SOCIETE GENERALE
Cross Asset Research

GLOBAL ASSET ALLOCATION
28 February 2013

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WEEKLY

Multi Asset Snapshot

The Gold rush is over

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Written in collaboration with SG's commodity, financial and technical analysts, this 20-page report identifies and examines major factors driving Gold prices, from the US dollar to inflation, not to mention real interest rates, volatility and investment flows as well as supply and demand.

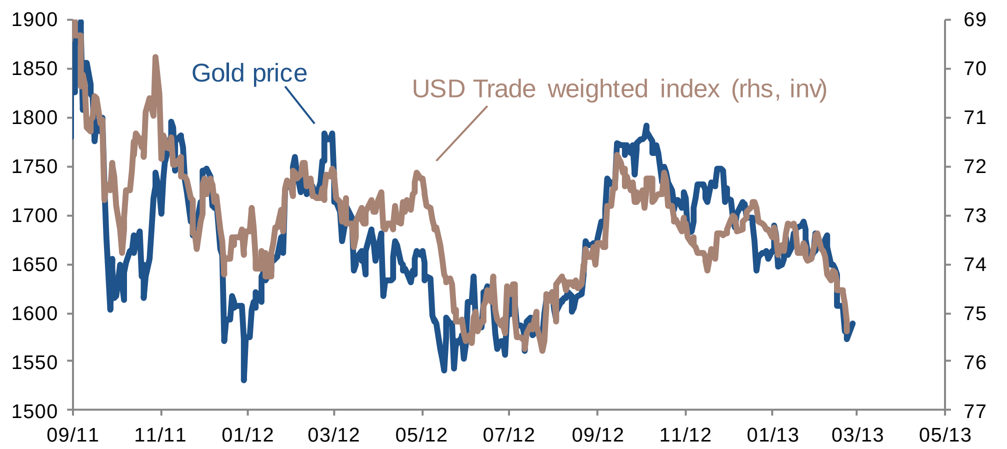
- Adding Gold led to significant decorrelation within portfolios when Gold prices rose in a straight line over 2001-2011 (read: risk reduction). Gold should continue to offer diversification, but risk is now on the downside.

- However, outflows from Gold ETPs are accelerating, hedge funds are significantly reducing their long position and the spot price has dropped 15% from its peak. The Gold rush is over.

- The consensus is still bullish, but the outlook for Gold is less shiny now. SG's macro scenario calls for a stronger USD and higher real rates this year. This mix would be a sour cocktail for Gold at a time when inflation remains low.

- Are Gold mining stocks any better than the metal itself? See page 13 for our views.

Stronger US dollar, a headwind for Gold



US dollar index – FED nominal trade-weighted index versus major currencies (100 = March 1973).
Source: Fed, Datastream, SG Cross Asset Research

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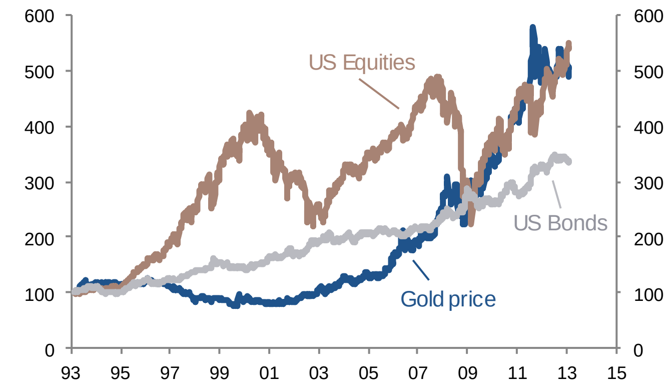
Gold and asset allocation

Gold's performance and volatility are more comparable to US Equity's performance and volatility than to US Bonds' performance and volatility.

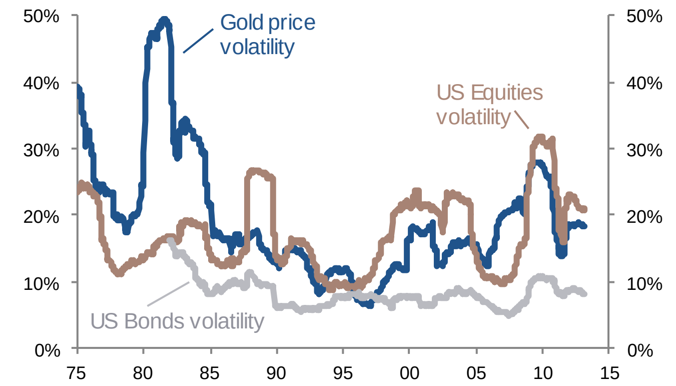
The price of Gold price has increased 4.9-fold over the last 20 years, for an average annual rate of 8.3%. This is somewhat similar to the performance of US Equities over the same period (+8.9%/year). In contrast, US Bonds have delivered only 6.3% growth per annum, but with far less volatility at 8% compared to 17% for both US Equities and Gold since 1980.

Asset performance over the last 20 years



Prices in total return and in USD dollars. 100 = 15/02/93.
Source: SG Cross Asset Research

Gold volatility regime close to Equity's volatility regime

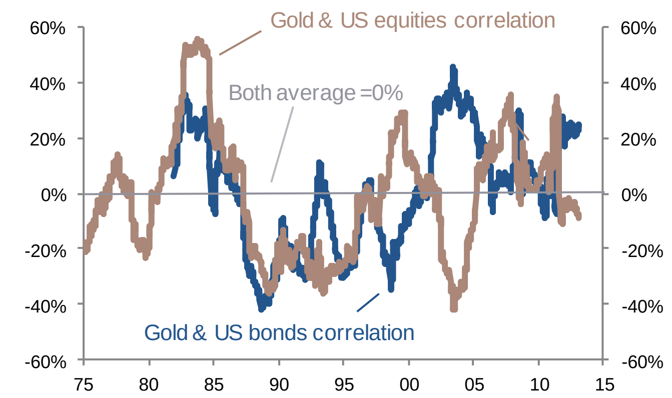


Two-year annualised volatility based on weekly prices in total return and in USD dollars.
Source: SG Cross Asset Research

Gold: a decorrelated asset, skewing the efficient frontier

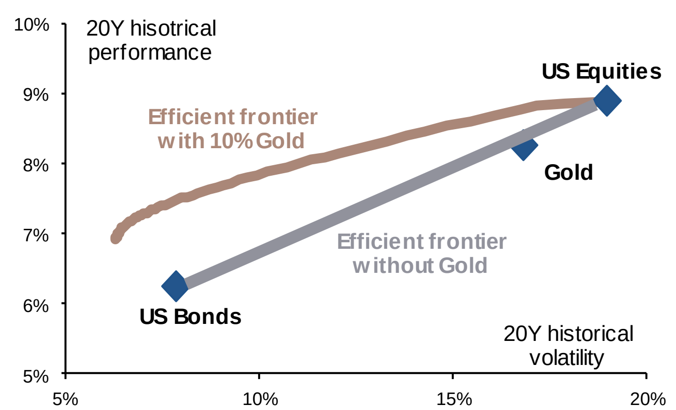
Despite the similarities with US Equities in terms of performance and volatility, Gold's average correlation with US Equities and Bonds over the last 20 years is 0%. So the Gold asset class brings diversification to a portfolio. Below we highlight in the right chart how the efficient frontier of a portfolio composed of only US Equities and US Bonds would be skewed if the portfolio invested 10% of its holdings in Gold.

Gold: correlation of 0% with Equities and 0% with Bonds…



Two-year correlation based on weekly prices in total return and in USD dollars.
Source: SG Cross Asset Research

… skews the efficient frontier



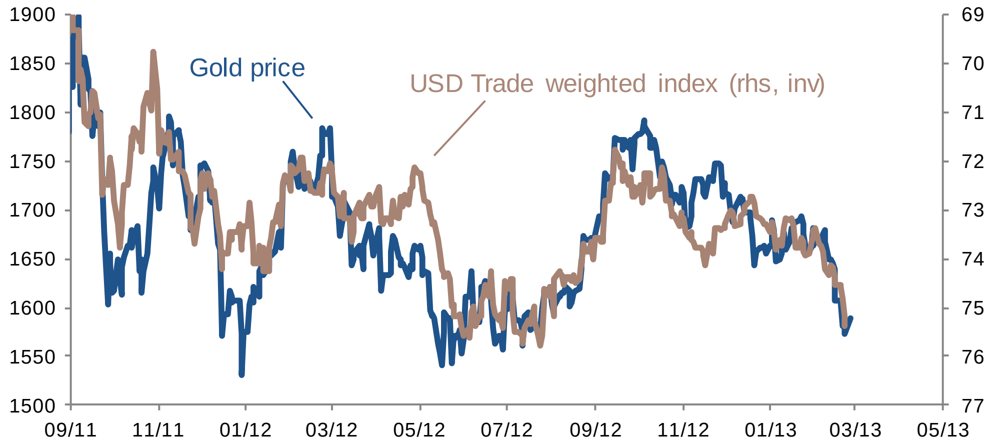
Source: SG Cross Asset Research

Gold as a (global) currency

Gold prices have been highly sensitive to the US dollar over the last 18 months. Nevertheless, to capture the worldwide value of the US dollar, we need to measure it versus a basket of currencies (here we do so using a trade-weighted index). On the next page, we examine why the EUR/USD has not been a good Gold price indicator in the recent period.

The chart on the right shows the correlation between Gold prices and the USD trade-weighted index. The correlation is higher over longer horizons, with the Fed index versus the broader index rebased in 1997 (correlation since September 2011: 78%).

Gold prices have suffered from US dollar strengthening (correlation: 75%)

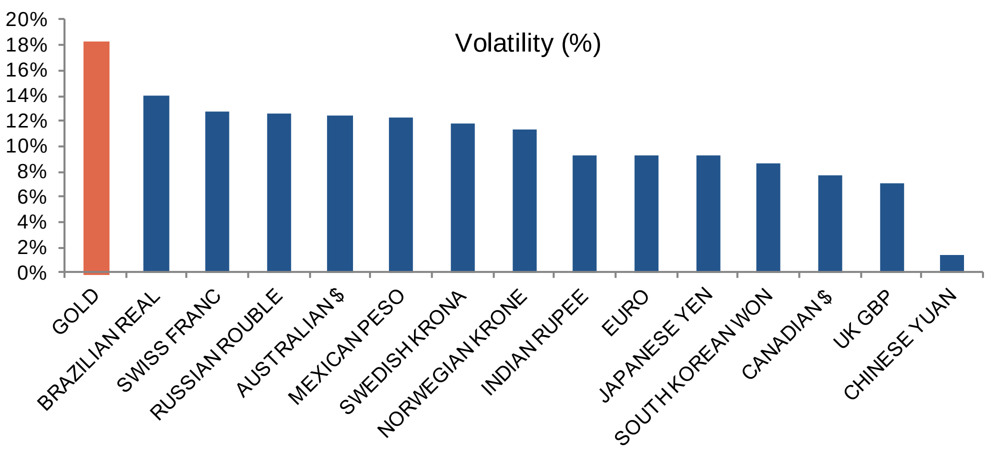


US dollar index – FED nominal trade-weighted index versus major currencies (100 = March 1973).
Source: Fed, Datastream, SG Cross Asset Research

Due to the correlation highlighted above, Gold could be considered a natural hedge against further US dollar appreciation. However, bear in mind that Gold prices are far more volatile than any other major currency.

Two-year Gold volatility (18%) is twice as high as EUR/USD volatility (9%) and GBP/USD volatility (7%).

Gold: the most volatile currency in the world



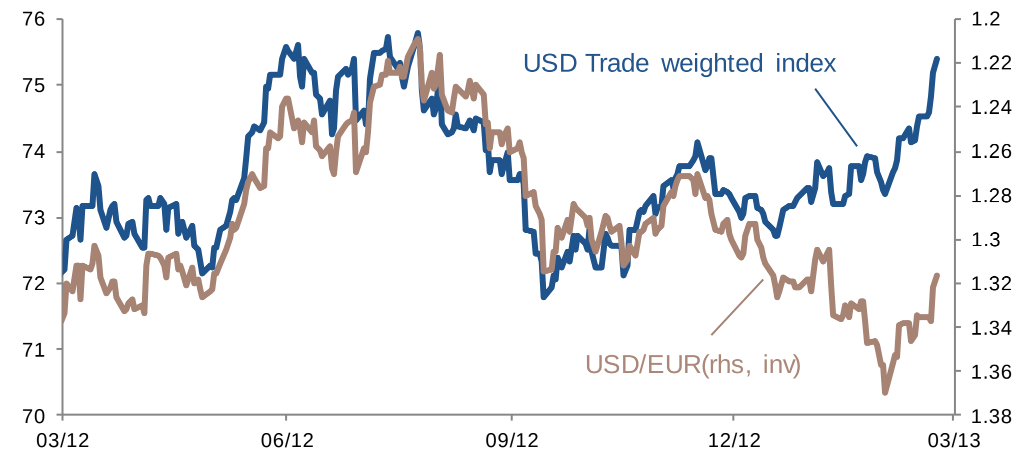
Two-year weekly volatility in US dollar. Source: SG Cross Asset Research

Why did USD/EUR and Gold prices recently decorrelate?

The USD/EUR rate has been correlated with the USD trade-weighted index, and hence with the price of Gold, in recent years. However, the euro strengthened in December and January versus the US dollar, whereas the latter also strengthened versus other major currencies like the Japanese Yen, the UK Sterling and the Canadian dollar.

The USD / EUR rate does not reflect a “global value” for the US dollar.

Since December, the US dollar has been strong in general…but not against the euro

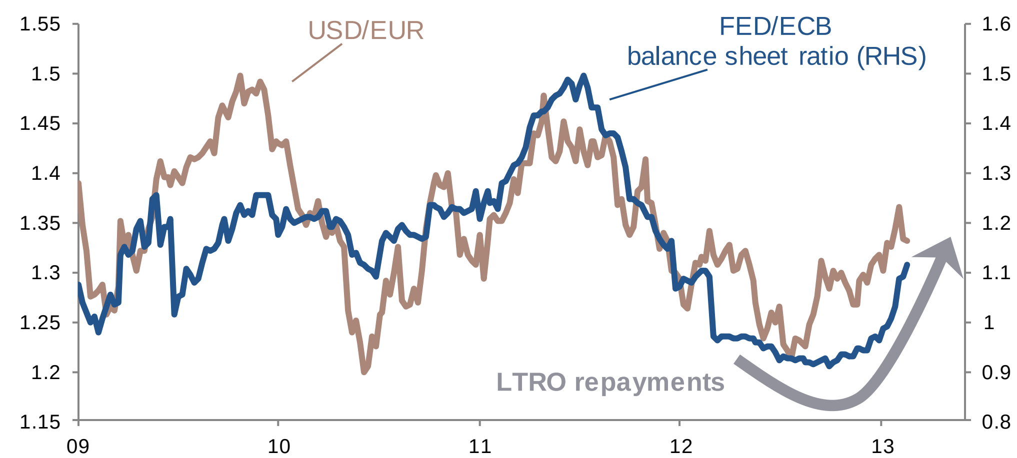


US dollar index – FED nominal trade-weighted index versus major currencies (100 = March 1973).
Source: Fed, Datastream, SG Cross Asset Research

Expansion of the ECB and the Fed’s balance sheets explains recent swings in the USD/EUR rate. Whereas the Fed is entering a third round of quantitative easing, buying $85bn / month of assets, the ECB balance sheet shrunk recently due to LTRO repayment. This explains the recent strengthening of the euro versus the US dollar.

The FED and ECB’s balance sheet ratio moves were behind recent swings in the USD/EUR.

FX market is highly sensitive to central bank balance sheet expansion

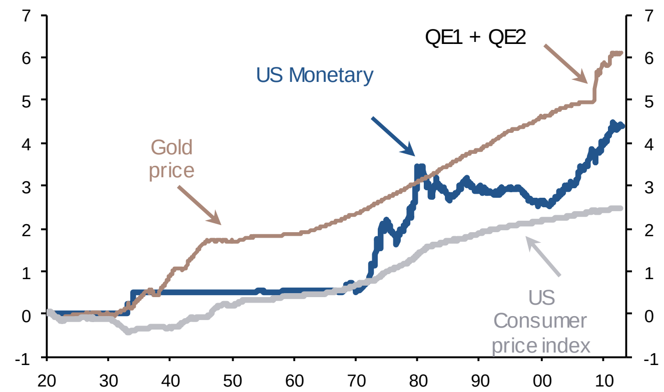


FED / ECB balance sheet ratio in local currency. Source: Datastream, Bloomberg, SG Cross Asset Research

US dollar: more appreciation in sight (1)

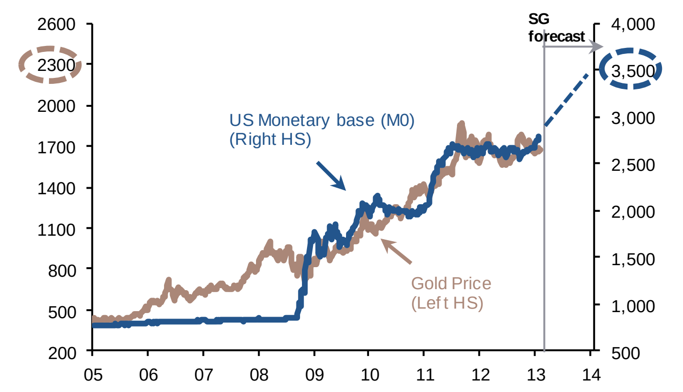
For a long time Gold prices have been supported by higher inflation and USD debasement (i.e. an increase of the monetary base M0). Since the failure of Lehman Brothers in September 2008, the Fed has increased its balance sheet, which has been a support for Gold prices.

Gold price: sensitive to inflation and US debasement



US money base (M0) and US CPI (all items). Logarithmic scale, base 100 in 1967. Source: Federal Reserve Bank of St. Louis, SG Cross Asset Research

Gold is supported by Fed's QE1 and QE2



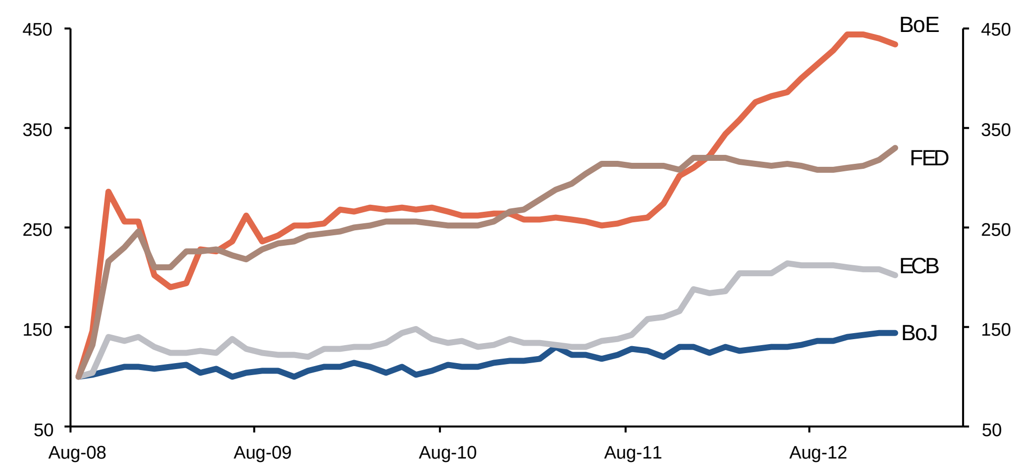
M0 in USDbn. Gold price in $/oz. US monetary base projections based on QE1 and QE2: treasury purchases pass-through to M0 is close to 100%; MBS purchases close to 50%. Fed to engage in $40bn + $45bn of Treasury purchases per month throughout 2013. Source: Federal Reserve Bank of St. Louis, Bloomberg, DataStream, SG Cross Asset Research

Given improving newsflow in the housing market and the job market, debate concerning the pace of quantitative easing is emerging from within the Fed (see page 13 – Minutes of the FOMC). Even if it seems premature for the Fed to talk about exit strategies today, the topic will come up sooner rather than later. This would be a support for the US dollar and a headwind for Gold.

Since the beginning of the financial crisis, the BoE and the Fed have been very aggressive.

However, there is still room for further balance sheet expansion in the eurozone (in case of ESM / OMT activation) and in Japan (announced since the arrival of Mr Abe).

Central bank balance sheet expansion since the beginning of the subprime crisis



100 = August 2008. Central bank balance sheets in local currency. Source: Bloomberg, SG Cross Asset Research

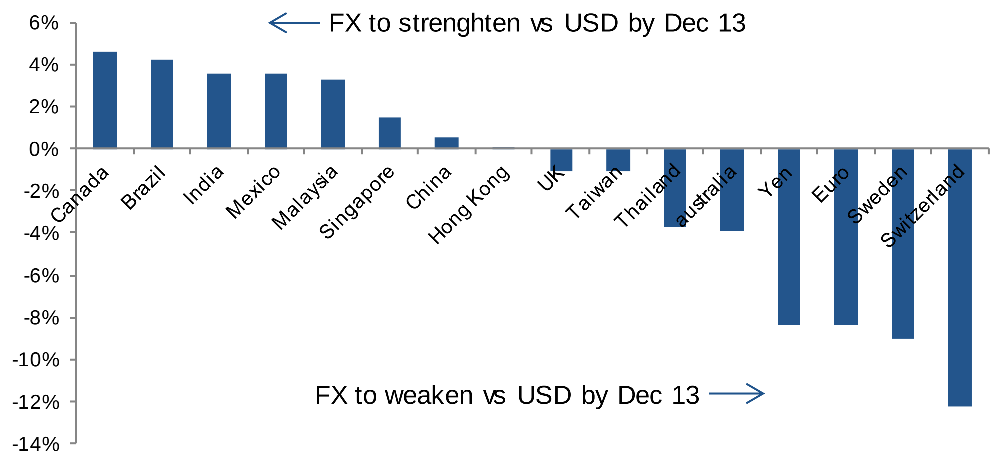
US dollar: more appreciation in sight (2)

Not good news for Gold prices. SG's FX strategists expect the US dollar to strengthen against most major currencies by year-end. This is in line with the recent positive trend in US macro data. For more details on our FX and rates forecasts, see addendum (pages 18-19).

The chart on the right shows major US trade partner currencies versus the US dollar.

SG's FX strategists expected the EUR and the YEN to weaken by 8% versus the USD by December.

US dollar to strengthen against most currencies by year-end according to SG FX strategists



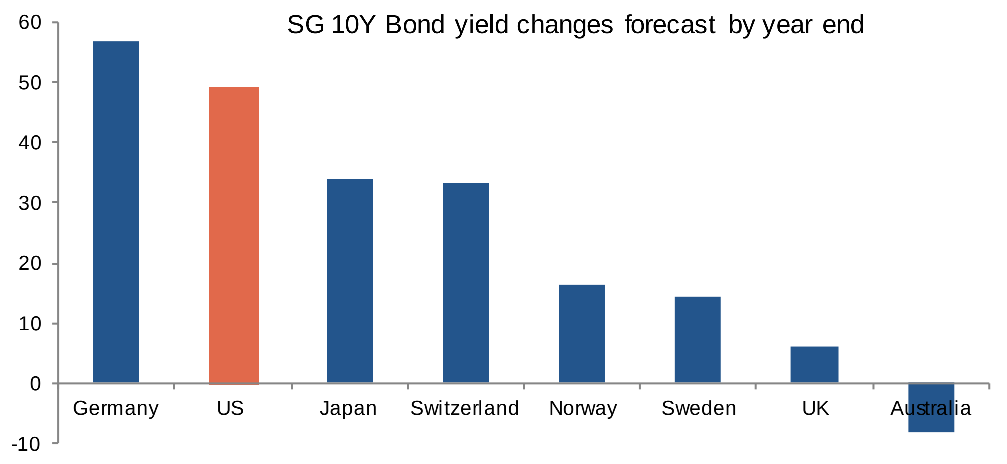
Potential upside / downside according to SG FX forecast on currencies of major US trade partners versus US dollar. Data as of 27/02/12.
Source: SG Cross Asset Research

A stronger US dollar expectation is consistent with SG's year-end rates forecast. Fixed Income strategists expect the 10-year bond yield to increase more in the US than in Japan, Switzerland and the UK, for example. Only German rates are expected to rise more than US rates, but this is partially due to some degree of rebalancing within the eurozone (in favour of peripherals bonds).

SG's fixed income strategists expect the US 10-year bond yield to reach 2.35% in December 2013.

Want to leverage your FX portfolio to a rising US yield environment? Take a look at [When Commos meet FX]

US 10Y bond yield to increase by year-end



Potential increase / decrease in the 10-year bond yield by year-end based on SG Fixed Income strategist expectations. Data as of 271/02/12.
Source: SG Cross Asset Researc

Yes, real rates also matter

The unusual looking chart below shows that Gold prices have historically dropped (the "empty" bubbles) when positive real rates **AND** the US dollar strengthen. Note that there are many "empty" bubbles in the top left area of the chart but that other areas are full of "blue" bubbles (i.e. rising Gold prices). So during periods of negative real rates **OR** US Dollar weakening, Gold prices have systematically increased.

A Pollock? No, just a 3D chart linking Gold prices (see legend), US real rates and US dollar performance since 1973

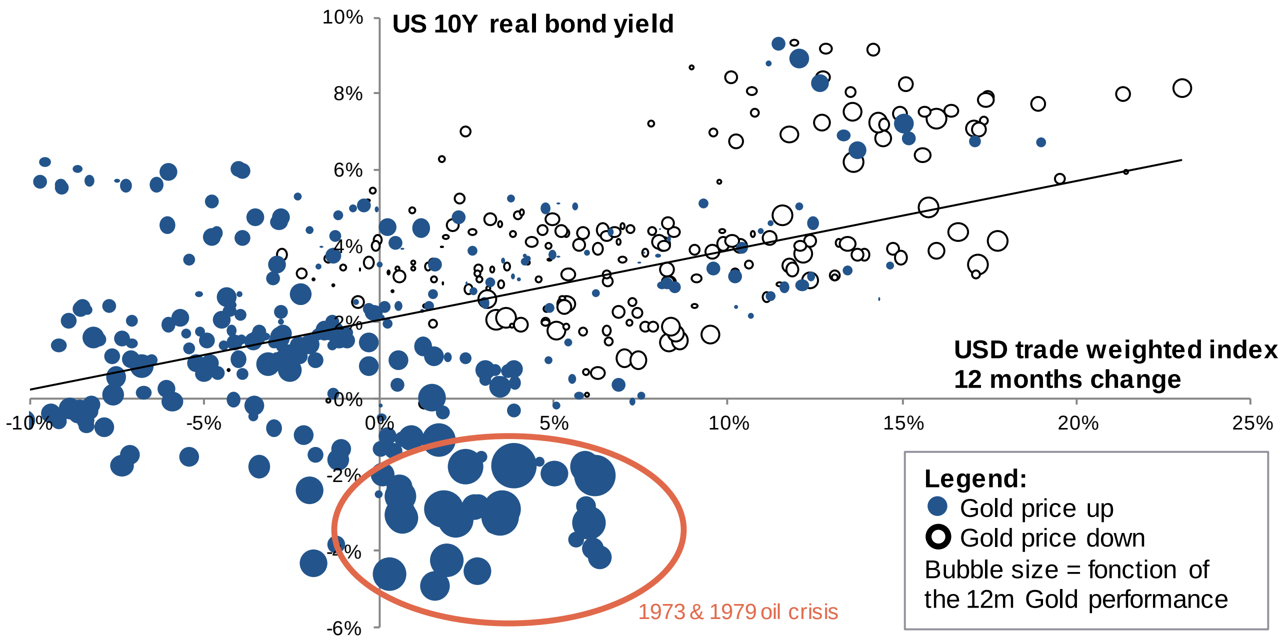
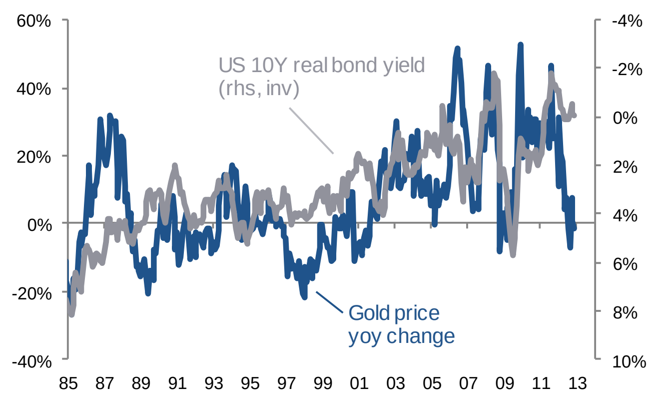


Chart based on monthly data since January 1973. US 10Y real bond yield: US 10Y Government bond yield – US yoy CPI rate. US dollar index 12 months change: FED nominal trade-weighted index versus broad basket of currencies (100 = January 1997). Source: Datastream, SG Cross Asset Research

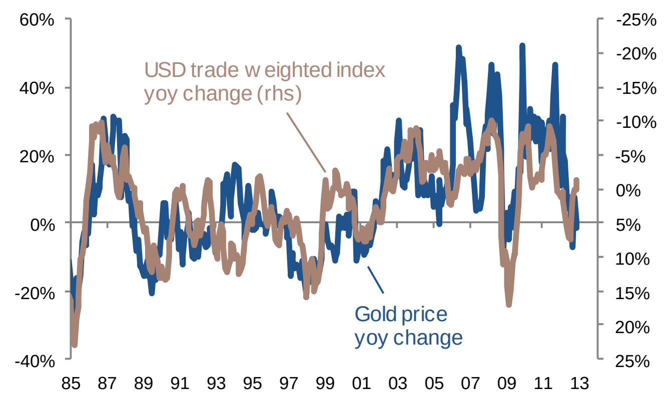
Since 1985, the US dollar (per the trade-weighted index) has been more highly correlated with gold prices than US 10-year real rates (compare 1987, 1998 and 2012).

US real rates and Gold prices – 51% correlation



US 10Y real bond yield: US 10Y Government bond yield – US yoy CPI rate.
Source: Datastream, SG Cross Asset Research

USD trade-weighted index and Gold prices – 67% correlation



US dollar index yoy change: FED nominal trade-weighted index versus broad basket of currencies (100 = January 1997). Source: Datastream, SG Cross Asset Research

How efficient is Gold as protection against inflation?

Gold is usually considered to be a good hedge against inflation (see long-term chart on page 6). Below we highlight the relationship between Gold prices (size and color of bubble), the US inflation rate (vertical axis) and the USD trade-weighted index (horizontal axis).

Since the end of the Gold standard, US inflation rates have exceeded 8% five different years (1974, 1975, 1979, 1980 and 1981). If the case of higher inflation **BUT** strong USD appreciation, Gold prices have dropped, as in 1975 and 1981 (look at the "empty" bubble).

In the context of a weakening USD, Gold prices have systematically increased regardless of inflation rates.

Gold, inflation and the US dollar

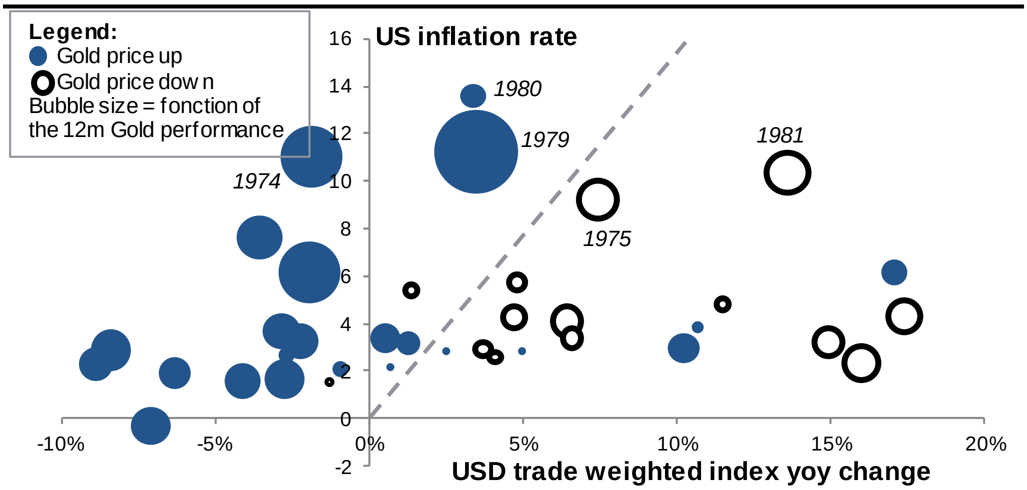
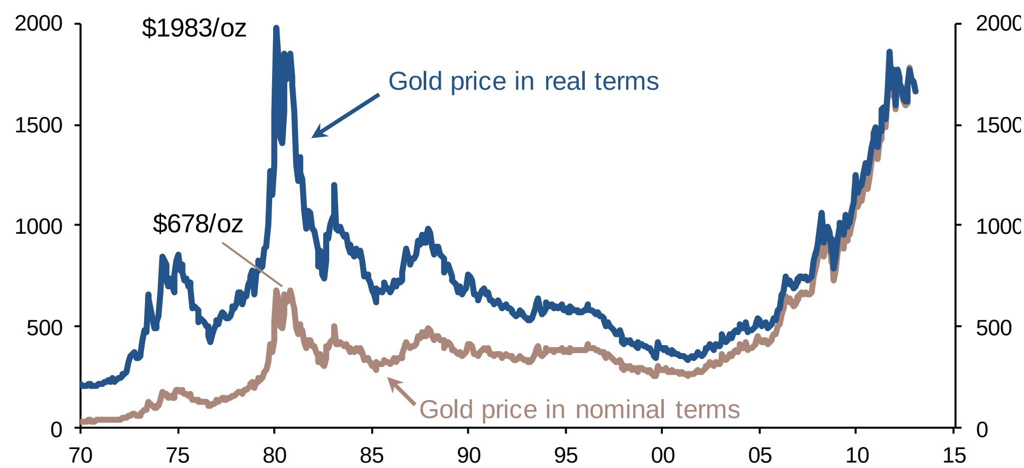


Chart based on annual data since January 1973. US inflation rate based on consumer price index yoy change. US dollar index 12 months change: FED nominal trade-weighted index versus broad basket of currencies (100 = January 1997). Source: Datastream, SG Cross Asset Research

The January 1980 Gold price peak of $678/oz corresponds to $1983/oz in current US dollars. Gold is not at an all-time high in real terms.

Gold at an all-time high? Not in real terms!



Gold price in real terms is at January 2013 price. Source: Datastream, SG Cross Asset Research

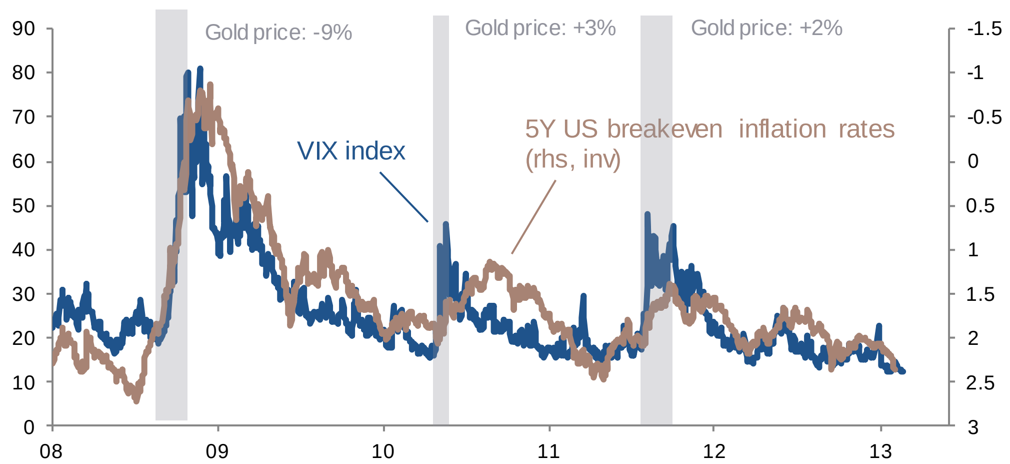
Is Gold really a hedge against market fears?

According to the popular Investopedia, "the VIX index is a widely used measure of market risk and is often referred to as the **investor fear gauge**." Since the bankruptcy of Lehmann Brothers in 2008, the spectre of deflation has emerged (as evidenced by multiple comparisons between the current situation and the 1930s in the US or the 1990s in Japan). So it may come as no surprise to see a strong correlation between the VIX index and 5Y US breakeven inflation rates.

Since 2008, any spike in the "investor fear" gauge corresponds to lower inflation expectations.

Currently the VIX index is very low (at 14%) and the 5Y US breakeven inflation rate is high (2.34%).

Equity volatility and 5-year inflation expectation: 83% correlation since 2008



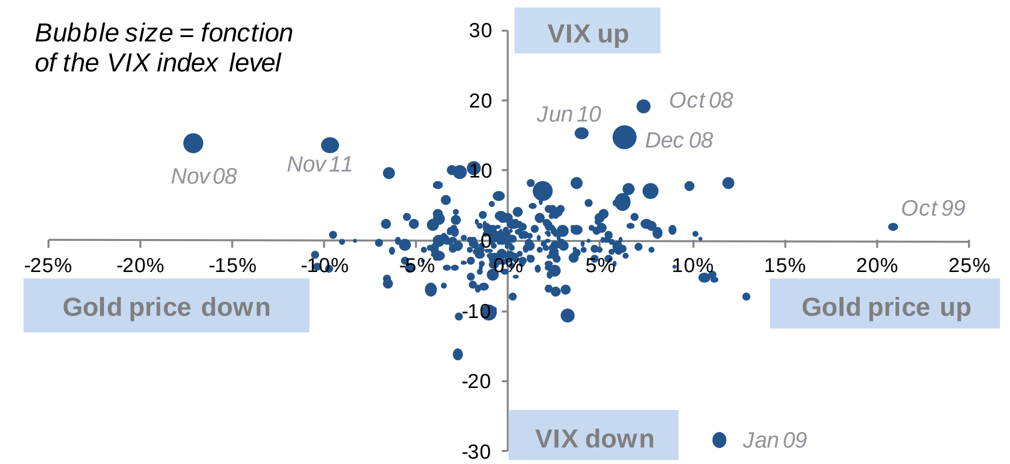
VIX index US equity implied volatility. US breakeven inflation rates are calculated by subtracting the real yield of the inflation linked maturity curve from the yield of the closest nominal Treasury maturity. The result is the implied inflation rate for the term of the stated maturity. Source: Bloomberg, SG Cross Asset Research

As higher volatility has corresponded with lower inflation expectations since 2008, it would follow that Gold (the usual hedging asset against inflation) has not particularly benefited from market stress since 2008.

There has been no correlation between Gold prices and the VIX index since 1990.

Gold is not a good hedge against equity market fears.

Correlation between Gold prices and VIX index: 0% (monthly change since 1990)

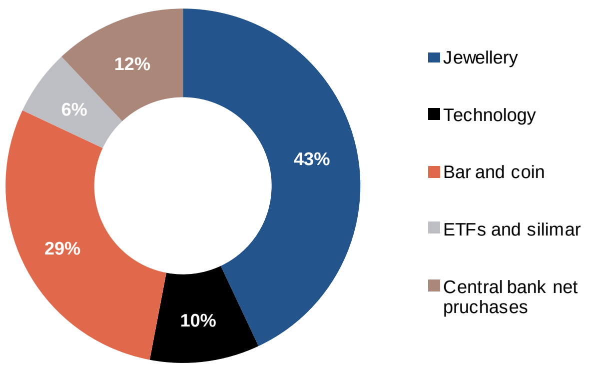


Based on monthly change since January 1990. VIX index US equity implied volatility. Size of the bubble is a function if the VIX index level.
Source: Datastream, SG Cross Asset Research

Supply and demand

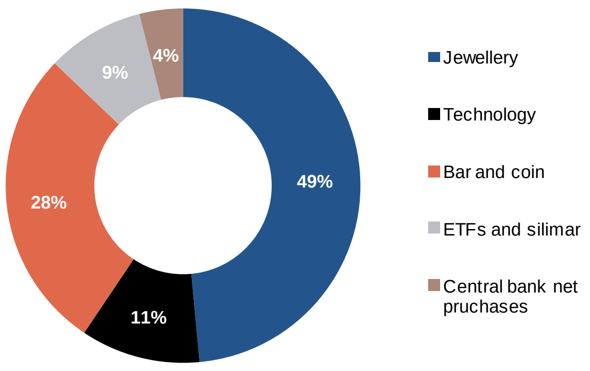
Demand for Gold from central banks has increased, whereas demand from jewelry has dropped over the last few years. This makes sense given the increase in the value of gold. For further comment on Gold demand, refer to our latest Precious Metals Drivers.

Gold demand breakdown by type – Q4 2012



Source: World Gold Council, SG Cross Asset Research

Gold demand breakdown by type – 5y average (2008-2012)

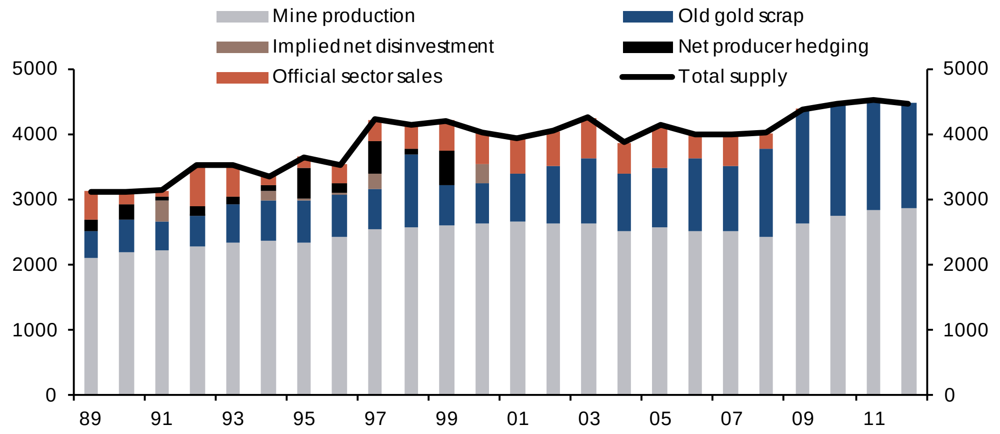


Source: World Gold Council, SG Cross Asset Research

Note that more than half of global jewelry demand stems from India (29%) and China (28%). Chart on request: gaa@sgcib.com.

Gold mine production has increased by around 50% over the last 24 years, but this is not enough to meet gold demand. Old gold scrap now represents around 36% of total supply!

Recycling more and more to meet demand



Gold supply in tones. Source: DataStream, GFMS, SG Cross Asset Research

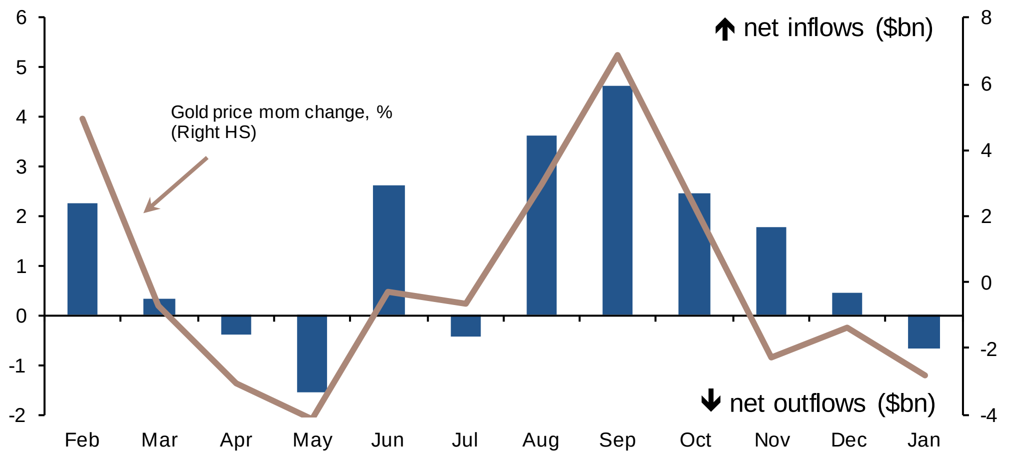
Financial flows: from inflows to outflows

Net inflows / outflows into Exchange Traded Products (ETP) are very sensitive to Gold prices. When the Gold price rises, inflows into Gold ETPs accelerate. When the Gold price drops as it did recently, Gold ETPs suffer some outflows. Refer to data published in our monthly Mutual Fund Watch.

Let's get some perspective on ETP flows: net outflows in January 2013 were $0.7bn; total cumulative inflows in ETPs since 2005 is €94bn.

Chart with longer history available on request: gaa@sgcib.com.

Precious Metals ETPs – net inflows / outflows linked to Gold prices

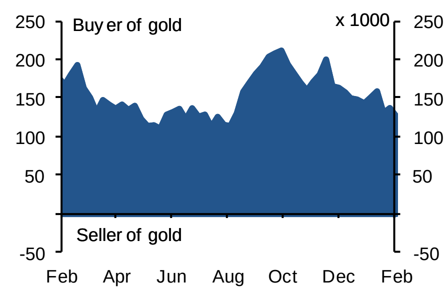


Net inflows into Commodity ETPs, monthly data. Source: EPFR Global, SG Cross Asset Research

Hedge funds have started to reduce their net long position

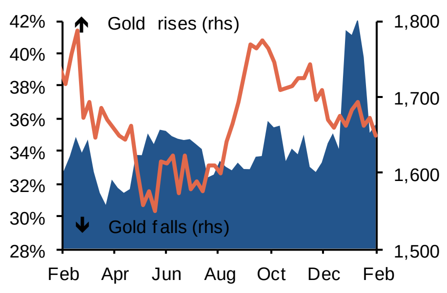
In our Hedge Fund Watch, every month we highlight hedge funds' positions (either long or short). Even if hedge fund managers remain net long on Gold, they have significantly reduced their positions since last summer.

Gold – Hedge fund net positions



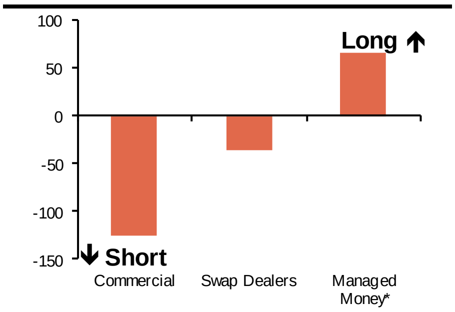
Net positions. Contracts of 100 troy ounces.
Source: CFTC, SG Cross Asset Research

Gold price & non-commercial positions on total open interest (O.I.)



Gold price ($):orange line, rhs
Source: CFTC, SG Cross Asset Research

Gold – Who is long, who is short? A disaggregated view

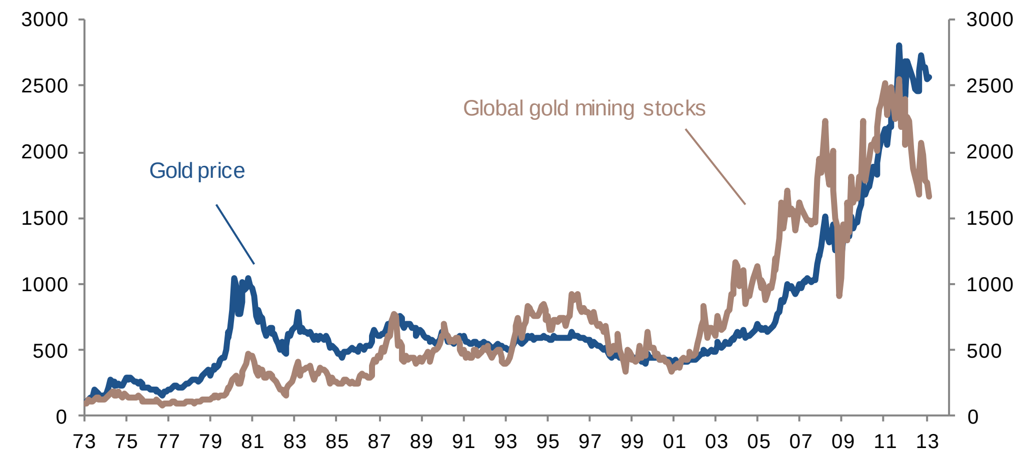


Long/Short: current net position (/1000 contracts)
Source: CFTC, SG Cross Asset Research

Global Gold mining stocks

Global gold mining stock prices have been correlated with gold prices since 1973. However, they have severely lagged precious metal prices.

Gold miners vs Gold price (100 = 01/01/73)

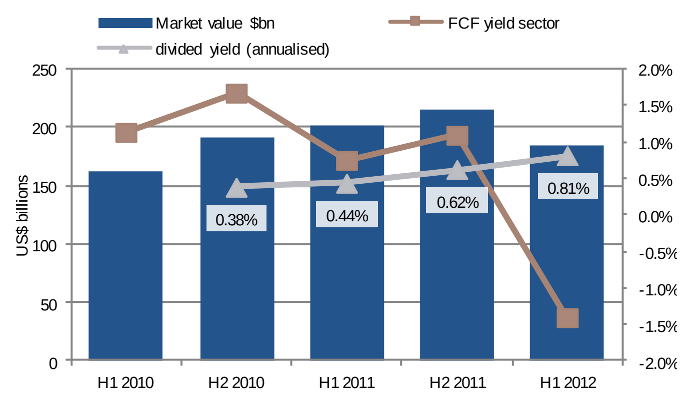


Data 100 = 01/01/73. Global gold mining stock price in USD
Source: Datastream, SG Cross Asset Research

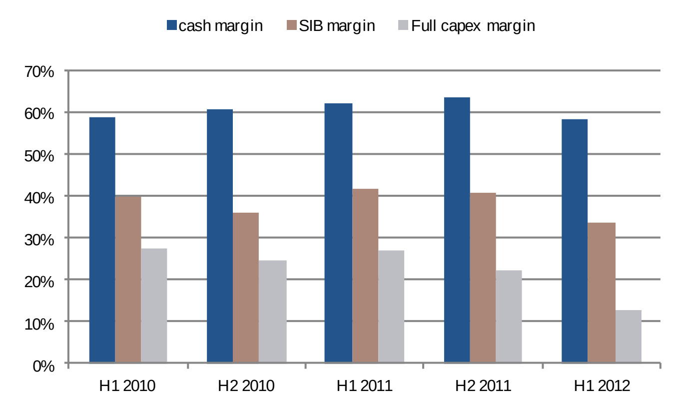
Over the last two years cash margins for a group of 14 gold producers (listed in the chart below) have flatlined at around 60%, compared to a >40% increase in the average gold price. Add in stay-in-business and growth capex, and the margin drops from 27% to 13%. This trend is also evident in the same group of miners' FCF yields (left-hand chart).

Bottom line, over the last few years mining companies have struggled to control operating and capital costs, with annual increases of around 15% to 20% becoming a new 'industry standard'. Flagship projects meanwhile have suffered delays due to permitting problems and budget overruns. A collapse in free cash flow despite the bull run in metal prices has seen Equities sidelined and investors taking on exposure to precious metals through royalty companies and ETF products.

Combined market value, FCF and dividend yield



Margins on three key cost measures



Source: SG Cross Asset Research, stocks included in analysis above, Randgold, Petropavlovsk, African Barrick, IAMGOLD, AngloGold Ashanti, Centamin, Polymetal, Barrick, Newmont, Goldcorp, Eldorado, Kinross, Hochschild, Fresnillo

Is a turning point in sight for the industry?

Mining projects have long lead times and many producers are locked into or just entering high capex programmes, so there is no quick fix. However, capital discipline has been elevated to the top of the agenda and hurdle rates for investment decisions are under more scrutiny. Another emerging theme is spinning out non-core assets, to limit cash burn and to refocus the business on a 'returns-based' culture, which could also be an important part of a potential re-rating of the sector. The potential threat of a falling rather than rising gold prices adds extra urgency to these measures.

Correlation analysis: Gold prices vs Gold mining stocks

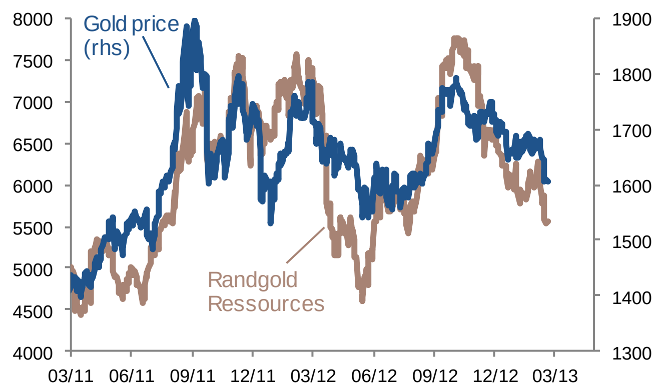
Below, we have done a sensitivity analysis comparing Global Gold mining companies with market capitalisations greater than $5bn with gold price movements over the last two years. Randgold Resource is the stock that is most correlated with Gold prices.

Correlation between Gold prices & Gold mining stock prices

Company Name	Country	Market Cap bn U$	2 years Correlation
BARRICK GOLD	Canada	32	44%
GOLDCORP	Canada	27	41%
NEWMONT MINING	US	21	41%
NEWCREST MINING	Australia	17	28%
YAMANA GOLD	Canada	11	42%
ANGLOGOLD ASHANTI	South Africa	10	50%
KINROSS GOLD	Canada	9	36%
RANDGOLD RESOURCES	UK	8	63%
BUENAVC1	Peru	7	30%
ELDORADO GOLD	Canada	7	42%
AGNICO-EAGLE MINES	Canada	7	35%
POLYUS GOLD	Russia	7	9%
GOLD FIELDS	South Africa	7	48%
POLYMETAL INTERNATIONAL	UK	6	42%

Two-year correlation based on daily data in local currency between gold prices and gold mining stocks (with market capitalisation > $5bn).
Source: Datasteam, SG Cross Asset Research

Randgold shares most highly correlated with Gold prices



Source: Datasteam, SG Cross Asset Research

What the charts say on Gold

For any questions regarding SG's technical Gold analysis, please contact stephanie.aymes@sgcib.com

Gold spot: the long-term uptrend persists but is de-steepening. Only a definite break below 1522/1500 would confirm a major change in the trend.

- **March monthly close will be decisive**

The rally has been parabolic since 2009, i.e. since the break above the multi-year channel at 1045. Gold has never closed below the quarterly moving average since then. It is at **1675** and Gold is breaking it.

The Stochastic indicator has settled in bullish territory, i.e. 70/75% (blue dashed line) for a long time now (since mid-2003). It has pulled back to the support zone, corresponding to the corrections of October 2006 and 2008 and April 2012 (see arrows).

Source: SG Cross Asset Research

■ **Shallower correction but longer (offsetting)**

Last May, Gold broke below the very steep rising channel which was containing the rise since late 2008, but this signal was not followed by an overall collapse of the flat price. This break is more likely the result of the inertia in prices. Indeed, Gold has been moving within a lengthy sideways/flat consolidation channel between **1522/1500** and **1803/1827**. However, a definite close below 1522/1500 would confirm a major bearish reversal pattern (Double Top) with a potential at **1265**.

■ **Since September 11 every up/down move lasted 4-5 months. Timing will therefore be key next month.**

Source: SG Cross Asset Research

Where does consensus stand?

Updated SG Gold price forecasts will be published on 20 March 2013 in the next issue of the Commodities Review.

According to SG's Commodity Research, Gold's cost of production is around **$945/oz** (more details in the Commodities Review).

Gold forecast: forward prices vs Bloomberg consensus forecast ($/oz)

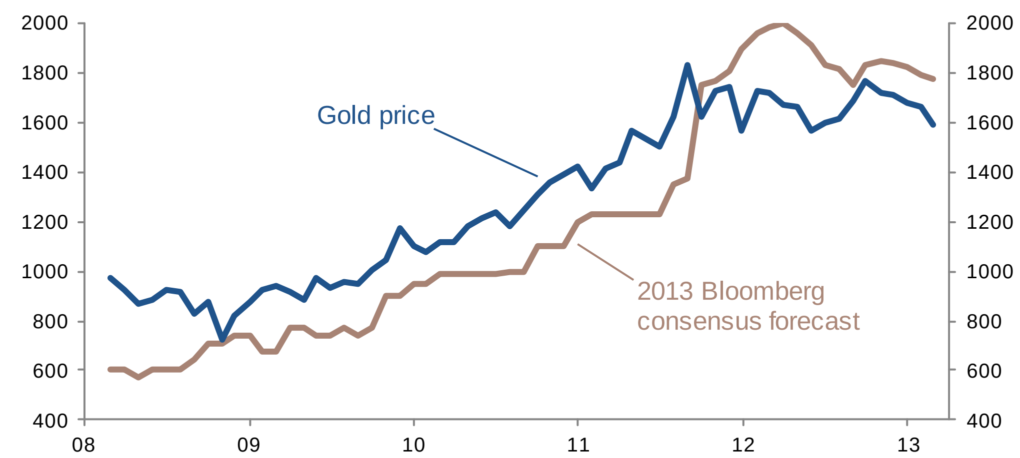
	Spot	Q1 13	Q2 13	Q3 13	Q4 13	2013	2014	2015	2016
Forward price	1608	1639	1587	1620	1620	1625	1628	1644	1663
Upside/downside vs spot		*+2%*	*-1%*	*+1%*	*+1%*	*+1%*	*+1%*	*+2%*	*+3%*
Consensus forecast	1608	1715	1788	1800	1810	1776	1755	1575	1603
Upside/downside vs spot		*+8%*	*+14%*	*+15%*	*+16%*	*+13%*	*+13%*	*+2%*	*+2%*

Forward and spot prices: data as of 26/02/2013. Source: Bloomberg

The 2013 consensus forecast has tracked spot prices.

Between 2008 and 2012 the market expected the price of gold in 2013 to be lower than the spot price. Since 2012, the consensus has been more bullish.

2013 Bloomberg consensus forecast evolution



Monthly data since February 2008. Source: Bloomberg

Addendum (1): G10 FX forecasts

	21-Feb-13	Mar-13	Jun-13	Sep-13	Dec-13
EUR/USD	1.32	1.35	1.30	1.25	1.20
USD/JPY	93.3	95.0	97.0	98.0	100.0
GBP/USD	1.53	1.55	1.52	1.51	1.50
USD/CHF	0.93	0.92	0.96	1.01	1.06
USD/CAD	1.02	0.99	0.98	0.98	0.98
AUD/USD	1.02	1.02	1.01	1.00	0.98
NZD/USD	0.83	0.83	0.83	0.82	0.80
USD/NOK	5.67	5.48	5.65	5.84	6.08
USD/SEK	6.42	6.37	6.58	6.80	7.08
EUR/JPY	123.2	128.3	126.1	122.5	120.0
EUR/GBP	0.87	0.87	0.86	0.83	0.80
EUR/CHF	1.23	1.24	1.25	1.26	1.27
EUR/CAD	1.35	1.34	1.27	1.23	1.18
EUR/AUD	1.29	1.32	1.29	1.25	1.22
EUR/NZD	1.58	1.63	1.57	1.52	1.50
EUR/NOK	7.48	7.40	7.35	7.30	7.30
EUR/SEK	8.48	8.60	8.55	8.50	8.50
DXY Index	81.3	80.1	82.4	84.8	87.4

Key central bank rates

	21-Feb-13	Mar-13	Jun-13	Sep-13	Dec-13
USA	0.25	0.13	0.13	0.13	0.13
Japan	0.10	0.10	0.10	0.10	0.10
Eurozone	0.75	0.75	0.75	0.75	0.75
United Kingdom	0.50	0.50	0.50	0.50	0.50
Australia	3.00	3.00	3.00	3.00	3.00
Switzerland	0.00	0.00	0.00	0.00	0.25
Norway	1.50	1.50	1.50	1.75	2.00
Sweden	1.00	1.00	1.00	1.00	1.50

10 year bond yields

	21-Feb-13	Mar-13	Jun-13	Sep-13	Dec-13
USA	1.98	2.00	1.75	2.00	2.35
Japan	0.74	0.80	0.75	0.90	1.00
Eurozone	1.59	2.00	1.50	1.70	2.00
United Kingdom	2.11	2.20	1.70	1.80	2.00
Australia	3.54	3.00	3.00	3.25	3.25
Switzerland	0.75	1.05	0.70	0.80	1.00
Norway	2.51	2.50	2.00	2.20	2.50
Sweden	1.99	1.95	1.50	1.70	2.00

Source: SG Cross Asset Research

Addendum (2): EM FX forecasts

	Mar-13	Jun-13	Sep-13	Dec-13
EUR/PLN	4.00	3.95	3.90	3.90
EUR/HUF	300	295	290	290
EUR/CZK	25.60	25.80	26.00	26.10
EUR/RON	4.39	4.42	4.37	4.40
EUR/RSD	109.50	110.00	112.00	108.00
EUR/RUB	38.20	39.35	39.25	39.45
EUR/TRY	2.30	2.20	2.10	2.15
RUB/BASK	33.75	35.00	35.50	36.00
USD/RUB	30.10	31.45	32.45	33.15
USD/TRY	1.80	1.75	1.75	1.80
USD/ZAR	9.20	9.20	9.30	9.30
USD/ILS	3.72	3.70	3.65	3.65
USD/BRL	2.00	1.98	1.95	1.90
USD/MXN	12.45	12.30	12.40	12.40
USD/CLP	465	460	475	475
USD/COP	1775	1750	1750	1750
USD/PEN	2.520	2.485	2.455	2.420
USD/CNY	6.22	6.18	6.21	6.19
USD/HKD	7.75	7.75	7.75	7.75
USD/INR	51.50	50.00	52.00	52.00
USD/IDR	9400	9200	9600	9600
USD/MYR	3.04	3.00	3.00	3.00
USD/PHP	41.00	40.50	42.00	42.00
USD/SGD	1.21	1.19	1.21	1.22
USD/KRW	1070	1060	1050	1040
USD/TWD	29.10	28.80	29.50	30.00
USD/THB	30.25	29.50	30.50	31.00

Key central bank rates

	Mar 13	Jun 13	Sep 13	Dec 13
Poland	3.75	3.50	3.50	3.50
Hungary	5.00	4.50	4.50	4.50
Czech Rep.	0.05	0.05	0.05	0.05
Romania	5.25	5.25	5.00	5.00
Russia 1-day repo rate	5.50	5.50	5.25	5.25
Turkey	5.25	5.25	5.25	5.25
South Africa	5.00	4.50	4.50	4.50
Israel	1.50	1.50	1.50	1.50
Brazil	7.25	7.25	7.25	7.25
Mexico	4.50	4.50	4.50	4.50
Chile	5.00	5.00	5.00	5.50
Colombia	4.00	4.00	4.00	4.00
Peru	4.25	4.25	4.25	4.25
China	3.00	3.00	3.00	3.00
South Korea	2.75	2.75	3.00	3.25

Source: SG Cross Asset Research

APPENDIX

COMPANIES MENTIONED

AngloGold Ashanti (AU.N, Buy)
Centamin Plc (CEY.L, Hold)
Fresnillo (FRES.L, Sell)
Goldcorp (G.TO, No Reco)
Hochschild Mining (HOCM.L, Sell)
Iamgold Corp (IMG.TO, Hold)
Petropavlovsk (POG.L, Buy)
Polymetal International (POLYP.L, Hold)
Randgold Resources (RRS.L, Buy)
African Barrick Gold Plc (, No Reco)
Kinross Gold Corp (K.TO, No Reco)
Newmont Mining Corporation (NEM.N, No Reco)

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BUY: absolute total shareholder return forecast of 15% or more over a 12 month period.

HOLD: absolute total shareholder return forecast between 0% and +15% over a 12 month period.

SELL: absolute total shareholder return forecast below 0% over a 12 month period.

Total shareholder return means forecast share price appreciation plus all forecast cash dividend income, including income from special dividends, paid during the 12 month period. Ratings are determined by the ranges described above at the time of the initiation of coverage or a change in rating (subject to limited management discretion). At other times, ratings may fall outside of these ranges because of market price movements and/or other short term volatility or trading patterns. Such interim deviations from specified ranges will be permitted but will become subject to review by research management.

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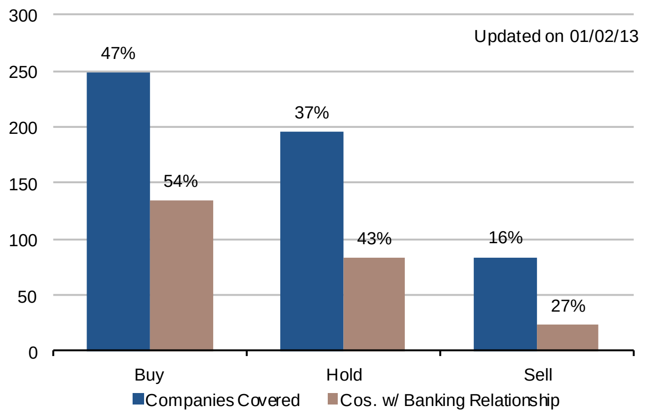
OVERWEIGHT: sector expected to outperform the relevant broad market benchmark over the next 12 months.

NEUTRAL: sector expected to perform in-line with the relevant broad market benchmark over the next 12 months.

UNDERWEIGHT: sector expected to underperform the relevant broad market benchmark over the next 12 months

Equity rating and dispersion relationship



Source: SG Cross Asset Research

SG EQUITY RESEARCH RATINGS on a 12 months period (in effect through March 13, 2012)

BUY: expected upside of 10% or more over a 12 month period.

HOLD: expected return between -10% and +10% over a 12 month period.

SELL: expected downside of -10% or worse over a 12 month period.

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NEUTRAL: sector expected to perform in-line with the relevant broad market benchmark over the next 12 months.

UNDERWEIGHT: sector expected to underperform the relevant broad market benchmark over the next 12 months.

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