)	40	(35)	41	(100)
Filling The Gap									
Net Hedging -- Fwd Sales/Gold Loans/Options	(151)	(412)	(289)	(438)	(92)	(410)	(446)	(310)	(200)
Net Official Sector Sales (Purchases)	520	547	620	479	663	370	481	269	300



Top Producing Countries (MT)				
Country	2005	2006	2007	YoY %
South Africa	315	292	270	-7.5%
Australia	263	246	246	0.0%
United States	256	252	240	-4.8%
China	224	240	265	10.4%
Peru	208	202	167	-17.3%
Russia	175	173	169	-2.2%
Indonesia	167	116	137	18.1%
Canada	119	104	101	-2.2%
Uzbekistan	79	75	74	-1.3%
Ghana	63	70	79	12.5%
World Total	2,522	2,486	2,476	-0.4%

Official Sector Gold Holdings (MT)				Official Sector Holdings			Consumer Demand - Selected Countries (MT)				
Selected Countries & In	Reserves	US\$ bn ⁴	% in Au	2006	Jewellery	Net Retail	Total	2006	Jewellery	Net Retail	Total
United States	8,134	0.20	78.2%	India	589.0	134.7	723.7	India	589.0	134.7	723.7
Germany	3,418	0.08	66.3%	China	241.4	11.7	253.1	China	241.4	11.7	253.1
IMF	3,217	0.08	0.0%	Japan	34.0	46.0	80.0	Japan	34.0	46.0	80.0
France	2,562	0.06	49.4%	Indonesia	77.0	3.0	80.0	Indonesia	77.0	3.0	80.0
Italy	2,452	0.06	68.1%	Vietnam	26.9	34.0	60.9	Vietnam	26.9	34.0	60.9
Switzerland	1,101	0.03	39.8%	Saudia Arabia	152.3	7.3	159.6	Saudia Arabia	152.3	7.3	159.6
Japan	765	0.02	2.1%	Egypt	75.4	0.9	76.3	Egypt	75.4	0.9	76.3
ECB	564	0.01	61.2%	UAE	96.0	10.0	106.0	UAE	96.0	10.0	106.0
Total, Official Sector	29,813	0.74		Turkey	196.9	53.5	250.4	Turkey	196.9	53.5	250.4



Supply From Above Ground Stocks (MT)			Reference Statistics (MT)		Gold ETF Holdings & Other GBS (MT)			
(end of 2006)	% of Total				Fund	4Q07	1Q08	2Q08
Jewelry	82,700	51.1%	CB Lending Pool	3,800	StreetTRACKS-US	628	642	644
Official Sector	29,813	18.4%	Mine Supply / Year	2,422	Other	193	228	230
Private Investment	26,500	16.4%	Total Hedge Outstanding	707	Total	821	870	874
Fabrication	19,200	11.9%	5 Yrs of CBGA	2,500	Average Trading Volume (US\$ mlns)			
Unaccounted	3,600	2.2%				4Q07	1Q08	2Q08
Total Stock	161,813	100%			StreetTRACKS-US	\$601	\$1,174	\$916

Source: Bloomberg, Stockval, Gold Fields Minerals Services (GFMS), World Gold Council, Brook Hunt and Citigroup Investment Research

Appendix A-1

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