CEE Equity Research

June 2008

Special Report Gold

A Shiny Outlook!

- Secular bull market still intact
- Strongly increased investor interest in 2008 and beyond
- Gold is rising due to a structural supply/demand deficit
- Central banks will want to achieve a higher degree of diversification of their dollar holdings
- Necessary correction following an overbought scenario
- First target price 1,200; longterm target: inflation-adjusted all-time-high of USD 2,300

ERSTE BANK

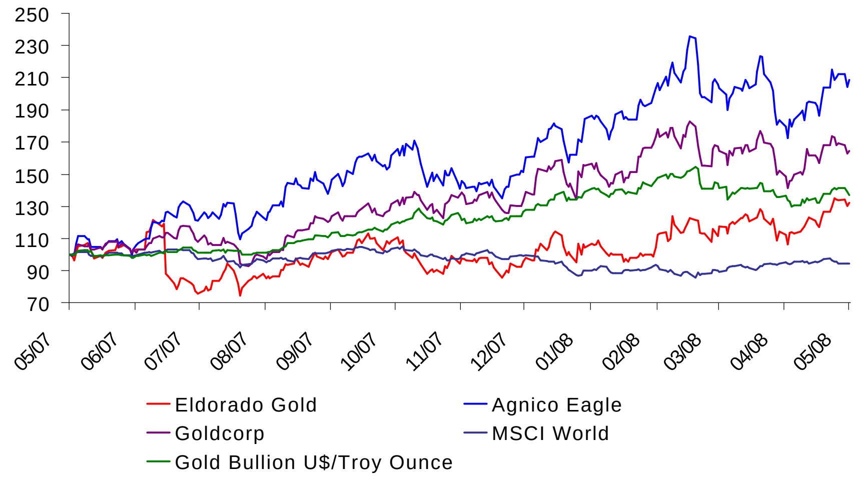
Contents

Introduction

Positive setting for gold investments to be prolonged

The chart underneath is a prime example of the impressive performance of high-quality gold shares even in a volatile market scenario. This cross section is not just a list of top-performers, but the result of the objective selection of gold mining shares that have shown to perform clearly above average over a long period of time. Since we rated the industry environment very favourably in our previous gold report of May last year, some of these shares have already been on our weekly recommendation list for months. This latest gold report will now illustrate in detail why the sector should remain attractive for a good number of years more. This sector analysis provides the interested investor not only with a comprehensive body of know-how as basis for decision-making in the gold sector, but also with various additional and extraordinarily attractive investment ideas.

Selected gold stocks vs. MSCI world vs. gold price



Source: Datastream

Gold passed its nominal all-time-high as expected; next target: inflation-adjusted high of USD 2,300

Since our previous gold report of May 2007 the gold price increased from USD 670 per ounce to beyond the infamous USD 1,000 per ounce threshold, meaning that the yellow precious metal exceeded its nominal all-time-high of USD 850 per ounce of 1980. On 17 March a new high was set at USD 1,034. Since then the price has corrected considerably, but in a long-term perspective this has been an overdue and technically necessary correction within the setting of a secular bull market. However, at USD 2,300 per ounce the inflation-adjusted high is still a long way off.

Negative real interest rate as a base for further increases of the gold price

The current gold rush is based on a number of factors: One of the most important ones is the falling confidence in the American economy. The subprime crisis has developed into a liquidity and credit crisis and subsequently grown into a confidence crisis and a crisis of the system itself. The chronically weak dollar, the credit crisis originating in America and concerns over strongly rising inflation and the exploding growth of the money supply have caused the investors to feel uneasy and channel billions of funds into precious metals. Whereas gold investments had been ridiculed as "relic for cowards" until very recently, their stability and safe haven features were appreciated in the event. The Financial Times for example headed one of its articles on 7 January 2008, "Gold is the new global currency". This did come as a surprise, seeing that FT had traditionally been quite critical on gold. After what started out as US property crisis had developed to a global financial crisis leaving marks on the real economy, the US central bank had no option but to react by massively cutting rates. This has led US real interest rates onto negative ground, which should form a base for further increases of the gold price.

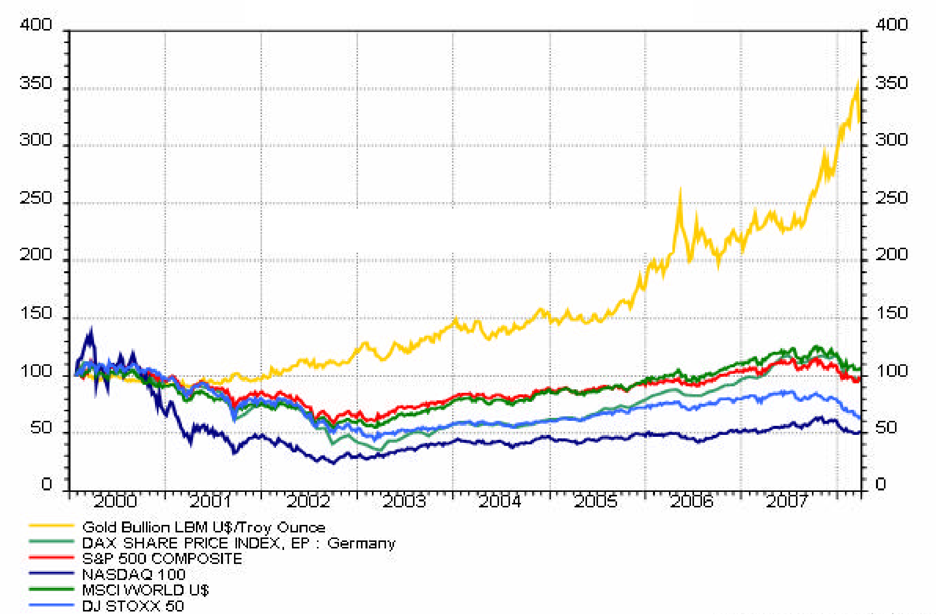
Introduction

In addition, the following factors are responsible for the gold bull market:

- Strong increase in jewellery demand from India and the Middle East
- High inflows into exchange traded funds (ETFs)
- Negative real interest rates in USA, China and other countries
- Volumes sold by central banks are falling
- Continued decrease in mining output
- Repurchasing of old forward hedging contracts (producer de-hedging), i.e. the gold supply on the market is cut further
- Generally strong commodity markets, particularly oil
- Increasing geopolitical risks

While equities used to outperform commodities clearly for 20 years, this situation has reversed since the year 2000. The current turbulences on the stock exchanges have lent support to this paradigm: Whereas the established global indices have largely lost value since 2000, gold has been gradually booming.

Stock indices vs. gold since 2000



Source: Thomson Datastream

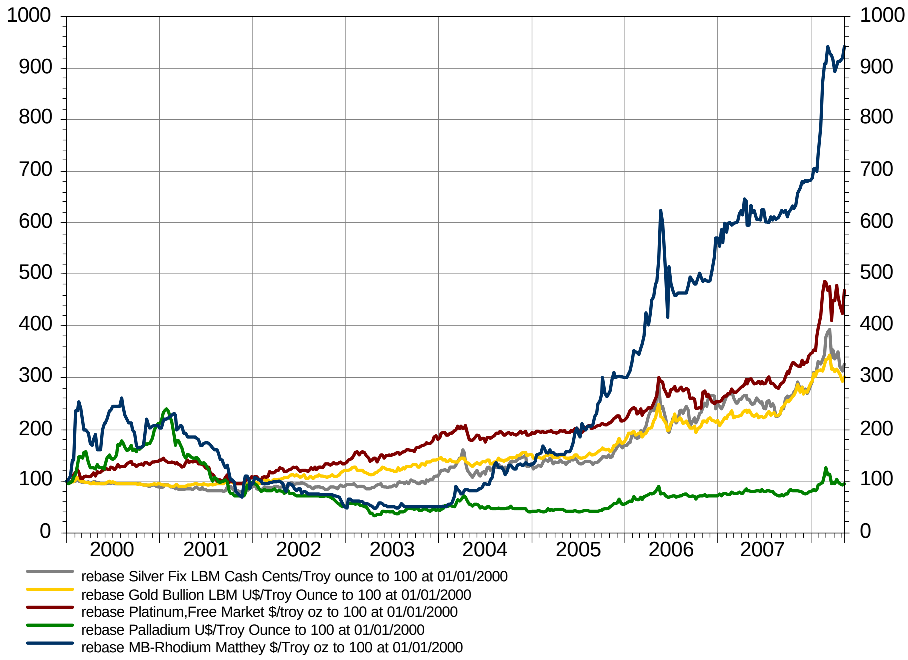
Introduction

Precious metals remain on upward path

The bull market in precious metals continued throughout 2007 and has shown no signs of letting up in 2008. Platinum and ruthenium have set new all-time-highs along with gold, and silver has seen the highest price in many years.

The following graph shows the development of the most important precious metals since 2000 (standardised at 100).

Precious Metals since 2000 in USD



Source: Thomson Datastream

Mining output still receding, gap between supply and demand can only be compensated by price increases

The gap between supply and demand continued to widen last year. Mining output fell to 2,476 tonnes, i.e. the lowest amount since 1996. Central bank sales were up only slightly on the previous year in spite of the higher price, and the same is true for the supply of recycled gold. On the demand side, speculative demand increased sharply last year, especially in the second half, and jewellery demand as well as industrial demand was robust, but might come down a bit in 2008. On top of that, central banks in Russia, China, and the Arabic region will want to gradually diversify themselves more out of their dependence on dollars. Even if only a small percentage of the (petro) dollars gets funnelled into gold investments, this will trigger another price leap. 2007 was also the first year where private persons owned more gold than central banks in total.

We consider this situation supportive to the scenario we described last year, and expect the gold price to rise further. In this report we will address the supply/demand situation, specific features, the technical picture as well as the sector of gold mining shares.

Supply

The supply on the gold market is made up by the following components:

I. Primary supply (= Mining output)

II. Secondary supply

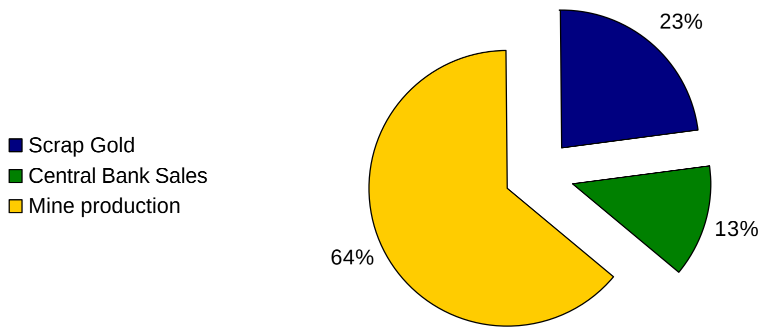
a) Recycling/scrap gold

b) Disinvestment

i. Central bank sales

ii. Gold lease, supply from hedging transactions (difficult or impossible to quantify)

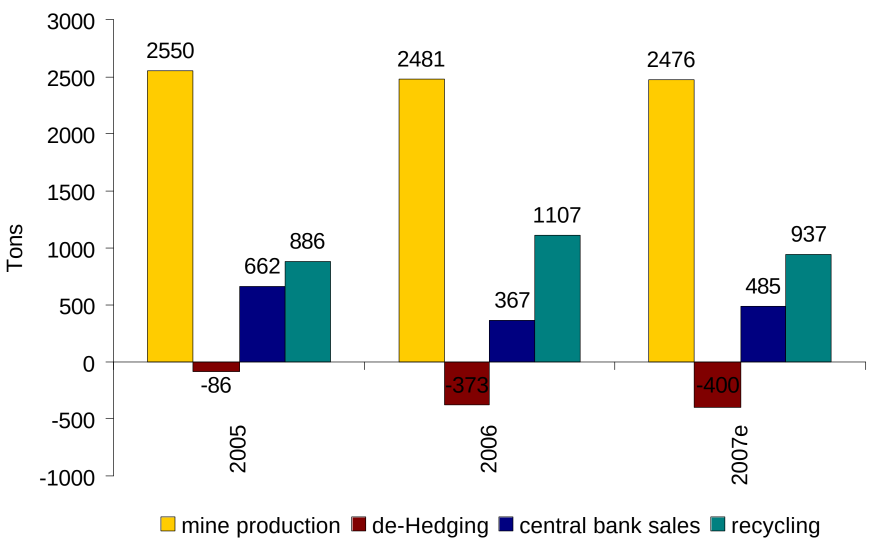
Gold supply



Source: GFMS, company data, own calculations

Total annual demand for gold is around 3,600 tonnes, but only close to 2,450 tonnes are produced by mines every year. The shortfall is compensated by central bank sales and recycling (so-called scrap gold). While central banks used the high gold price in the second half of 2007 to sell some of their holdings, the increased supply was eaten up by the continued fall in mining output and the lower supply of recycled gold. The demand side was stronger than in the previous year across the board, which means that the gap between supply and demand widened in 2007.

Supply structure 2005 - 2007



Source: GFMS, company data, own calculations

Supply

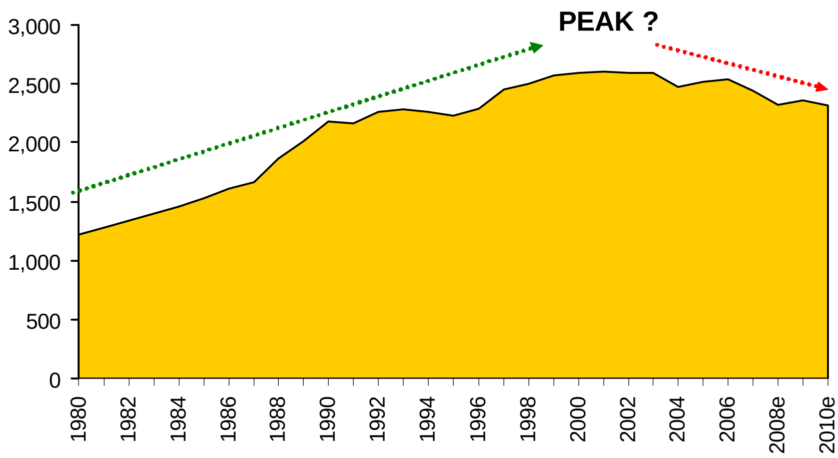
Primary production: First peak oil, now peak gold?

Production continues to decline, the market share of the "Big Four" is gradually sliding

In 2007 gold production dropped to the lowest value in eleven years. The actual output of 2,476 tonnes (-0.4% on the previous year) fell short of the expected amount of 2,485 tonnes.

Gold production is declining or stagnating, respectively, in eight of the twelve most important gold-producing nations which in total account for more than 50% of global primary supply. Among those are the traditional "Big Four" gold-producing countries, Canada, Australia, USA, and of course South Africa, all of which are faced with stagnating or receding capacities.

Mine production in tons



Source: GFMS, company data, own calculations

Reasons for the falling mine production:

- During the gold bear market of 1980 to 2000 many of the smaller goldmines were closed, and hundreds of gold shares were delisted. Due to the large lead times of five to eight years, production capacities cannot be increased on the spot. Decades of negligence in terms of investment in exploration, human resources, conveying machinery, and materials will presumably cause a substantial time lag, which means that we expect primary production to pick up only from 2011.

- Because of dramatically increased exploration and development costs the development of a mine represents an enormous entrepreneurial risk. Junior explorers have been short of financial partners over the past years; therefore new mining projects were mainly taken on by majors (large, globally established mine operators).

- The easily and inexpensively minable resources are nearly exhausted, much like in the case of oil. The mining of low grades as well as ore situated in great depths, tends to be unfeasible for technical or economic reasons. For example, for each gram of gold mined, an average of one tonne of rock has to be processed (open pit method).

- Canada and Australia in particular have passed more stringent environmental laws which are supposed to mitigate the ecological consequences of gold mining. This is why permissions for new projects have been delayed and have become much more costly. The highly toxic cyanide solutions that wash the gold out of their rock substratum are particularly dangerous, leading to poisonous drinking water and in the event to dying fish and consequential damage to human life.

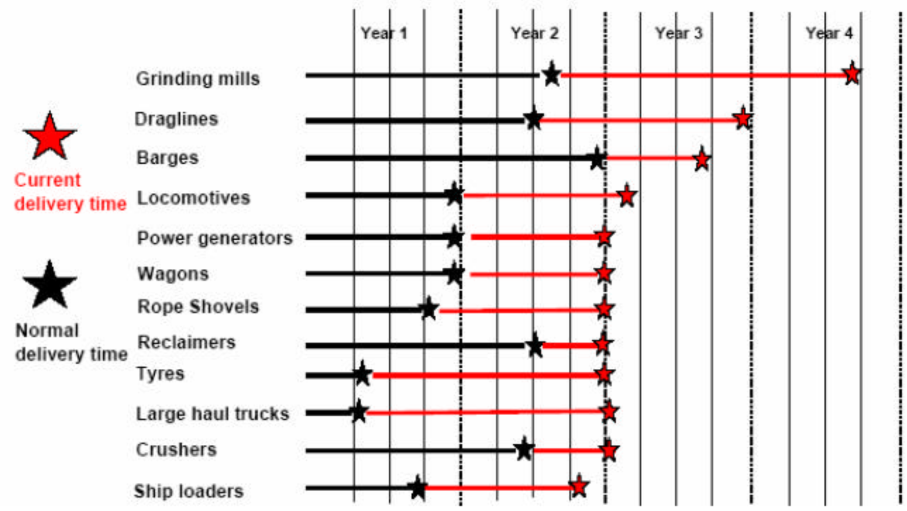
Supply

- The service industry catering to gold mining is currently also running at full capacity. The laboratories analysing rock samples as well as qualified personnel awarding certifications (e.g. NI 43-101 in Canada) are fully booked for years.

- Judging from the current projects, the strongest output growth will be coming from China, West Africa, Russia, and Central and South America. The political risks in countries such as for example Peru, Indonesia, Ecuador, Zimbabwe, and most recently Venezuela further curtail the supply.

The following graph highlights the massive time lags and bottlenecks in rock mills, diggers, and other equipment required in the mining process.

Delays for mining equipment



Source: Rio Tinto plc

Legal amendments in the USA could weigh heavily on the primary supply

On 1 November, 2007, the Hard Rock Mining and Reclamation Act was passed in the USA. This Act will cause a number of elementary changes in the American mining industry. Among other things, a 4% royalty tax on existing production and an 8% tax on new exploration projects were introduced. On top of that, additional environmental standards (applicable to existing projects) were adopted. The substantial costs of said standards would call into question the profitability of numerous projects. The proposed alterations will have to be passed by the Congress first, so there is still room for modifications. However, the Act should have severe effects on the US mining industry in any case. It would drastically increase production costs, make things even more difficult for new projects, put a lid on exploration projects and eventually decrease US mining output.

Gold producers such as Barrick Gold and Newmont Mining expect a further decline in primary production and a considerable increase in the price of gold

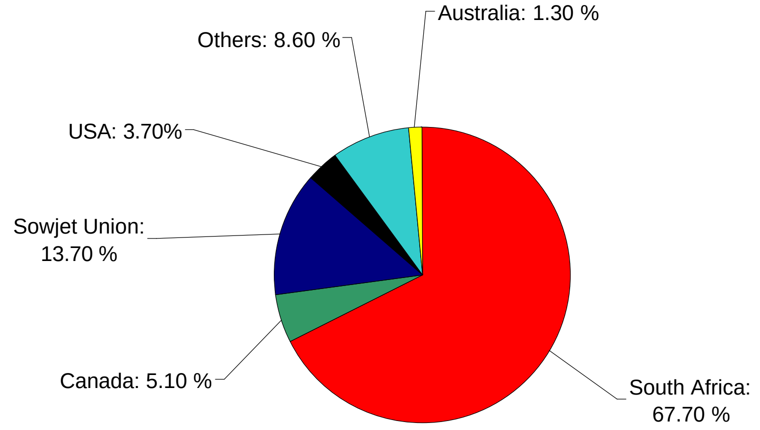
Barrick Gold surprised the markets with the statement that we would see a considerably higher gold price within the next five to seven years, given that the decline in mining output would be much more pronounced than previously expected. The statement came as a surprise because Barrick Gold had been known for its cautious forecasts of the gold price. CFO Sokalsky expects a decline in mining output of 10 to 15% over the next five years. This bandwidth has been confirmed by all other major producers, as they all expect mining output to decline. Pierre Lassonde of Newmont Mining pointed out that there had not been any discoveries of more than 30 million ounces in many years, which is why he, too, expected falling primary output over the next five to ten years.

Supply

South Africa as convincing example of the problems in the gold mining industry

South Africa can be used as prime example of the problems in the gold industry. In 1970 the country was producing 32 million ounces of gold a year, or more than two thirds of global production.

Mine production 1970

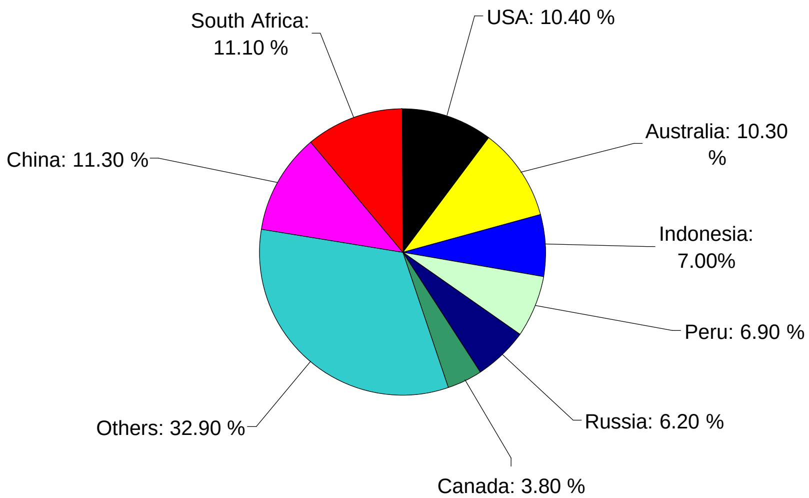


Source: Goldsheetlinks.com

Since the beginning of the 20th century, South Africa had been the leading gold producer in the world. Due to shrinking gold deposits the country had to yield its no.1 position, which it had been hanging on to since 1905, to China last year. Of course precious metals continue to play a central part in the South African economy: Mining accounts for more than 5% of the country's GDP and employs almost 10,000 people.

Since 2002 production has slumped by almost a third. 2007 saw the lowest production since 1922. The decisive factor in this development was the aging of the gold deposits, forcing mine operators into ever deeper and more demanding drilling. Currently these drillings take mines down to depths of 4,000 metres in the attempt to find new deposits. However, these deposits tend to have a lower yield and are thus much more costly to mine than the now exhausted deposits used to be. The average gold content is currently about 4 grams per tonne of rock, whereas in 1966 the average content in South Africa was 16 grams per tonne.

Mine production 2007



Source: Goldsheetlinks.com

Supply

As the rock is hot in such depths, the mining operation itself is much more expensive. The complicated mining methods have taken their toll. Dozens of mines were closed in Johannesburg after numerous miners died having been exposed to a poisonous gas leak. Up to 200 miners die every year as a result of drastic safety hazards. Energy bottlenecks lead to the temporary closure of some mines. The national electricity supplier Eskom has reported the worst supply shortages for decades, as a result of which the electric grid has to be shut down for several hours a day. According to Eskom the end of these shortages is not in sight yet, and further supply problems are envisaged for the next five to eight years. Johannesburg and the region of Gauteng are the most severely affected areas - Gauteng being the centre of the South African gold and platinum production. Anglo-Gold Ashanti, Gold Fields, and Harmony had to suspend production temporarily, and the world's largest platinum producer, Anglo Platinum, had to halt parts of its mining operations for a while too. Gold Fields now plans to axe almost 7,000 employees, i.e. more than 13% of its total staff.

The following overview shows the shifts of gold production over the past two decades in terms of countries.

Gold production 1987 vs. 2007

	1987	2007	Change
China/Mongolia	73	292	301%
Ghana	64	234	266%
Australia	217	574	164%
South America	206	422	105%
North America	271	348	28%
Russia	296	292	-1%
South Africa	607	253	-58%
Total	1734	2415	+ 39,2 %

Source: Wellington West Capital Markets Inc.

Mining costs

Mining costs per ounce have increased nearly as much as the gold price; gold mining is becoming more technically advanced and thus more expensive

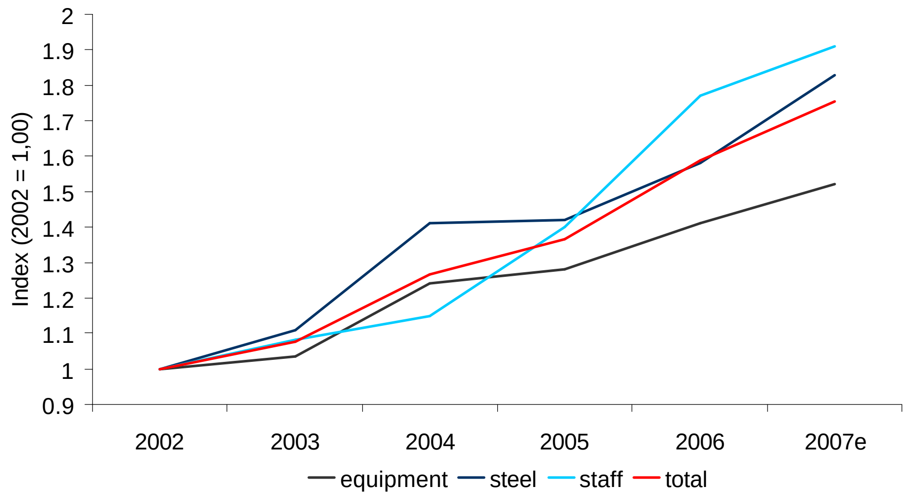
Gold mining is a process involving advanced technical engineering. Oversized drilling machinery drives tunnels into the rock, which is then transported to industrial plants on kilometres of conveyor belts. Gigantic mills pulverise the rock, and centrifuges hurl the gold from the rocks. Chemical baths then bind the gold, and electric current does away with the impurities.

In the course of the past couple of years the prices of energy and steel have risen dramatically. The energy costs in the open-pit method (surface mining) for example account for up to 40% of total mining costs. On the procurement front (i.e. services and equipment), gold producers are up against an increasing degree of competition from other mining companies. Buying a large rock mill would typically involve a waiting period of up to four years. Because of twenty years of gold bear market this area also suffers from a lack of human resources. The sharp increase in mining costs also results from lower grades of rock (whose mining is more demanding and thus more costly), increased investment requirements, and higher staff costs.

Supply

The following chart illustrates the sharp increase in the most important cost factors in gold production.

Production costs - change since 2002

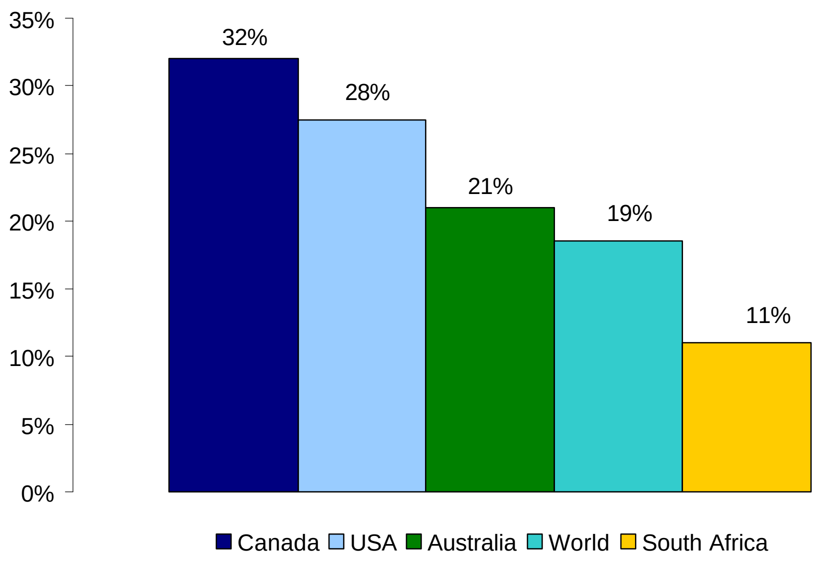


Source: Bloomberg, own calculations

Mining costs increased by 18.5 % in 2007

The sharp increase in mining costs is also obvious on the following chart. The average cash costs per ounce produced in 2007 had increased by 18.5% on the year. Mining costs rose most strongly in Canada (+32%), followed by the USA (+27%), and Australia (+21%). The increase of South Africa (+11%) was below average, but the country had already recorded massive increases over the previous years.

Increase in production costs per ounce in 2007



Source: company data, own calculations

This means that gold mining today is hardly any more profitable than in periods of lower gold prices. This applies particularly to countries where the local currency has appreciated against the dollar (e.g. Australia, Canada).

Supply

Falling primary production forecast until at least 2011

Therefore primary production should continue to fall, given that the number of new confirmed reserves cannot make up for the number of mines slated for closure until at least 2011. Due to the sharp rise in costs the higher gold price is not likely to trigger an increase in exploration projects. This represents one pillar of our positive gold price scenario.

Excursus: The Chinese Gold Rush

The price boom is fuelling the production boom

For the first time since the end of the 19th century, South Africa is not the world's largest gold producer anymore. In 2007 the Chinese gold production increased to 276 tonnes (+12%), while South Africa produced 272 tonnes (-8.1%). Many mines managed to double their capacities, which was above all due to low environmental standards and massive exploration activities in previous years. A number of junior miners launched production last year (China Gold Mines, Jinshan Gold Mines, Sino Gold Mines). According to the China Geology Survey Bureau (CGS) five large mines took up production in 2007 with total reserves of 650 tonnes of gold. Liquidity continues to flow into the mining sector at a massive rate; the mining sector has partially replaced the property sector and the equity market as boom sector. The standards and authority permits are less complex, which means that projects can be put into action much more quickly than in the traditional "Big Four" gold mining regions.

The most important authority on the Chinese gold sector is the China National Gold Group Corporation (CNGC). It holds the mining rights in seven of the eight most important mining regions. The CNGC owns 450 mines in China, and recently the corporation has become a more active player abroad for example by acquiring a 42% stake in Jinshan Gold Mines, which is listed in Canada. In total China has almost 1,300 goldmines and 1,000 mining companies. The sector is currently going through a consolidation phase.

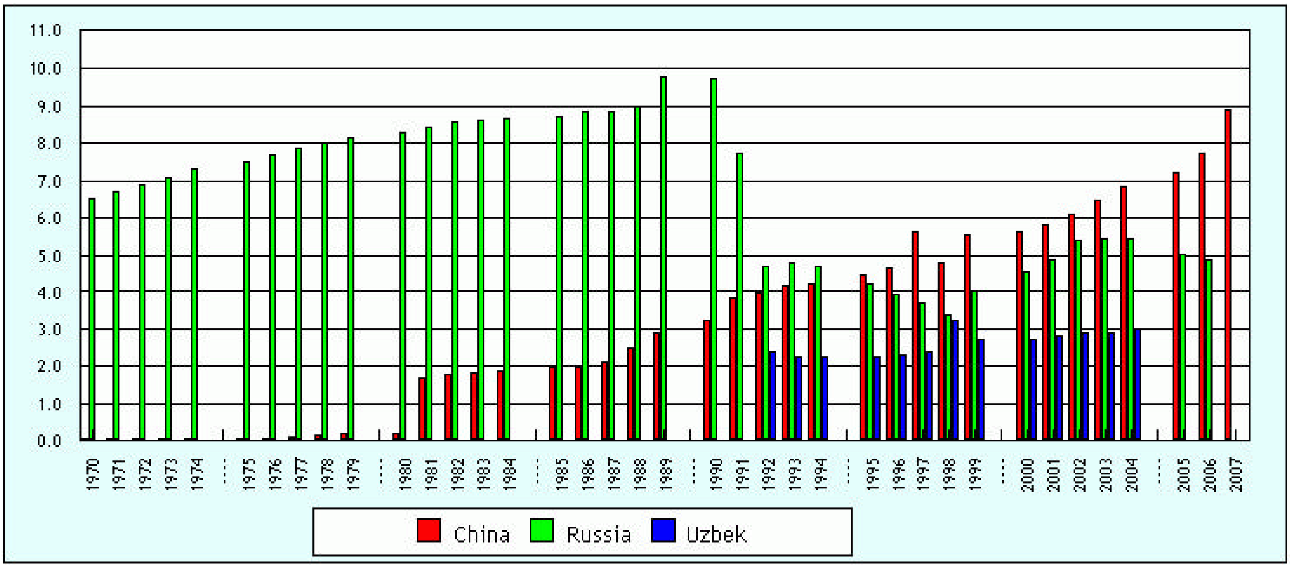
Chinese gold market is gradually deregulated and developed

Between 1949 and 1982, it was illegal to personally own gold in China, and up until 1998 it was still next to impossible for private persons to buy gold. Upon recommendation by the World Gold Council and as part of the catalogue of measures for joining the WTO in 2001, the gold market was gradually deregulated. Since the formation of the Shanghai Gold Exchange in 2002, the trading volume of gold and gold-based products has increased considerably, which in turn stimulates demand. Before that time, the entire volume of gold produced had to be sold to People's Bank of China (Chinese central bank). Since January 2008 gold futures have also traded at the Shanghai Futures Exchange. Demand increased by 20% to 326 tonnes in 2007. This means that China has overtaken the USA and is the second-largest customer worldwide behind India. The abolishment of the 17% VAT on purchases of gold, should it happen, would further stimulate trading.

Supply

The following graph shows the mine production in China, Russia, and Uzbekistan in millions of ounces. Whereas Russia's primary production has been on a gradual decline, China has managed to increase its production from 0.2 million ounces in 1980 to 9 million ounces most recently.

Production China, Russia, Uzbekistan



Source: Goldsheetlinks.com

Russia and China as net importers

However, only a small part of the gold produced makes it onto the open market. China, which has recently become the world's largest gold producer, is net importer. So is Russia, the world's fifth-largest producer. This means that the production of the world's largest and the world's fifth-largest mining nations never leaves the country.

Secondary supply

Central banks:

Structural shortage can only be compensated by central bank sales

The supply shortage was only compensated through massive selling by the central banks in recent years. This means that the central bank sales are essential to balance the disequilibrium of supply and demand. Between 1970 and 1980 the positioning of central banks was relatively neutral. Only since the end of the Cold War have most European central banks been gradually selling their gold.

Central Bank Gold Agreement (CBGA) regulates central bank gold sales

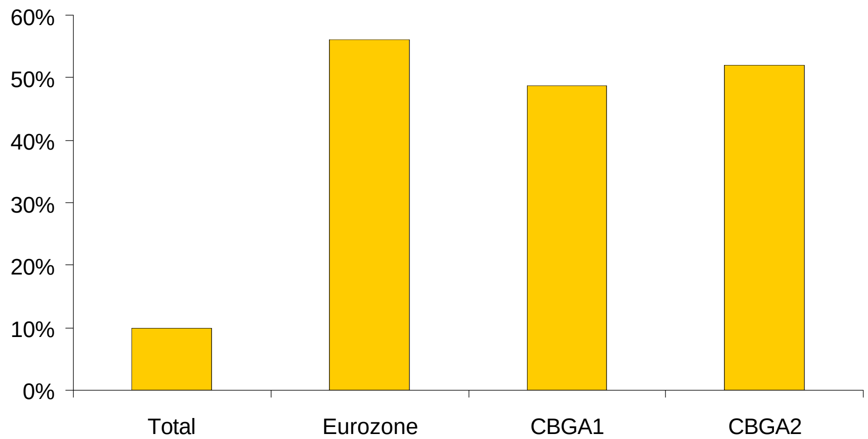
In order to regulate gold sales, the first gold agreement was signed in 1999. Within the framework of the Central Bank Gold Agreements (CBGA), the 15 signing central banks and the ECB agreed to sell a certain amount of gold per year while the contract was in force (a contractual year starts on 27 September). It was also stipulated that gold would remain an important element of global monetary reserves. The first agreement, CBGA I, came into force in September 1999 and was binding for the following five years. The participating banks committed themselves to selling a maximum of 400 tonnes of gold per year. On top of that the banks agreed not to expand the volume of gold leases, gold futures, and gold options for five years. The agreed-on amount of a total of 2,000 tonnes was adhered to, mainly on the back of the sales of the Swiss central bank (SNB). After the chairman of SNB had stated in 1997 that around half of the gold reserves, i.e. 1,300 tonnes, were not relevant to the monetary policy of Switzerland anymore, 1,170 tonnes were sold within the period of CBGA I, and the remaining 130 tonnes in the following year.

Uncertain future after CBGA II expires

The current agreement CBGA II expires on 27 September 2009. The maximum sales volume was increased to 500 tonnes under this agreement. There are currently no plans for a new agreement, which means that the period of accorded central bank selling may be over in 2009. This situation might lead to a significant decrease in supply on the global market. However, the common practice of balancing chronic budget deficits by selling gold should remain the same. Banca d'Italia for example was told to sell parts of its gold reserves by the Italian government.

The following overview shows that the share of gold as part of total central bank reserves is much higher among the CBGA banks than in the rest of the world.

Gold as % of central bank reserves



Source: AMF, www.gold.org, central bank information

Secondary supply

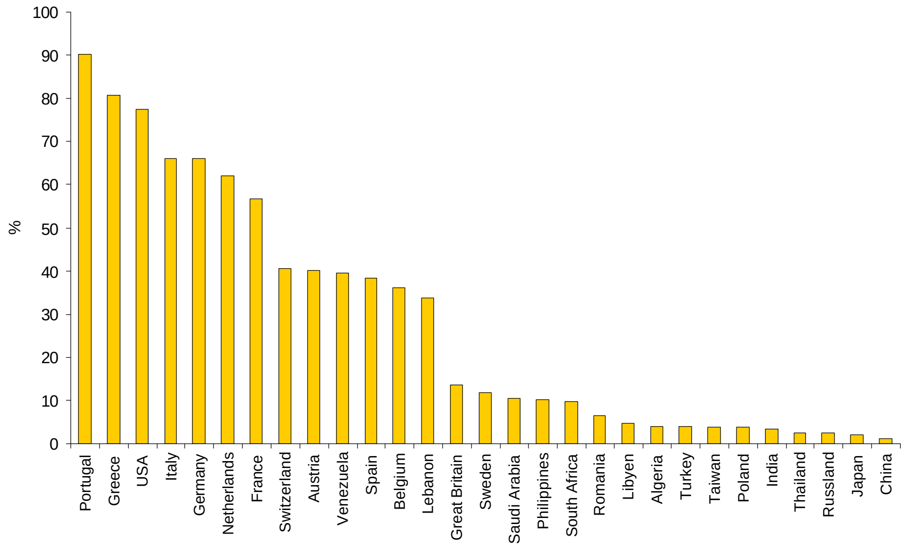
2008 & 2009: Major selling programmes are over. Will the 500 tonnes limit be fully used?

In the third year of the agreement a total of 476 tonnes were sold, with Spain, Switzerland, and France among the major sellers. In the fourth year (which started on 27 September, 2008) the French and Spanish central banks will remain very active on the selling side. At the end of March, the World Gold Council reported that Switzerland, one of the largest sellers of recent years, was approaching the final stages of its most recent selling programme of 250 tonnes. In the meantime Germany announced that it would not sell any more of its gold. A lot of countries have already finished their selling programmes, therefore it would not surprise if the upper limit of 500 tonnes were not fully exhausted in 2008 and 2009.

Dollar creditors with constant holdings, share of total reserves still small

Globally the average share of gold in terms of total reserves of the central banks is slightly below 10%. The established Western industrialised nations hold at least 50% of their reserves in gold, whereas the portion of gold in terms of total reserves is very small in emerging economies such as China, Russia, and India. The largest dollar creditors (e.g. Japan, China) as well as commodity producers (Russia, Saudi Arabia) have kept their gold holdings constant or have increased them, respectively. Since 2000, China has drastically raised its holdings, but the share remains low in terms of total reserves, as the following chart outlines:

Global central bank reserves



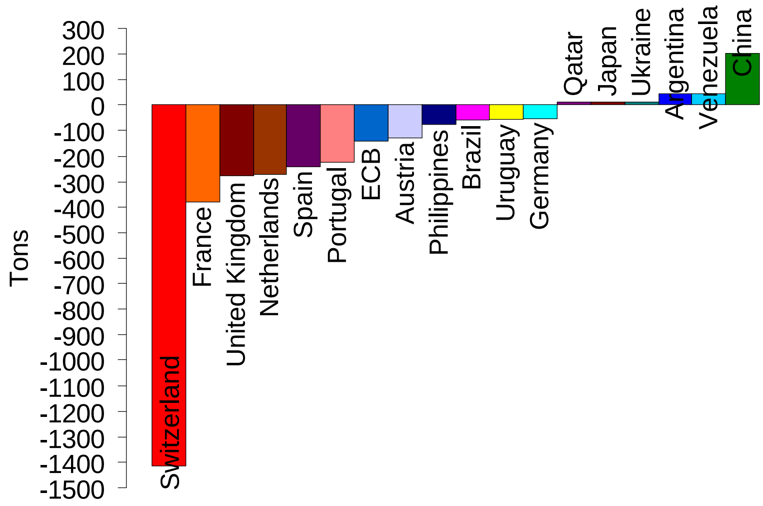
Source: AMF, www.gold.org, central bank information

Reserves heavy in dollars continue to be diversified by gold

People's Bank of China (PBoC, Chinese central bank) already announced in 2005 that it would increasingly resort to gold bullions in protecting its foreign exchange reserves and its own currency. After all, China only holds slightly more than 1% of its USD 1.3bn of foreign exchange reserves in gold, whereas Germany's comparable ratio is 60%. PBoC is in good company as far as its scepticism vis-à-vis the dollar goes. The central banks of Argentina, the Ukraine, South Africa, numerous Arabic countries, and Russia have all announced they intend to diversify in a similar fashion. The Russian authorities said they would more than double the share of gold in terms of total reserves from 4.2% to 10%. This is equal to 500 tonnes, or three times the annual Russian production. Countries outside the CBGA agreement will probably continue to buy in 2008, an assumption confirmed by the third and fourth quarter 2007 purchases in spite of the high price level.

Secondary supply

Changes in central bank holdings 2000-2007 in tons



Source: AMF, www.gold.org, central bank information

IMF on the selling side for the first time since 1980?

In summer 2006 massive sell-offs by central banks pushed the price down from USD 720 to USD 540 within a matter of weeks. In periods of high budget deficits the high gold price tempts to use sales proceeds in balancing out budgetary shortcomings. This might soon lead the IMF to sell some of its gold reserves as well. Currently its reserves stand at 3,217 tonnes. This means that the IMF owns the third-largest gold reserves behind the USA and Germany. The Fund already sold 1,600 tonnes, i.e. one third of its holdings, in the gold bull market between 1976 and 1980 in order to "reduce the significance of gold in the international monetary system". In view of an annual IMF deficit of more than USD 400mn Morgan Stanley recommended to sell parts of the gold reserves.

Since its incorporation the IMF benefited from granting loans to emerging nations, which has most recently become obsolete due to the commodity bull market. The G7 recently agreed on the sale - after the USA had surprisingly given its consent. The IMF will sell a total of 403.3 tonnes of gold for around USD 13bn. However, the actual execution of the transaction hinges on a modification of the bylaws, which 85% of the members have to agree to. Details have not been made public yet, but the transaction will probably be settled over the counter, with the gold likely headed for Asia or Russia. The immediate reaction to the news was very positive with the gold price down to USD 921, but ETFs bought twelve tonnes on the very same day.

Recycling

The sharply increased gold price leads one to assume that the volume of recycled gold (scrap supply) would have risen considerably. However, this was only partially so. There was hardly any selling pressure noticeable, particularly not in price-sensitive regions such as India or the Middle East. This confirms the assumption that in general the gold price will remain on an upward path and sales are thus best avoided. By contrast, the recycling supply had risen notably after the strong gold price hike in 2006.

Conclusion Supply:

The supply side suggests further gold price increases

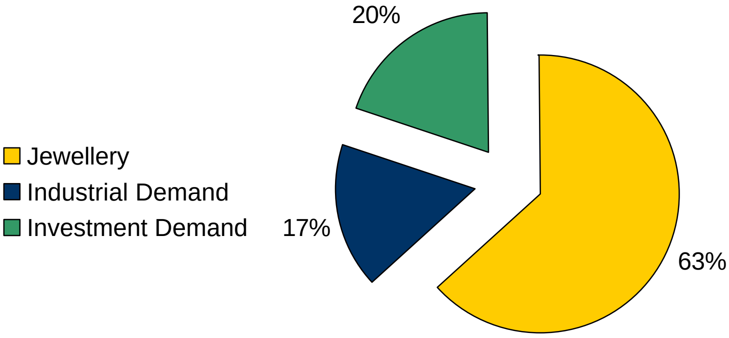
The supply came down again last year, and this trend is likely to continue over the coming years. The falling primary production, receding central bank sales, and the only negligibly higher recycling supply should offer a solid base for future gold price increases.

Demand

Demand breaks down into two categories:

- physical demand (jewellery, industry)
- speculative demand (investment demand)

Gold demand



Source: www.Gold.org, EB research

Robust growth of demand in all three areas

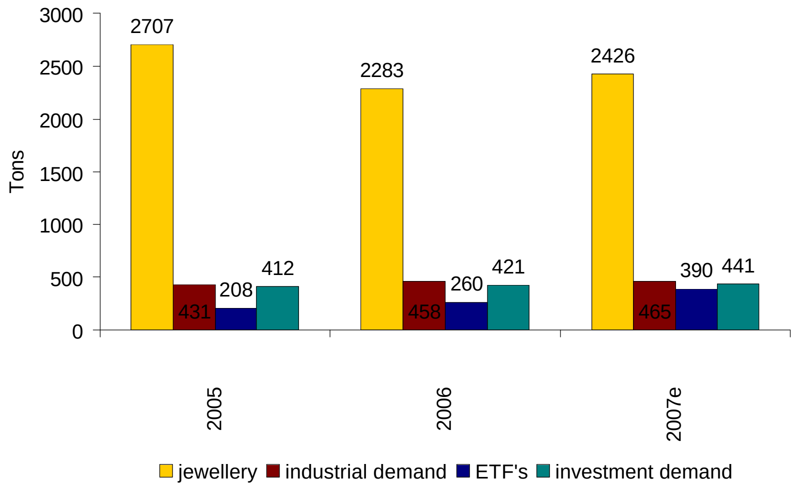
The demand side of the gold market has shown a clear upward trend in the past decade. Each one of the three most important areas, i.e. jewellery, industry, and investment, has recorded substantial gains. The tendency towards diversification among investors, the sharply rising demand from emerging markets, and the rising number of industrial uses of gold have been primarily responsible for this scenario. The price shock last year, when gold increased by more than 45%, did cause demand from the jewellery industry to shrink, but failed to result in a major slump of any sort. Besides, this decline was largely compensated by the substantial increase in investment demand.

Another factor of the soaring gold demand is the high internal and external deficit of the USA that can only be sorted out through the adequate depreciation of the US dollar. Especially Asian nations, posting high current account surpluses and holding the majority of their foreign exchange reserves in dollar-denominated assets, have gradually increased the gold portion in their portfolios.

Exchange Traded Funds with substantially stepped-up volumes

Physical demand over the past few years has mainly been driven by emerging economies in Asia, the Arabic region, and Russia, while speculative demand has benefited mainly from the success of exchange traded funds (ETFs). Physical gold held by ETFs increased by almost 50% between November 2006 and 2007. Institutional investors were the main buyers, whereas demand from retail investors edged up only by a bit.

Demand



Source: EB estimates, GFMS

Demand

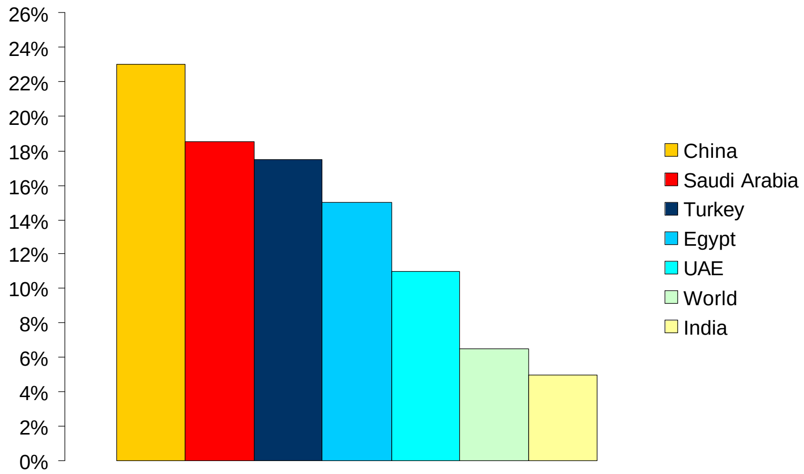
Total gold demand last year increased by 4% (in tonnes) and by 20% in dollar terms to almost USD 80bn. This means that demand increased for the fourth year in a row. The three most important areas, jewellery, industry, and investment, posted consistent growth rates each. Jewellery demand was on the weaker side during the second half of the year due to the higher gold price, but this was more than made up for by the increase in investment demand.

Jewellery demand

Jewellery demand 2007: Increasing demand in spite of substantial price hikes

The gold demand from the jewellery industry currently accounts for 63% of total demand and is thus the most important influencing factor for the gold price. Both speculative demand and jewellery demand remained on their upward trend due to the globally rising level of wealth. Total jewellery demand increased by 4% in 2007, but the geographic differences were massive: Demand in China increased by 23% to 326 tonnes, whereas the USA (-14%) and Europe (avg. -8%) recorded falls. This means that for the first time China has replaced the USA as second-largest gold consumer. The demand from Saudi Arabia, Turkey, Egypt, and the United Arab Emirates was growing above average as well, whereas India recorded slightly below average growth rates.

Jewellery demand change YoY



Quelle: GFMS, own estimates

High gold price dampens demand in the fourth quarter 2007 and the first quarter 2008

In the fourth quarter 2007, jewellery demand fell by 17% in comparison with the same period of 2006 due to the high price level. Especially India, the world's second-largest gold importer, displayed some price sensitivity and saw demand slump by 64% in comparison with the reference period of 2006. In the UAE, demand came down by close to 30% in the fourth quarter. We can see subdued buyers' interest in 2008 too. Gold sales in Dubai have shrunk by 15%. Dubai is considered one of the most important trading spots for gold and jewellery worldwide and mainly caters to Arabic and Indian demand.

India showed its price-sensitive side

Due to the recent massive price hikes, jewellery demand in India is probably set to fall more substantially. The price for 10 grams of gold passed the infamous threshold of 10,000 rupees. However, buying has only been postponed, not scrapped altogether, which should make for good support in the case of (possible) price declines. Within the framework of the ongoing correction of the gold price, sales in India have recovered quite a bit. This means that the price may have found support at around USD 850 through physical demand, and the investors seem to be getting used to the higher price levels. On top of that, recycling supply remained constant, so in the long run further price increases are likely.

Demand

To Indians, gold means jewellery, investment, and life insurance at the same time

As a result of the rapid economic growth, the appreciation of the rupee against the dollar, and the constant increase in purchase power, the demand for gold has been on a continuous upswing for the past years. In 2007 India imported more than 900 tonnes of gold which equals around one fifth of the entire world's gold transaction value. Indians own a total of almost 15,000 tonnes of gold, i.e. about one tenth of the worldwide gold reserves. The special relationship Indians have to this precious metal is also deeply rooted in Hindu culture. In India, gold is traditionally used as dowry for brides - called "stridhan" - because women are officially barred from owning land or other property. Although gold is held in the form of jewellery, it has more of a monetary sort of value, because it protects ("insures") the woman's existence should the marriage break up. Gold is therefore a social safety net.

Estimated jewellery demand for the Indian „Wedding Season“ 2009

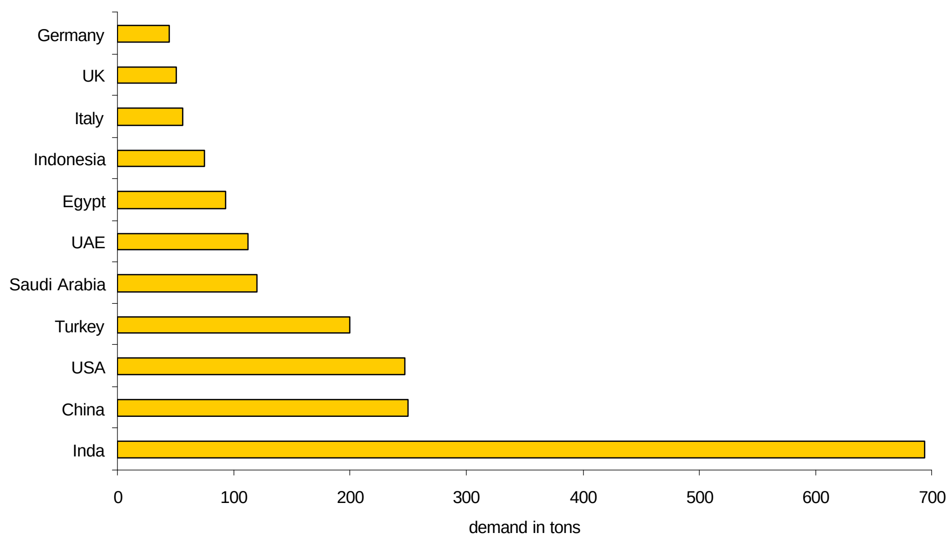
Total of 8 million marriages per year				
Income group p		Total no. of marriages	Gold Consumption per marriage in gms	Total Gold Consumption in tonnes
Very rich	1%	80,000	4000	320
Rich	3%	240,000	800	192
Upper middle	6%	480,000	400	192
Middle	15%	1,200,000	100	120
Lower Middle	25%	2,000,000	40	80
Poor	25%	2,000,000	10	20
Very poor	25%	2,000,000	2	4
		8,000,000		928

Source: www.gold-eagle.com

Outlook 2008: slight decrease in jewellery demand expected, long-term scenario still positive

The high prices might weigh on jewellery demand in 2008. We therefore do not expect the growth rates of previous years to be achieved this year and forecast jewellery demand to the tune of 2,200 to 2,400 tonnes. However, the growing population and the rising disposable income in the emerging countries should support demand in the long run. Any significant slump in jewellery demand from China and India (in conjunction with further declining equity markets) would of course depress the gold price. This represents the largest downside risk in our otherwise optimistic gold price scenario.

Estimated Jewellery demand in 2008



Source: GFMS, own estimates

Excursus: De-hedging

What does producer hedging and de-hedging mean?

Since mine operators have to invest heavily in exploration and mining, they sell some of their future gold production forward - the largest risk involved being that the expected cash flows from the gold production differ from the forecasts. This may happen if a) not enough gold is produced or b) if the gold price is below the expected value. Mine operators can only influence the former and have to plan far ahead, so they usually sell their own production forward. This is called producer hedging. The premature cancellation of these long-term supply contracts is called de-hedging.

De-hedging increases physical demand

During the price slump that started in 1980, production was sold at cost so as to ensure the existence of the company. However, today these long-term contracts weigh heavily on the balance sheets as the companies cannot benefit from the rising gold price or because the supply contracts have to be terminated at high costs. On top of that, the majors have full hedge books and further curtail the gold supply on the market, thus widening the gap between supply and demand. Between 2001 and 2006 close to 2,000 tonnes of gold were bought back as part of de-hedging programmes. We expect this volume to decline because the largest positions have now been cancelled.

Forward contracts account for the lion's share in hedging, i.e. the forward transaction is obligatory for both sides. Put and call options are more speculative. This way producers can protect themselves against falling gold prices (put option): they achieve a fixed price even if the spot price is lower at the particular point in time. The bank that writes the put has to borrow the respective amount of gold from the central banks and sell it immediately on the spot market.

Unhedged producers benefit more from the gold bull market

In periods of rising gold prices, the shares of unhedged companies will of course perform much better (please refer to the Amex Gold Bugs index). Barrick Gold (who closed the hedge-positions earlier than most of it's competitors) rose to become the world's leading gold producer through numerous acquisitions (e.g. Normandy, Placer Dome), whereas hedgers such as AngloGold and Newmont Mining lost large parts of their market share. The following chart shows the outperformance by unhedged companies in periods of rising gold prices:

Hedged vs. unhedged gold stocks

Source: Thomson Datastream

Demand

Excursus: Gold-carry trade and gold lease

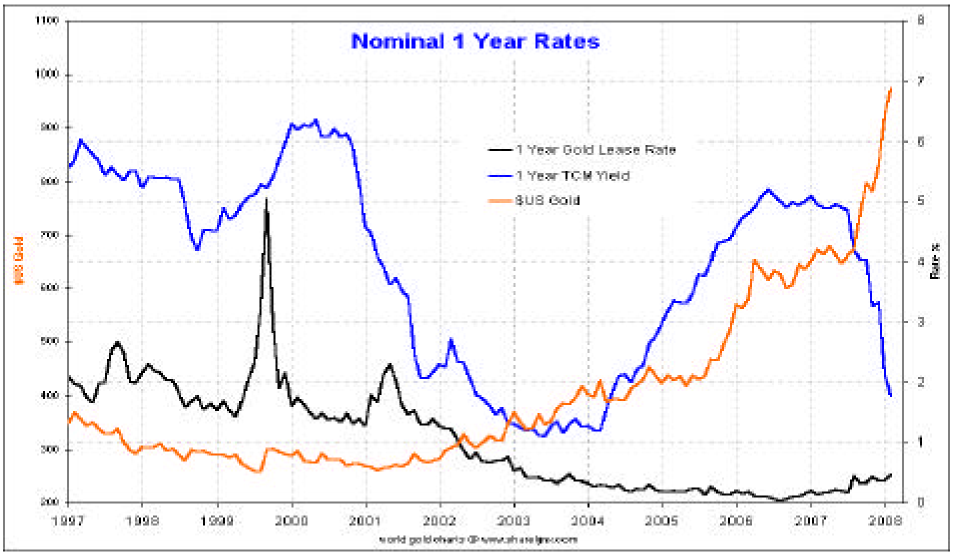
Gold lease since the beginning of the 1980s

Gold leasing became common practice in the 1980s when central banks were leasing out their gold reserves for 1 to 2% of interest per year to commercial banks (mainly JP Morgan Chase, Goldman Sachs, UBS, and Citibank) - not bad, considering this particular asset had not yielded any interest up until then. The income is then reinvested into bonds. The banks in turn lease the gold out to mines which sell the leased gold and use the proceeds to fund capital investments for example in conveyors. These investments enable the mines to continue producing gold and thus to settle their gold debt with the central banks, among other things. It is customary in the case of the gold lease to return the leased gold at the end of the maturity, and the mines also have to pay interest for leasing the gold. Since the debt is denominated in gold rather than currency, this procedure basically constitutes a hedge against falling gold prices for the mines. However, it also means that they will not benefit from rising prices. A so-called bullion bank acts as intermediary between both parties and receives a commission for every successful transaction set up. This carry trade works of course only as long as the low-interest asset class does not increase.

Gold lease positions according to GATA at 10,000 to 15,000 tonnes of gold

This way the liquidity in the gold sector improves and the chance for more transactions, especially derivatives, increases. That said, central bank gold leasing has also lead to a considerable distortion of the supply/demand ratio. The supply has been artificially inflated, derivatives (e.g. swaps, forwards, and options) have created short positions that are based on central bank gold and thus depress the price and are keeping it artificially low. As the process of the gold lease would suggest, it is not the same gold that is returned, but newly mined one. This makes it possible for the mine initially to sell the leased gold on the market, which boosts the supply and has negative effects on the price. Due to the external influence during this period the gold price is exposed to manipulation. In order to prevent this situation from occurring and to promote the transparency of gold reserves the IMF is planning to modify the reporting regulations for central banks. Until now it has taken more than a glance at the balance sheet to figure out how much gold is actually held by the central bank and how much has been leased out. But according to the modified regulation banks would now have to clearly report the volume of gold leased out so as to leave no doubt about who is doing what. According to calculations by the Gold Antitrust Action Committee (GATA) central banks have currently leased out gold reserves to the tune of 10,000 to 15,000 tonnes to banks. Any quick settlement of these short positions would probably push the gold price to far higher regions.

Gold-lease rates 1997-2008



Source: www.sharelynx.com

Demand

Carry trades are depressing the gold price

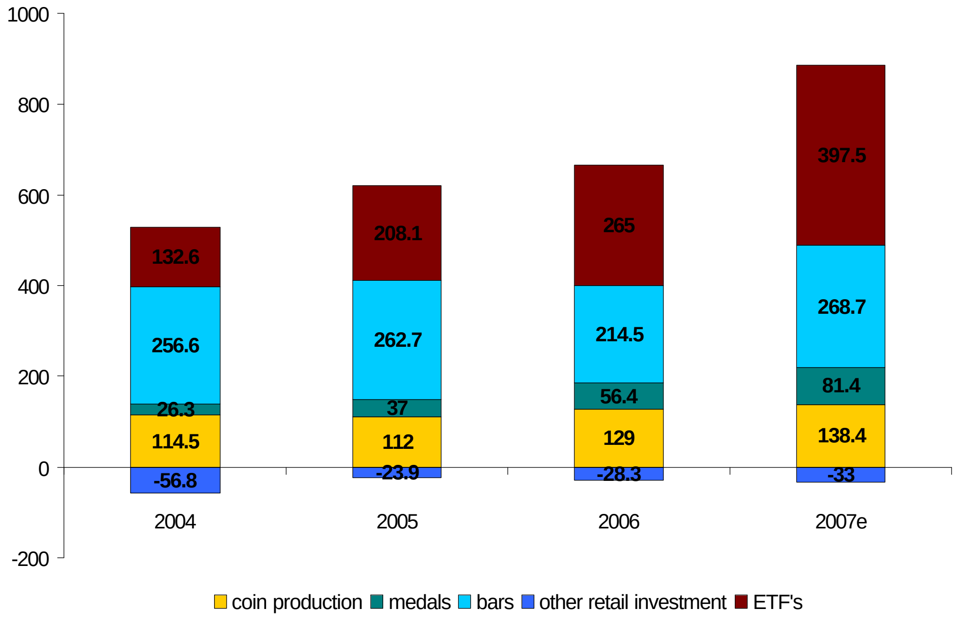
The gold carry trade is a risky form of gold lease. In this case banks do not go through mines to hedge their position but sell the gold on the market and invest the proceeds mainly in bonds. This means that the banks make their profit from the interest rate differential. The dependence on the development of the gold price represents the risk involved in this procedure. During periods of decrasing gold prices investment banks benefit massively from this kind of transaction since falling prices mean profits for the banks. On the other hand, an increasing gold price results in losses for the banks. This conflict of interest between the investors who speculate on rising prices and the banks which hope for the opposite gave rise to the theory of the so-called gold price manipulation, first proposed by Dimitri Speck. According to Speck the Fed has intervened frequently on the American gold market since 5 August 1993. The manipulations could be proven because interventions would occur specifically on key fixing and opening dates.

Investment demand

Commodities are becoming important asset class again

Investment demand in 2007 was ambivalent. Whereas the first half of the year saw demand slump by 20%, investors were flocking to gold as safe haven in the second half.

Investment demand 2004 - 2007



Source: www.gold.org, own estimates

The inflows into exchange traded funds (ETFs) in the fourth quarter of 2007 amounted to USD 8bn, i.e. a clear all-time-high since the beginning of the bull market in 2001. Total demand in 2007 was slightly up on 2006 in volume terms, but 15% higher in dollar terms.

ETFs are exchange traded index funds that reflect the gold price 1:1 and that have to physically deposit the gold. Investors like ETFs because of their high degree of transparency and their favourable cost structure.

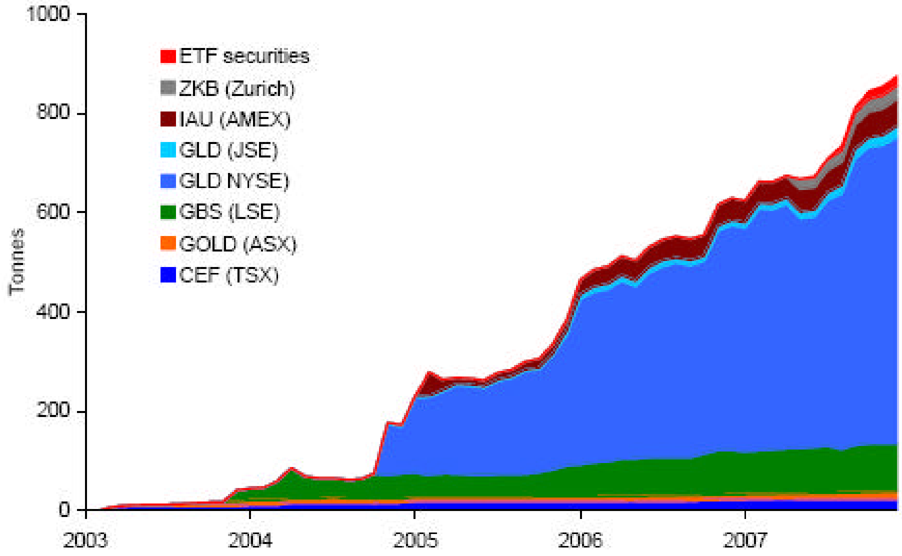
Numerous new ETFs in the pipeline

The volume of the largest gold ETF, StreetTrack Gold Trust, increased last year to 640 tonnes, which meant the fund overtook the Dutch central bank as eight-largest gold owner in the world. At the end of 2007 the Xetra-Gold ETF was floated in Germany. A new ETF is expected for Dubai in 2008 which will be structured in accordance with Sharia law. The State Bank of India plans to issue a gold ETF this

Demand

year as well. In addition, the StreetTRACKS ETF will be listed in Hong Kong by September at the latest. According to the World Gold Council, total demand could rise by almost 30% on the back of ETFs.

The following graph illustrates the volumes of the largest gold ETFs in tonnes:



Source: DB Global Markets Research estimates

Deutsche Bank forecasts a 60% increase in ETF volumes by 2010

The European ETF market is growing rapidly as well. According to a report by Deutsche Bank, assets invested will reach EUR 150bn in 2010 (volume as per end of March 2008: EUR 93bn). The report claims that the volume growth will be mainly due to institutional investors, as especially pension funds will diversify into ETFs.

Demand for investor coins also on upward trend

In addition, mints use gold for their coins, with bullion coins - produced by gold mining nations - representing the most popular end products. Demand has risen sharply over the past three years. Holding gold in bullions (i.e. not in coins) is more common in the Middle East and Asia.

In the first quarter of 2008 gold investments in bullions and in coins increased significantly in comparison with the reference period of last year. In Vietnam they increased by 110%, in the USA by 91%, in Germany by 80%, in China by 63%, and in Switzerland by 44%.

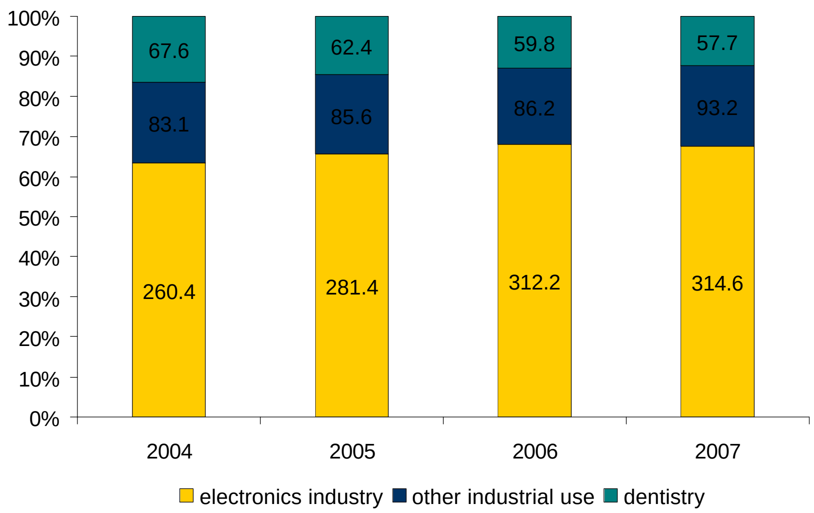
Demand

Industrial demand

Industrial demand increased by 2% in 2007 to a total of 465 tonnes. Demand from the industrial sector accounts for slightly more than 10% of total demand. Consumption in this segment will probably continue to grow by 5 to 10%. Only a severe global recession could cause demand to shrink temporarily.

Gold is easy to process and has outstanding conductivity for electricity and heat. These characteristics make the yellow precious metal an important commodity for industrial use. The most important field of application is the electrical industry where gold is used for circuits, die bonds, relays, connectors, and printed circuit boards among other things. Another important area is dentistry.

Industrial demand 2004 - 2007 in tons



Sources: own research, Bloomberg

Conclusion demand:

All three components of demand (jewellery, industry, investment) have embarked on long-term upward trends that are still intact. Driven by the rapid development of the emerging countries (especially China), jewellery demand should display stable growth rates over the coming years. With regard to hedging, we expect lower demand due to the fact that most contracts have been terminated already. Investment demand seems to remain very robust given the increasing importance of commodities as asset class. This area is where we envisage the largest growth rates. Industrial demand should continue to grow as well; this component, however, is of subordinate significance.

Gold and its specific characteristics

1. Gold is both monetary asset and commodity

The first gold coin dates back to 500 B.C.

The gold market differs from other commodity markets in that a substantial part of it is bought for investment reasons (e.g. as protection against inflation). On top of that, the monetary aspect is often forgotten due to 20 years of bear market, the massive central bank sales over the past few years, and the end of the Bretton Woods Agreement. Currencies always used to be simple gold derivatives. The entire money creation by the central banks was covered by physical gold reserves. Therefore gold is both commodity and monetary asset. Historically speaking, the yellow precious metal has always been used to cover the currency. Even 5,000 B.C. the value of goods was assessed in gold units, and about 500 B.C. the first pure gold coin was minted.

"The USA should hold on to its gold reserves. (…) Gold still represents the highest form of payment in the world. During the war in 1944, Germany could only buy materials with gold. Paper money, in extremis, will not be accepted by anyone - gold on the other hand will always be accepted."

Alan Greenspan, "Gold and Economic Freedom"[1]

Numerous fields of application for gold

Gold comes with a multitude of characteristics that make it an ideal means of payment and of value conservation. It is durable, easily recognisable, suitable for storage, and above all, divisible. On top of that, it is almost impossible to boost the gold reserves in a sustainable way without a certain (considerable) lead time. Due to its melting point of 1,063 degrees centigrade and its high chemical stability it is almost indestructible, which means that all gold that has ever been mined is still around. It is also the most dilatable of all metals and can be pressed to a sheet of one ten thousandth millimetre or dilated to a thread of 105 kilometres (per ounce). Gold has a very high electrical conductivity and is therefore widely used in electrical appliances of all sorts.

2. Gold as protection against inflation

Gold in the sixth century B.C. and during the Weimar Republic

Gold and the development of inflation have a highly positive correlation. Therefore the investment in gold represents an excellent way of protecting one's purchase power. The dollar has lost 95% of its value since the establishment of the Federal Reserve in 1913 (source: Fed inflation calculator), whereas gold has increased from USD 20.67 to above 1,000 by a factor of 50.

Gold has been known to constitute a good hedge against inflation at least since the 1970s. But even much longer time series confirm the stable purchase power of the yellow precious metal. According to a passage in the Old Testament, one ounce of gold would buy you 350 loafs of bread at the time of Nebuchadnezzar, the ruler of Babylon in the sixth century B.C. And today one ounce still buys you almost the same basket of goods. And according to a favourite saying one ounce of gold has always bought you a good suit - in the 18th century, in 1930, and today.

The German hyperinflation of 1923 was probably the most extreme example in the last century. In 1871 the German Empire declared the gold mark official legal tender. The system proved successful until 1918, when Germany could no longer come up with sufficient volumes of gold marks to honour its high reparations in the aftermath of WWI. Fiat money not covered by gold was introduced, resulting in hyperinflation in the 1920s. Said hyperinflation made it possible to snap up whole blocks of houses for 500 grams of gold during the Weimar Republic. Although the ghost of hyperinflation

[1] *Alan Greenspan, US House Banking Commitee on 24th of July 1998, German translation by Ferdinand Lips*

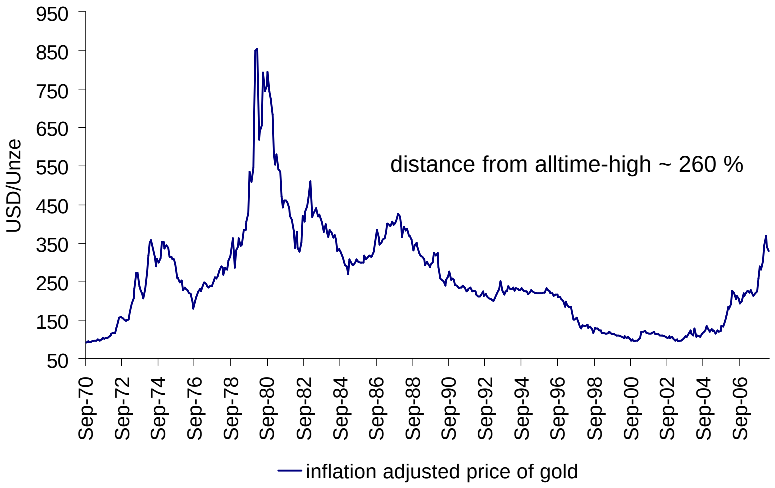
Gold and its specific characteristics

should not re-appear in Europe in the foreseeable future, the example goes to show how well suited gold is as means of value conservation and how important it is as crisis-proof pillar in a diversified investment strategy.

Inflation-adjusted gold price still historically low

The latest price increases and the passing of the (psychologically important) threshold of USD 1,000 per ounce can be put into perspective by looking at the inflation-adjusted gold price chart. At the end of the 1970s/beginning of the 1980, gold was worth up to USD 850 per ounce, while the average household income in America was about USD 17,000 annually. Today a family of four with an annual income of USD 17,000 would be living below the poverty line. The debt level of the American households has risen dramatically over the past decades. Whereas private households had total debts of USD 10 trillion in 1987, they have amassed USD 28 trillion in the meantime (or almost 3.5 times GDP). This means that a nominal comparison of the gold price over past decades makes only limited sense. Therefore you find an inflation-adjusted time series of the gold price in the following:

Inflation adjusted price of gold



Source: Bloomberg, own calculations

Put into a long-term perspective the development of the gold price does therefore not appear overheated. All that has happened is the reversal of the downward trend. The chart above illustrates that on an inflation-adjusted basis the gold price is still almost 260% below its 1980s highs. In order to reach its all-time-high in real terms the yellow metal would have to rise to USD 2,300.

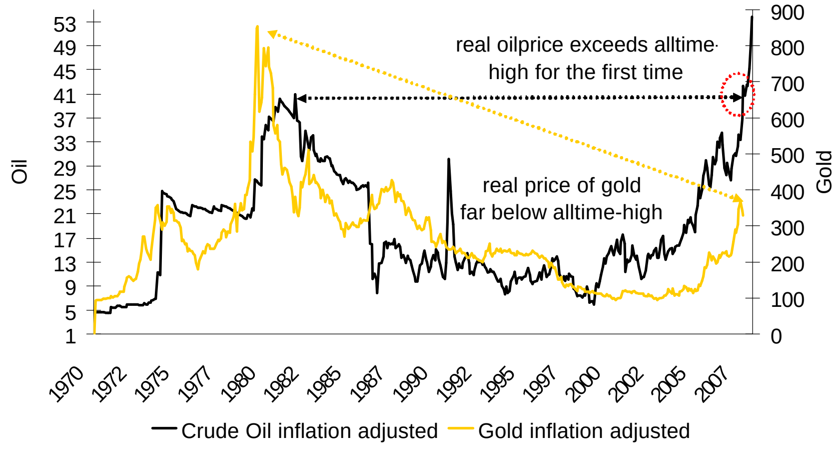
First real-term all-time-high of oil price recently - when is gold to follow?

In 1980 the American currency had a much larger purchase power than today. Based on the official inflation calculator of the Federal Reserve the inflation-adjusted all-time-high is USD 2,300. In other words, gold would have to cost more than USD 2,300 in order to reflect the real value of 1980. Oil, the black gold, has recently passed its real highs of the 1980s for the first time. We expect the same for gold sooner or later.

[2]*fiat money: money decreed by government: paper money that a government declares to be legal tender although it is not based on or convertible into coins and therefore depends on government decree to determine its value*

Gold and its specific characteristics

Gold and Crude Oil inflation adjusted

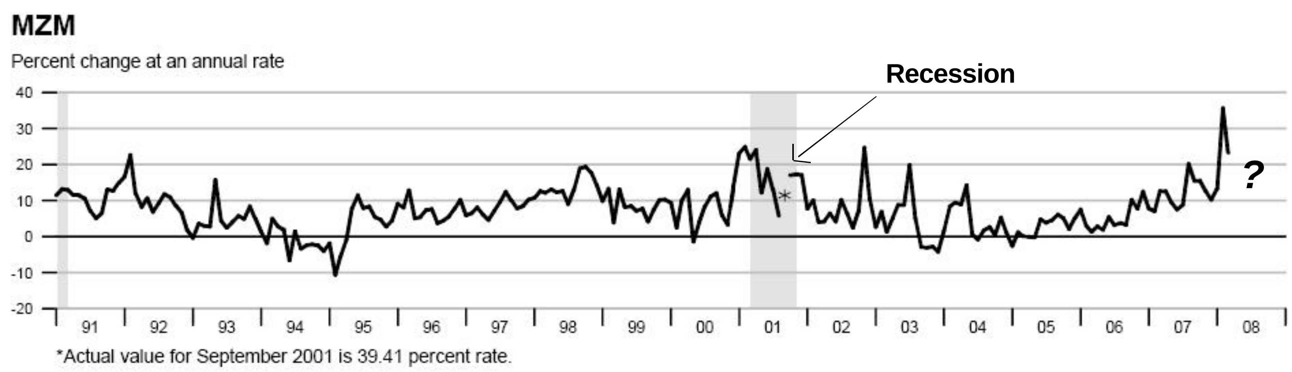


Source: Bloomberg, Datastream

Money with zero maturity (MZM) supply growth highlights expansive monetary policy by the US central bank

Money supply was also significantly expanded because of the massive liquidity injections by the US Fed. The following chart shows the annualised change in MZM (money with zero maturity) which contains daily callable money. MZM has been published by the Federal Reserve St. Louis since 1991 and includes M2 minus small time deposits and institutional money market funds. Since the publication of M3 was discontinued in 2006, MZM has probably best reflected the increasingly expansive monetary policy of the Fed. Whereas MZM increased by 9.2% in the whole of 2007, it had soared by 30% until April 2008 before coming down a bit more recently.

% change in MZM since 1991

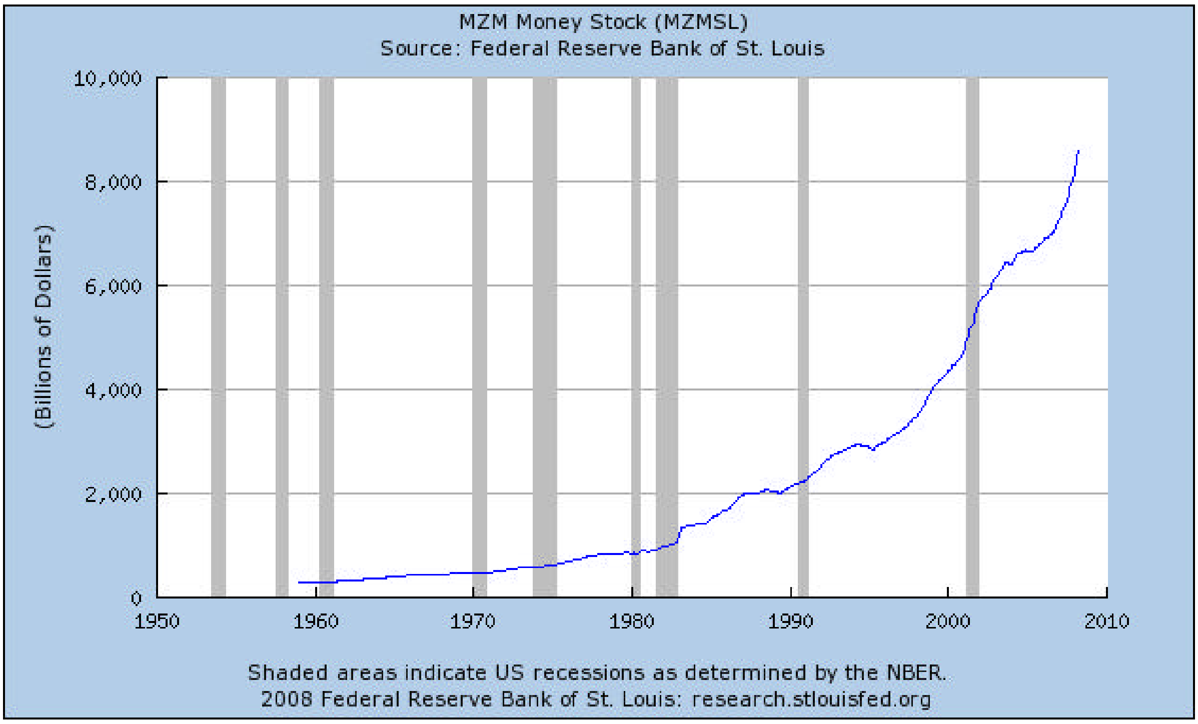


Source: Federal Reserve Bank St. Louis

Gold and its specific characteristics

Further down you see the money supply in billions of US dollar, with the grey areas indicating recessions. During and immediately after such periods the expansion of money supply would be particularly pronounced.

Absolute MZM

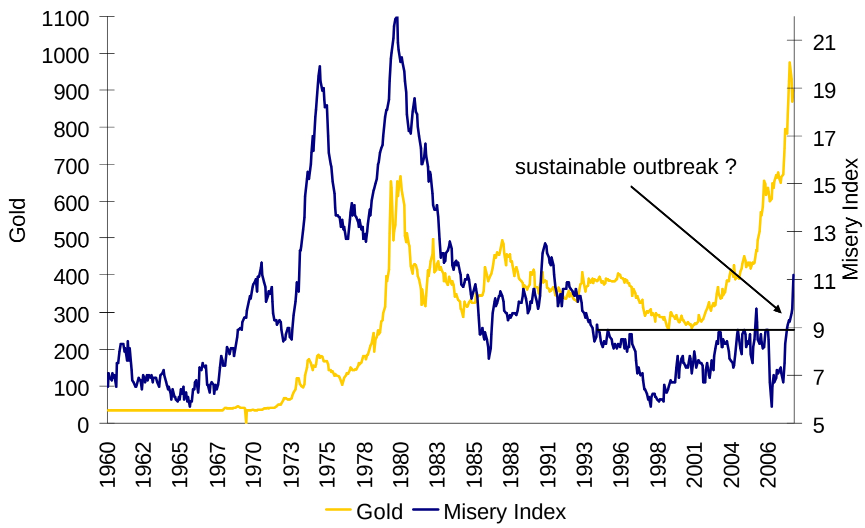


Source: Federal Reserve Bank St. Louis

Misery Index as reliable leading indicator

The Misery Index is the sum of inflation and unemployment rate. Due to the sensitivity of the gold price to the rate of inflation and general economic decline there is a strong correlation between the gold price and the Misery Index. The following chart shows that the Misery Index tends to break away before the gold price does, which would confirm the bullish scenario for the gold price.

Gold vs. Misery-Index



Source: Bloomberg, own calculations

Gold and its specific characteristics

In the past, rising inflation has therefore not usually preceded a worsening commodity performance. By and large commodity performance would point the same direction as the change of inflation rate. Thus, commodity investments have offered better protection against rising inflation than traditional asset classes. This result does not really come as a surprise, seeing that certain commodity prices are taken into consideration when calculating consumer prices, and help achieve a kind of natural synchronicity.

Gold as dollar hedge

Oil-producing and Islamic countries criticise the US dollar as world currency

An ever larger number of countries have been criticising the hegemony of the US dollar and the economic privileges it entails. Oil-producing countries such as Russia, Venezuela, Kuwait, Iran, the United Arabic Emirates, and Saudi Arabia have repeatedly uttered their dissatisfaction with dollar-based invoicing. Should they eventually prevail, this shift would certainly weigh on the US dollar (and support the gold price). On top of that, Islamic countries have looked into the creation of a gold-covered single currency (the gold dinar). Malaysia for example has been working on a plan to introduce the gold dinar for bilateral and multilateral transactions with Islamic countries since 2004. And in Russia there are those who demand that the rouble be covered by gold.

19 countries hold reserves of more than USD 5.2 trillion

The following chart illustrates the huge demand for dollar diversification and hedging of dollar exposure:

Reserves in Billion US-Dollars

China	1,528.00	Algeria	107.03
Japan	979.00	Malaysia	98.83
Russia	451.79	Mexico	84.65
OPEC	430.88	Thailand	82.39
Taiw an	277.09	Libya	74.42
India	264.73	Poland	65.33
Korea	259.69	Norw ay	60.34
Hong Kong	159.90		
		Total	5492.03

Source: IMF December 2007; Dr. Martin Murenbeeld, Dundee Wealth Economics

Gold and its specific characteristics

The Asian central banks' share of gold in terms of total reserves is substantially below that of their European counterparts, as highlighted in the following table:

SE Asia has over $ 3 Trillion reserves

	last Date Reported	Gold Reserves in Tonnes	Exchange Reserves (bn USD)	Gold as a percentage of Total Reserves
China	Dec. 07	600	1,528.00	1.06%
Japan	Feb-08	765	979.60	2.09%
Hong Kong	Jan. 08	2	159.90	0.04%
Korea	Jan. 08	14	261.40	0.15%
Singapore	Jan. 08	127	266.70	1.29%
Taiw an	Feb-08	423	277.80	4.00%
Total		1931	3,473.40	

Source: IMF April 08, Dr. Martin Murenbeeld, Dundee Wealth Economics

*Gold valued at USD 850

In order to hold 15% of total reserves in gold, China would theoretically have to buy 7,200 tonnes, Japan 6,850 tonnes, and the remaining Asian central banks would have to buy 6,000 tonnes of gold (at an average price of USD 600). The oil-producing OPEC countries would have to buy a total of 1,500 tonnes (i.e. some 50 million ounces) of gold if they wanted to achieve a level of 15% of gold coverage in their reserves.

Asian nations are setting up own Monetary Fund

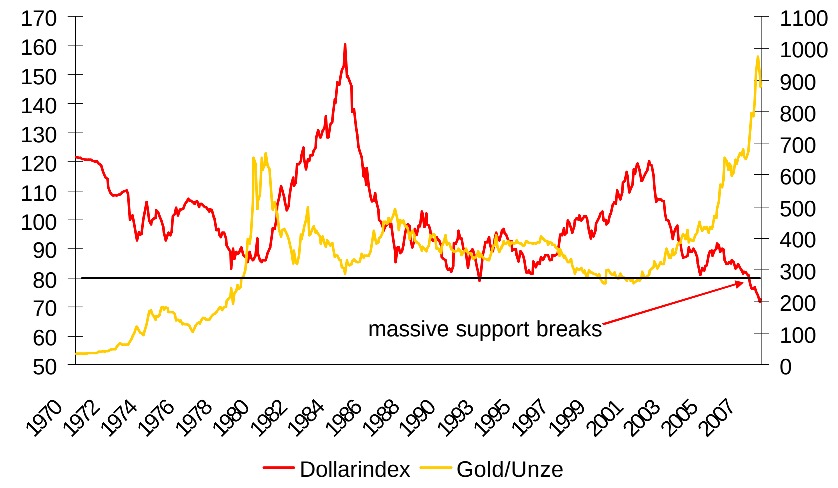
The intensifying efforts for autonomy among the Asian countries have been underlined by the recent establishment of an Asian Monetary Fund. During a meeting in Madrid at the beginning of May, 13 Asian countries agreed to set up a currency pool of USD 80bn. 80% of this sum will be provided by China, Japan, and South Korea, the rest will come from the other ASEAN member states. Almost ten years after the Asian currency crisis the goal is to lower the degree of dependence on the IMF.

Dollar index breaks massive support

The dollar index is a basket of currencies consisting of the euro (57.6%), the Japanese yen (13.6%), the British pound (11.9%), the Canadian dollar (9.1%), the Swedish crown (4.2%), and the Swiss franc (3.6%). Recently the index has for the first time broken through the support at 80 and is currently heading towards 70. Since July 2001 the dollar index has been in a secular bear market and has lost almost 40% of its value, and the end of the downward trend is still not in sight. This is why the dollar creditors' eagerness to diversify does not come as a surprise.

Gold and its specific characteristics

Dollar Index vs. Goldprice



Source: Bloomberg, own calculations

4. Commodity investments and their golden future

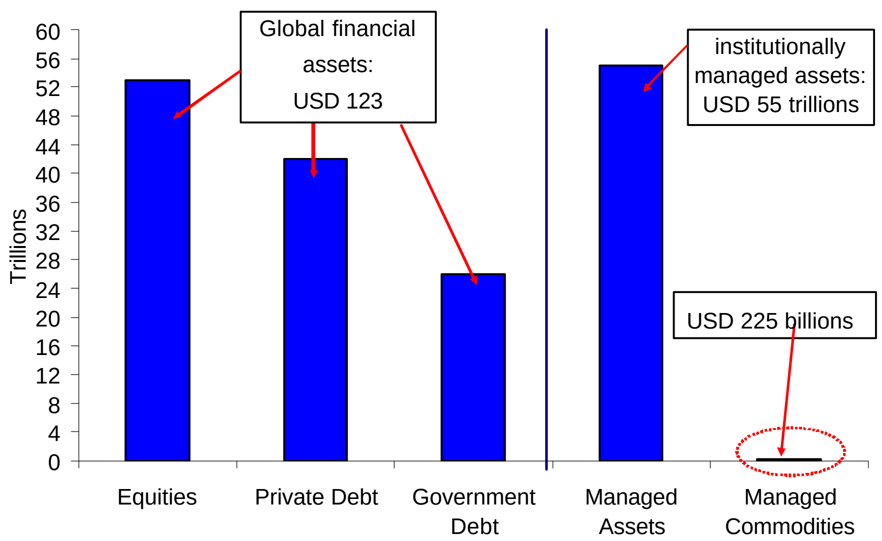
State funds as buyers?

Commodities remain strongly underweighted in the portfolios of institutional and retail investors. The increasingly active Sovereign Wealth Funds of Dubai and Singapore recently announced they would invest parts of their assets in gold. The state fund currently has assets under management of USD 3 trillion. According to a study by Morgan Stanley those assets might quadruple to up to USD 12 trillion by 2015. But it is not only Asian funds that have discovered the attractiveness of the yellow precious metal. The pension fund of the Californian civil servants, Calpers, recently said it would increase investments in raw materials and gold by a factor of 16.

Commodity investments still underweighted in institutional portfolios

The following chart illustrates the low prevalence of commodity investments in institutional portfolios. Institutions currently manage USD 55 trillion in assets, but only USD 225bn are invested in commodities. This means that soft assets exceed hard assets by a factor of 275. Total paper assets (USD 123 trillion) exceed commodity investments even by a factor of 615.

Dollar Index vs. price of gold



Source: Dr. Martin Murenbeeld, DundeeWealth Economics

Gold and its specific characteristics

Commodities: Alternative investments or traditional investment class?

Since equities and bonds were delivering extraordinarily positive performances in historic comparison from 1980 to 2000, commodities were completely disregarded during that period. Although commodities are basically a traditional investment class, they have ended up among alternative investments just like hedge funds or private equity for example due to 20 years of underperformance. But the price hike since 2001 has strongly revived the interest among global investors.

Nevertheless, commodities are strongly underrepresented on a global scale. According to a media survey among institutional investors in the USA, close to 60% of the participants are not invested in this area, but two thirds thereof are going to invest at least 5% of their assets under management or more. This is why we believe that the asset class of commodities, and primarily gold, will gradually gain significance in the strategic asset allocation of institutional investors.

5. Gold is a scarce and limited resource - example: Pareto distribution

The Pareto distribution outlines the low volume of gold per capita

Gold is a very scarce resource; the total amount of the gold mined so far is only 159,000 tonnes. To illustrate it, this is equal to a cube with an edge length of not even 19 metres.

The Pareto distribution (80/20 distribution) describes the statistical phenomenon of unequal distribution which comes up in many different areas. In other words, the majority of global activities in various areas are handled by only a fraction of the participants. Pareto himself was mainly interested in applying his principle to the wealth of nations which was then (as today) held by a small minority of the population. He found out that the distribution of income was remarkably similar across the different countries; for example, the 20 richest percent of the population would typically own 80% of total wealth.

If applied to the gold sector, the Pareto principle would therefore by virtue of analogy contend that 20% of the population own 80% of the global gold reserves, and 80% of the population own 20% of the reserves.

Taking into account a total global amount of gold of 159,000 tonnes and 6.3bn people, the following allocation results:

- 20 % of the world population - 80 % of the gold reserves: 3.245 ounces per capita
- 80 % of the world population - 20 % of the gold reserves: 0.2028 ounces per capita

Under the premise that 50% of the gold have fixed owners (central banks, institutional investors, industrial use), the model yields the following results:

- 20 % of the world population - 80 % of the gold reserves: 1.64 ounces per capita
- 80 % of the world population - 20 % of the gold reserves: 0.1014 ounces per capita

Conservative estimates put the world population in 2050 at 9.5bn. Based on the assumption that India, the world's largest gold consumer, will grow above average, we arrive at a highly positive scenario as far as long-term demand is concerned. The threat of gold shortages could therefore be part of a rather realistic setting.

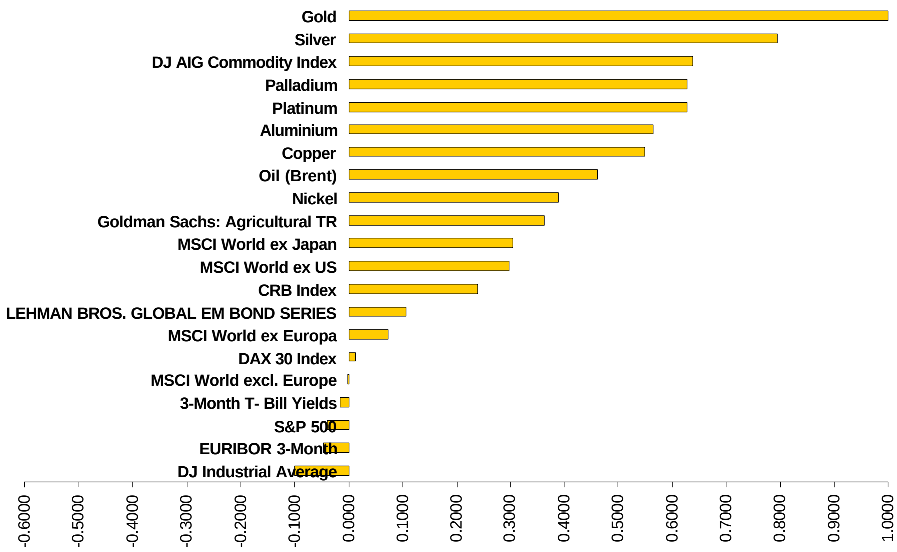
6) Gold as diversification - low correlation to other asset classes

No significant correlation with equities or bonds

Portfolio diversification is one of the pillars of a balanced long-term investment strategy. Gold has the extremely positive feature of low correlation with most other asset classes. Statistically there has been no significant correlation with domestic or foreign equities. Nor do US government bonds, treasury bills, or REITs show any significant degree of correlation. On top of that, in periods of crises there is an inverse relationship with equity investments, i.e. when shares plunge, gold rises. The ten-year correlation coefficient of gold mining shares and the MSCI World Index is only 0.11, and the coefficient of gold bullions and the index is even lower at 0.022. Many a time the correlation with the euro/dollar exchange rate has been overrated; in 2007 average correlation was at 0.48, which means it had come down substantially from the levels of previous years.

The following graph shows the average three-year correlation coefficient of weekly performances with other commodities as well as equity and commodity indices:

Correlation Gold vs. other asset classes

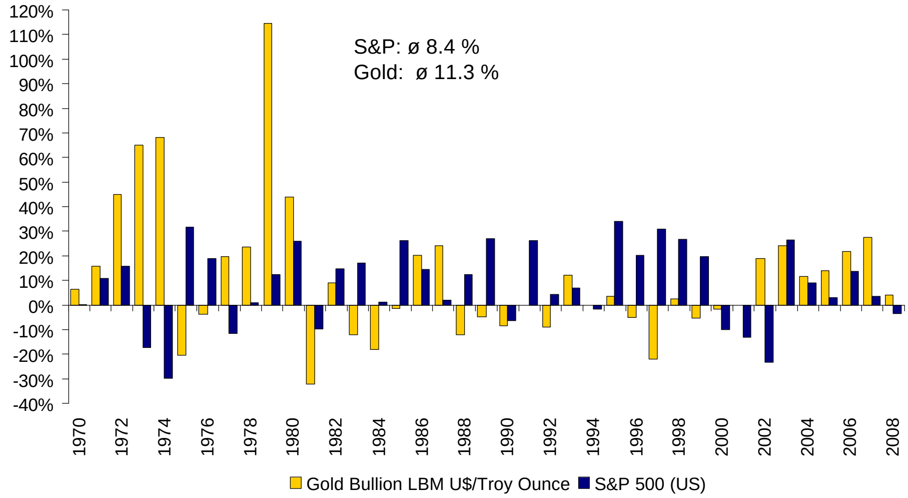


Source: JCF, Datastream, own calculations

Gold and its specific characteristics

The chart underneath illustrates the annual performance of gold in comparison with S&P 500 since 1970:

Annual % changes of gold and S&P 500



Sources: JCF, Datastream, own calculations

Ratio analysis

By analysing the long-term relationships of gold with other assets we wish to provide the reader with the basis for a different, long-term perspective of the market. Calculations are based on simple divisions.

In the following, we will analyse these ratios:

- Dow / gold
- Gold / oil
- Gold / silver
- Gold / HUI index

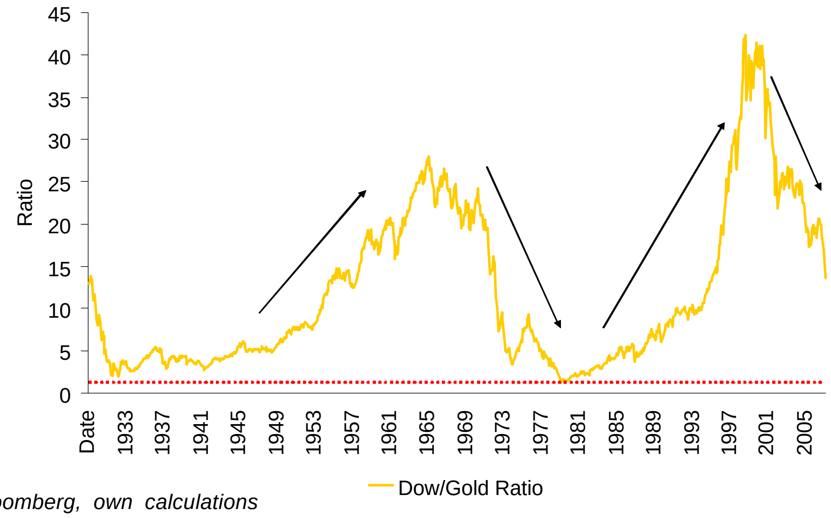
Dow Jones / gold

Dow/gold ratio indicates that gold remains undervalued against equities

The long-term comparison of the two asset classes, equities and gold, indicates the current attractiveness of the gold price. The ratio expresses how many ounces of gold would be required to buy the entire Dow Jones Industrial index. A Dow Jones price of 12,700 and a gold price of USD 880 per ounce yield a ratio of 14.4. This means that 14.4 ounces of gold are necessary to buy the Dow Jones or one share of each of the 30 companies represented in the index. Historically speaking, the Dow Jones has been undervalued when the ratio fell below 5, which was the case after the crash in October 1987 for the last time so far (the ratio dipped to 3.5). After that the Dow Jones index and the gold price were developing in diametrically opposed directions. Whereas gold re-embarked on its long-term bear market in the following years, the Dow Jones index skyrocketed. The ratio posted its all-time-high at above 40 in August 1999. After the first sharp correction the subsequent rally failed to climb to previous heights. From that moment on the ratio would only reach lower local highs, with each one usually lower than the previous one, thus establishing a downward trend which is still intact. At currently 14.4 and in comparison with gold the US equity market is still clearly overvalued and gold is clearly undervalued, respectively. In order for the ratio to generate a buying signal for equities, it would have to fall to a bandwidth of 5 to 2. Even a ratio of 1 would not be historically unusual: prior to the bull market on the stock exchange in 1980, the Dow Jones index was hovering around 900 points, and gold was at USD 850 per ounce. 1930 saw a similar scenario. The ratio of Dow Jones index and gold price hit its lows always in a band between 1 and 2. That was the signal to switch from gold to equities. The latest cycle started in 1999 at values of above 40. Shortly before the crash in 2000 the ratio had been at 43.7. The cycles posted their historic lows in 1933 and 1980, respectively. Since the collapse of the Bretton Woods Agreement in 1971 the average of the ratio has been 13.2, i.e. about the current level. From 1900 to 2007 the average was 5.5. This leaves room for a possible scenario where the Dow Jones index and the gold price develop diametrically again - only this time the Dow Jones would fall to 10,000 and the gold price would rise to USD 2,000.

The Dow/gold ratio therefore pinpoints that cyclical long-term lows on the gold market go hand in hand with long-term highs on the equity market, and vice versa.

Dow/Gold Ratio



Source: Bloomberg, own calculations

Gold / Oil

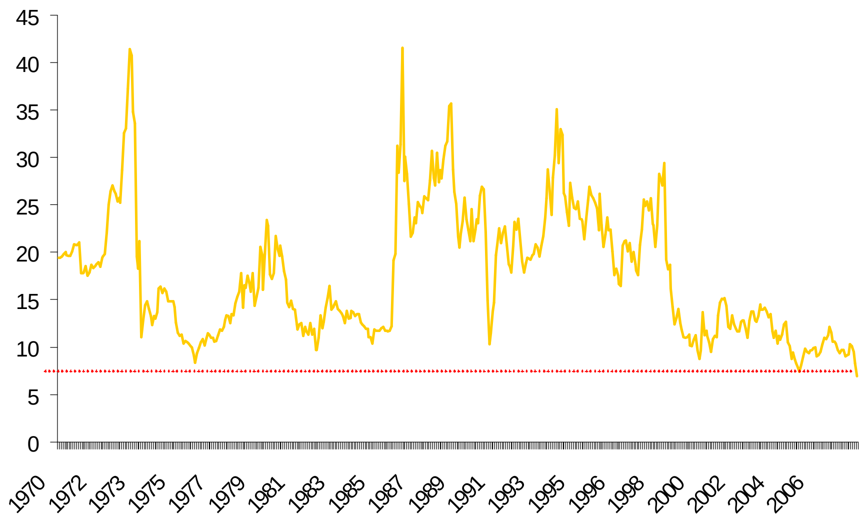
Oil and gold have a highly positive correlation. Both commodities are traded in US dollars and tend to rise when the dollar weakens against the most important currencies. In addition, oil is one of the most important indicators of inflation and thus also for the gold market. And the argument according to which we have reached or are about to reach peak oil, i.e. the peak of oil production, can also be applied to gold by ways of analogy.

In relation to oil, gold is currently close to its all-time-low, i.e. very cheap by historic standards. The current gold/oil ratio, i.e. the ratio of one ounce of gold to one barrel of crude oil, is close to 7, whereas the long-term average is 17.6 and the median is 16.1. This means that at ratio highs of more than 40 like in 1973 or 1986, the gold price would have to rise to almost USD 4,000 per ounce (at constant oil prices of USD 100/barrel). We therefore expect either gold to increase sharply or oil to fall significantly in the foreseeable future. Alternatively, the long-term increase of both is also possible, with gold outperforming oil. Even if the ratios do not seem compelling at first glance, they do contain information as to the future potential based on the historic context.

The stable purchase power of gold is also reflected by this ratio: Currently one ounce of gold buys you the same amount of oil as it did in 1945, 1982, and 2000.

Ratio analysis

Gold/Oil Ratio

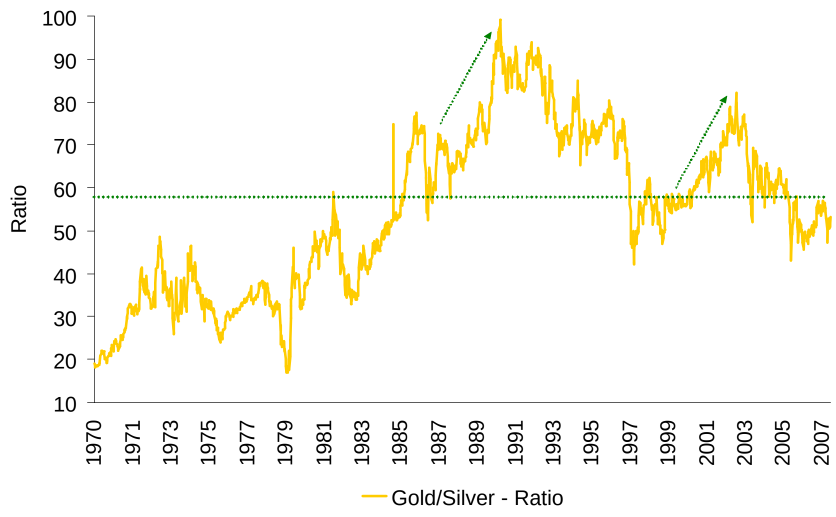


Source: Bloomberg, own calculations

Gold / silver ratio

This ratio shows how many ounces of silver can be bought for one ounce of gold. It is considered a reliable indicator for the over- or undervaluation of both precious metals in dollar terms. The current ratio is 53. Whereas before 1990 the average ratio had been 45, since 1990 it has risen to 67. In 2007 the average was 51. At the peak of the latest gold/silver boom in 1980 the ratio was 17. In the periods of 1970 to 1991 and 1993 to 2003 this ratio was also an excellent indicator for the equity market. Anything above 58 is considered a leading indicator of weak equity markets and of a pronounced relative strength of precious metals.

Gold/Silver - Ratio



Source: Bloomberg, Datastream, own calculations

Ratio analysis

Gold / HUI (Amex Gold Bugs index) ratio

The relationship of gold price and Amex Gold Bugs index (HUI) is currently 2.1. It expresses the relative performance of gold vis-à-vis the unhedged shares of the Amex Gold Bugs index. Although the index temporarily broke out of a long and gruelling sideways channel in 2005, it failed to build sustainable strength against the gold price. Thus the sideways trend indicates that gold mining shares basically do not outperform gold. In fact, both have been developing more or less hand in hand since 2003. The average of the ratio is 2.94, and the median is 2.4.

Gold HUI Ratio

Source: Bloomberg, Datastream, own calculations

Conclusion ratios:

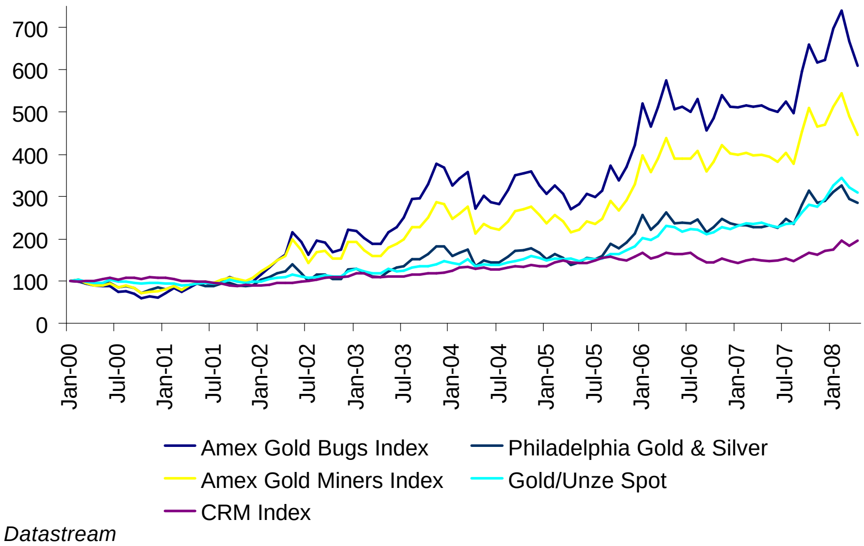
The long-term comparison of gold and other investments supports our positive scenario; especially the comparisons with the Dow Jones index and with oil show that the yellow precious metal is still attractively valued in a historical context.

Gold mining shares

Benchmark indices Amex Gold Bugs, Philadelphia Gold & Silver, and Amex Gold Miners

The Philadelphia Gold & Silver index (XAU), the Amex Gold Miners and the Amex Gold Bugs index are the benchmarks in the gold mining sector. In the following you find an overview of the performance of the different indices since the beginning of the bull market:

Performance gold indices



Source: Datastream

Amex Gold Bugs index

An investment in the Amex Gold Bugs index (which is an acronym for Basket of Unhedged Gold Stocks; although the most outspoken and, one might almost say, obsessed supporters of the gold standard are also called "gold bugs") is particularly interesting from a diversification point of view. This index contains the most important unhedged gold and silver mining companies. This means that the companies have sold their future gold production forward by a maximum of 1.5 years and will thus participate above average in the increase (and the fall) of gold prices. The companies listed in the index account for about 25% of the worldwide gold production. Shares of gold miners participate at disproportionately high rates in the development of the gold price. This can be put down to the inventories which are exposed to appreciation and depreciation, respectively. The larger the share of forward sold production, the smaller the leverage. The heavyweights of the index, which contains 15 companies, are Goldcorp, Barrick, and Newmont Mining.

Composition of Amex Gold Bugs Index

	Amex Gold Bugs Index (HUI)	Subsector	Country	M.Cap. in USD mn	Weighting Index %
CA3809564097	Goldcorp Inc	Gold Mining	CANADA	28.850	15,83
CA0679011084	Barrick Gold Corp	Gold Mining	CANADA	38.392	15,29
US6516391066	New mont Mining Corp	Gold Mining	UNITED STATES	21.096	9,84
GB00B01C3S32	Randgold Resources Ltd	Gold Mining	JERSEY	4.046	5,84
CA2849021035	Eldorado Gold Corp	Gold Mining	CANADA	2.522	5,46
US4227041062	Hecla Mining Co	Platinum & Precious Metals	UNITED STATES	1.444	5,35
CA4969024047	Kinross Gold Corp	Gold Mining	CANADA	14.381	5,26
CA0084741085	Agnico-Eagle Mines Ltd	Gold Mining	CANADA	9.895	4,99
CA4509131088	Iamgold Corp	Gold Mining	CANADA	2.216	4,99
CA6664161024	Northgate Minerals Corp	Gold Mining	CANADA	839	4,86
US1921081089	Coeur d'Alene Mines Corp	Precious Metals & Minerals	UNITED STATES	2.165	4,72
ZAE000015228	Harmony Gold Mining Co Ltd	Gold Mining	SOUTH AFRICA	4.633	4,70
ZAE000018123	Gold Fields Ltd	Gold Mining	SOUTH AFRICA	9.044	4,53
CA98462Y1007	Yamana Gold Inc	Gold Mining	CANADA	9.739	4,45
CA38119T1049	Golden Star Resources Ltd	Gold Mining	UNITED STATES	815	3,901
				150.076	100,00

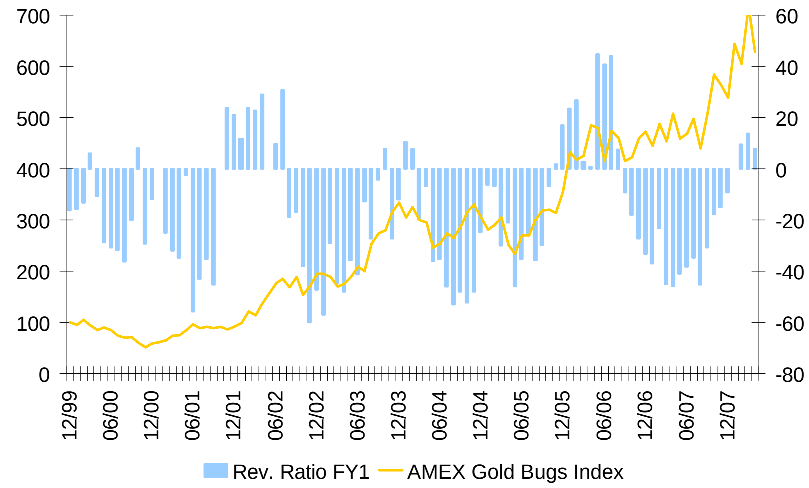
Sources: JCF, own research

Gold mining shares

Strongly positive revision ratio recently:

In the past three months we have noticed yet another positive overhang of earnings revisions. This means that more analysts have revised their earnings forecasts upward then downward, which has been a recurrent seasonality in recent years. The sales as well as the margin revisions have also exhibited a positive momentum.

Revision Ratio HUI



Sources: JCF, own research

Philadelphia Gold & Silver index

The oldest and probably best known North American mining index is the Philadelphia Gold & Silver index, also known under its code "XAU index". It contains the 16 most important hedged and unhedged gold and silver companies and was introduced in 1979 at an opening price of 100 points.

Due to the de-hedging programmes of recent years the composition of the index has changed. Barrick Gold for example was not represented in the Amex Gold Bugs index for quite some time, and now after clearing out its hedge book it commands a weight of 16.7% in HUI and of 21% in XAU. 53% of the companies in HUI, XAU, and the FTSE Gold Mines index are currently identical.

Composition of Philadelphia Gold & Silver

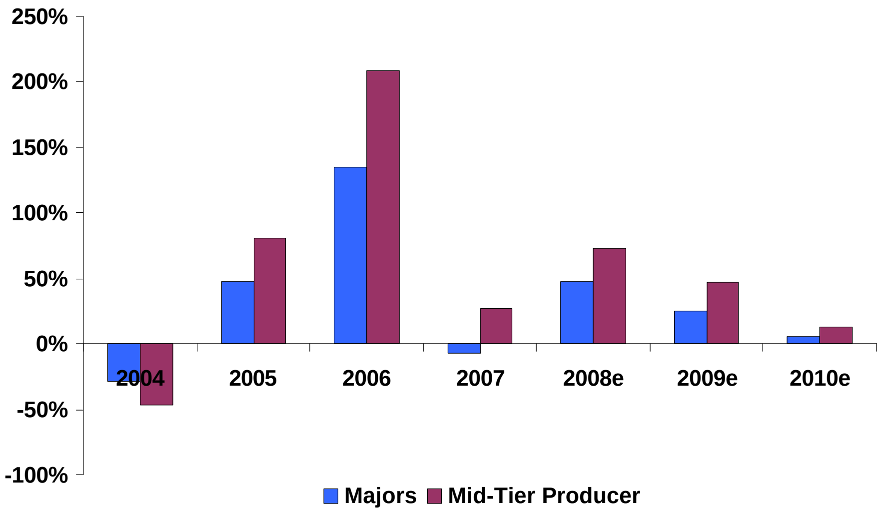
	Philadelphia Stock Exchange Gold & Silver (XAU)	Subsector	Country	M.Cap. in USD mn	Weighting Index %
US35671D5014	Freeport-McMoRan Copper & Gold Inc	Diversified Metals & Mining	UNITED STATES	40,964	20.28
CA0679011084	Barrick Gold Corp	Gold	CANADA	38,392	18.99
CA3809564097	Goldcorp Inc	Gold	CANADA	28,880	14.22
US6516391066	New mont Mining Corp	Gold	UNITED STATES	21,096	10.45
CA4969024047	Kinross Gold Corp	Gold	CANADA	14,381	7.11
ZAE000043485	AngloGold Ashanti Ltd	Gold	SOUTH AFRICA	10,007	4.95
CA0084741085	Agnico-Eagle Mines Ltd	Gold	CANADA	9,895	4.89
CA98462Y1007	Yamana Gold Inc	Gold	CANADA	9,739	4.52
ZAE000018123	Gold Fields Ltd	Gold	SOUTH AFRICA	9,044	4.48
ZAE000015228	Harmony Gold Mining Co Ltd	Gold	SOUTH AFRICA	4,633	2.29
GB00B01C3S32	Randgold Resources Ltd	Gold	JERSEY	4,046	2.00
CA8283361076	Silver Wheaton Corp	Precious Metals & Minerals	CANADA	3,676	1.82
CA6979001089	PAN American Silver Corp	Precious Metals & Minerals	CANADA	3,173	1.50
US1921081089	Coeur d'Alene Mines Corp	Precious Metals & Minerals	UNITED STATES	2,165	1.07
CA82823L1067	Silver Standard Resources Inc	Precious Metals & Minerals	CANADA	1,958	0.97
US7802871084	Royal Gold Inc	Gold	UNITED STATES	942	0.47
				202,989	100.00

Sources: JCF, own research

Gold mining shares

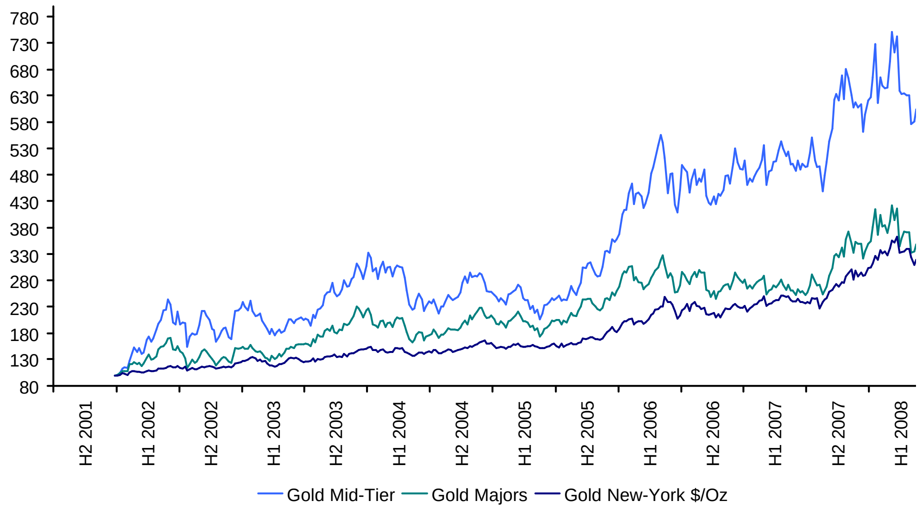
Many companies report rising reserves, but this is very often due to the decrease in production volume. Barrick Gold for example recorded a fall in production from 2001 to 2004 of 19%, and the confirmed reserves increased by 8%. This means that the life of the reserves increased from 13.4 to 18 years within three years.

EPS Growth Majors vs. Mid-Tier



Sources: JCF, own research

Comparison Mid Tier Producers vs. Majors vs. Gold since 2002



Source: Datastream, JCF

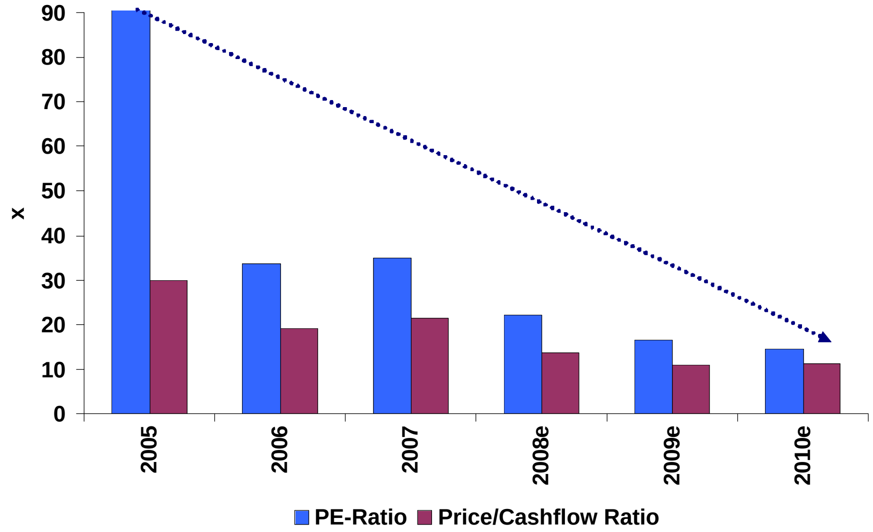
Gold mining shares

Amex Gold Miners Index

The index contains 34 international gold and silver producers with a market capitalisation of at least USD 100mn each. Barrick (9.19 %), Goldcorp (8.77 %), Anglogold Ashanti (6.66 %) und Newmont Mining (6.63 %) command the heaviest weightings. In contrast to Amex Gold Bugs and Philadelphia Gold & Silver, the Amex Gold Miners index does contain a number of mid-tier producers.

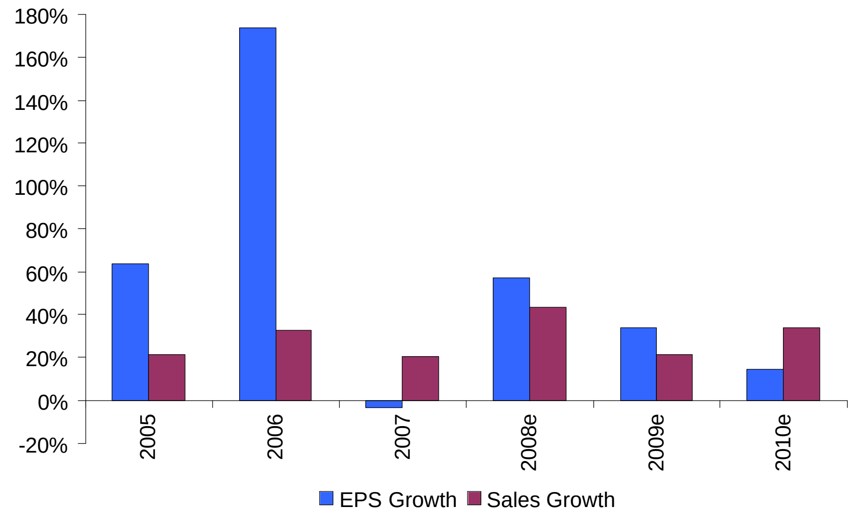
Please find various key ratios of the index in the following:

PE and Price/Cashflow 2005-2010



Source: JCF, own calculations

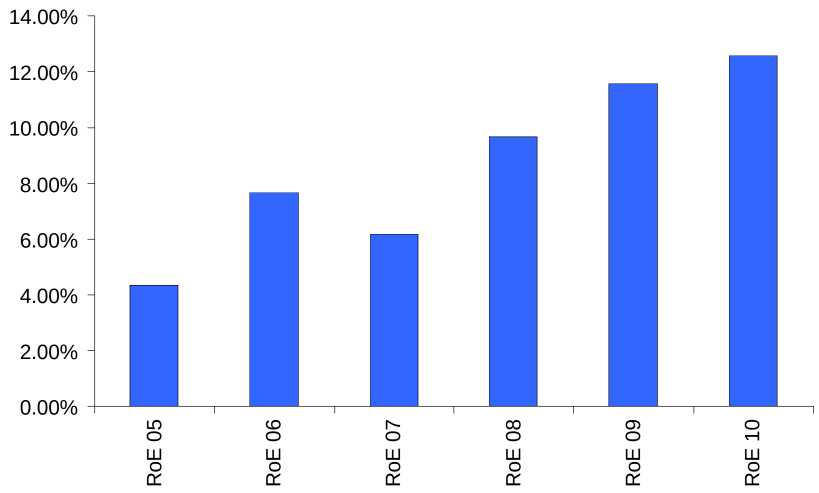
EPS & Sales growth Amex Gold Miners Index



Source: JCF, Datastream

Gold mining shares

Return on equity Amex Gold Miners Index



Source: JCF, Datastream

Selection criteria of gold shares

The essential factors and selection criteria of gold shares are:

- Reserve growth
- Cash costs / ounce
- Production growth
- Cash flow
- Management
- Infrastructure
- Political risk
- Gold price

The reported reserves and resources are the focus of the valuation of gold shares. Basically these are quantifications of ore deposits in the ground. It is crucial to differentiate between the two terms, because a successful exploration does not necessarily result in actual production.

Resource:

- The actual deposit and its purity and quality
- Resources are geologically confirmed, but the economic feasibility of the mining is not

Resources are broken down into:

a) Inferred resources:

- Rough estimate on the basis of samples and measuring data of experts in geophysics or geochemistry
- Inferred resources may not be used for the feasibility studies

b) Indicated resources:

- The status after additional drillings have been carried out

c) Measured:

- The most advanced state of exploration

Transformation of a resource into a reserve is from the "indicated" or "measured" stage only. After a thorough examination (specific mining methods, metallurgical processes, environmental compatibility, safety measures etc) and the confirmation of the economic feasibility (temporary feasibility study) it is possible to judge whether the deposit can be profitably mined. If that is the case, the deposit is called a reserve.

Reserve:

The portion of the resource that can be profitably mined under the given circumstances. The reference work of the respective mining association explains in detail how the feasibility study has to be performed and what deposits can be mined profitably. Reserves are a subset of resources.

Reserves are broken down into:

a)Proven reserves:

- Deposits that are very likely to be minable in the current price setting and with the given technical standards
- According to a rule of thumb there should be enough data available for the margin of error not to exceed 10% and for the confidence level to reach 80%.
- The fewer data there are available, the higher the margin of error and the lower the confidence level.

b)Probable reserves:

- Deposits that are 50% probable to be minable in the current setting.
- The knowledge about the resource is fragmentary, but there is a link to a certain resource.

c)Possible reserves:

- Deposits that are only 10% likely to be minable.

d)Undiscovered reserves:

- The existence of minerals can be concluded from comparisons with geologically similar deposits.

It is important to draw a clear distinction because reserves can be substantially smaller than resources. The comparability of these key figures is guaranteed by well-defined national standards (e.g. JORC Code in Australia, SAMREC Code in South Africa).

Cash costs per ounce represent another important key ratio. This indicator includes all mining costs (including transport and administrative, excluding mining interest, severance taxes, depreciation, recultivation, administrative group overhead, capital costs and exploration expenditures) per ounce of gold mined. Total production costs include severance taxes, amortisation, and recultivation.

Please find an overview of the 15 largest gold producers and their valuations underneath.

Gold mining shares

Selected large Cap gold stocks

	Market Capitalization in Mio. USD	Proven + Probable Reserve (Mio. ounces)	Cash Costs/Unze 2008e	P/E 08	P/E 09	EPS % Change 08	EPS % Change 09
Barrick Gold	36,918	129.20	415	17.4 x	15.9 x	22.6%	9.0%
Goldcorp	30,574	43.38	250	42.0 x	34.8 x	93.9%	20.8%
Newmont Mining Corp.	23,974	86.50	450	20.8 x	16.6 x	86.2%	25.2%
Kinross Gold	13,151	46.60	395	32.6 x	18.6 x	77.2%	75.4%
Anglogold Ashanti Ltd.	11,066	73.10	460	90.3 x	21.3 x	-51.9%	324.0%
Agnico Eagle Mines Ltd.	10,505	16.70	50	74.6 x	46.3 x	-5.8%	61.2%
Gold Fields	9,154	89.80	507	11.9 x	12.3 x	93.4%	-3.0%
Yamana Gold Inc	9,996	17.90	290	18.7 x	16.5 x	53.6%	13.1%
Compania De Minas Buenav	9,087	13.29	306	15.3 x	12.9 x	44.4%	18.4%
Lihir Gold Ltd	6,054	23.60	350	26.0 x	18.2 x	80.0%	42.7%
Harmony Gold Mining	5,099	53.60	609	15.2 x	10.4 x	508.7%	46.4%
Randgold Resources Ltd.	3,571	8.53	440	41.6 x	37.5 x	87.6%	11.1%
Centerra Gold Inc	2,218	7.00	400	10.8 x	8.3 x	427.5%	30.2%
Eldorado Gold Corp.	2,722	7.65	246	26.3 x	18.4 x	200.0%	43.3%
IAMGOLD Corp.	1,930	2.58	470	13.9 x	13.6 x	135.0%	2.1%
MEDIAN	7,571	17.30	398	22.4 x	17.4 x	83.8%	36.5%

Source: JCF, Firmendaten, Bloomberg, http://www.caseyresearch.com/?ppref=CSR000EM0508A

Further tendencies of consolidation in the gold mining sector

Sector consolidation will continue due to numerous factors

Due to structural problems in the commodity industry, the tendencies of consolidation are set to continue, and mainly exploration companies and mid-tier producers will benefit. But similar to the base metal sector (Rio Tinto/BHP Billiton) the gold sector might see the merger of two majors as well.

The following factors support our argument of a sustained wave of take-overs:

- After buying back their hedge positions, the large miners now have enough financial space, but are faced with the problem of lower replenishment of resources.
- A limited number of qualified staff.
- Ambitions to diversify regionally.
- Economies of scale are supposed to dampen the sharp increase in exploration costs.
- The quest for size is no end in itself: In 1998 the price tag on the construction of an underground mine was about USD 100. Now it is up to USD 1bn.
- While the top ten producers had accounted for 25% of global production in 1996, their share had increased to 44% in 2006. The top five of the sector made up 33% of total production.

According to a report by PricewaterhouseCoopers the number of take-overs in the mining industry increased by 69% in 2007. Total transaction volume was USD 158bn, i.e. 189% up on the previous year. In North America the number of transactions more than doubled from 310 to 695, especially the area of junior and near term producers saw a number of take-overs and mergers. The deal volume also increased in Asia (+72%), Africa (+81%), and South America (51%). 32% of the targets were from China, followed by 22% from Australia.

Gold mining shares

In the following you find an overview of the largest transactions last year:

Target Name	Acquirer Name	Seller Name	Announced Total Value (mil.)
MERIDIAN GOLD INC	YAMANA GOLD INC		3427.01
CORTEZ JOINT VENTURE	BARRICK GOLD CORP	RIO TINTO PLC	1695.00
ROYALTY & NON-CORE ASSETS	FRANCO-NEVADA CORP	NEWMONT MINING CORP	1300.00
MIRAMAR MINING CORP	NEWMONT MINING CORP		1269.93
WESTERN AREAS LTD	GOLD FIELDS LTD		1221.50
ELAND PLATINUM HOLDINGS LTD	XSTRATA PLC		987.44
ARIZONA STAR RESOURCE CORP	BARRICK GOLD CORP		793.38
RIO NARCEA GOLD MINES LTD	LUNDIN MINING CORP		776.77
BOLNISI GOLD NL	COEUR D'ALENE MINES CORP		764.25
WITS BASIN PRECIOUS MINERALS	EASYKNIT ENTERPRISES HOLDING		601.29
CUMBERLAND RESOURCES LTD	AGNICO-EAGLE MINES		524.58
VENEZUELAN ASSETS	RUSORO MINING LTD	GOLD FIELDS LTD	506.56
MULTIPLE TARGETS	ANOORAQ RESOURCES CORP	ANGLO PLATINUM LTD	499.37
PENASQUITO SILVER MINE	SILVER WHEATON CORP	GOLDCORP INC	485.00
GRD LTD	TRANSFIELD SERVICES LIMITED		432.17
PALMAREJO SILVER AND GOLD CO	COEUR D'ALENE MINES CORP		409.36
HERALD RESOURCES LIMITED	Tango Mining Pte Ltd		368.09
AGINCOURT RESOURCES LTD	OXIANA LTD		323.15
HERALD RESOURCES LIMITED	BUMI RESOURCES TBK PT		321.61
PEAK MINES LTD	PEAK GOLD LTD	GOLDCORP INC	293.74
EURASIA GOLD INC	KAZAKHMYS PLC		260.45
PORGERA GOLD MINE	BARRICK GOLD CORP	EMPEROR MINES LIMITED	250.00
TASIAST GOLD MINE	RED BACK MINING INC	LUNDIN MINING CORP	225.00
ESSAKANE PROJECT	OREZONE RESOURCES INC	GOLD FIELDS LTD	224.41
BALLARAT GOLDFIELDS NL	LIHIR GOLD LTD		219.49
PERSEVERANCE CORPORATION LTD	NORTHGATE MINERALS CORP		212.10

Source: Zephyr Database, own research

Most recently Lihir Gold has offered USD 1bn to take over the small West African competitor Equigold, whose cash costs per ounce are as low as USD 330. New Gold reported the merger with Metallica Resources and Peak Gold, and China Gold Group bought a stake in the Canadian Jinshan Mines. According to Peter Munk, CEO of the market leader, Barrick Gold, companies with proven reserves of at least 2 million ounces were on the "menu" of the majors.

The following production figures of the ten largest gold producers highlight the dire straits the large producers are in: Six out of the ten largest companies produced fewer ounces of gold in 2007 than in 2004. This is another reason for the expected industry consolidation.

Gold mining shares

Annual mining production in thousands of ounces

#	COMPANY	2004	2005	2006	2007
1	Barrick Gold	8610	9095	8647	8056
2	Anglogold Ashanti	6407	6166	5634	5473
3	New mont Mining	6989	6966	5871	5285
4	Gold Fields	4469	4411	4183	3965
5	Goldcorp	1361	1581	2125	2293
6	Freeport McMoRan	1441	2792	1737	2211
7	Harmony Gold	3428	2590	2344	1905
8	New crest	868	1427	1534	1758
9	Kinross Gold	1846	1866	1822	1627
10	Zijin Mining	420	496	1584	na

Sources: Company data, Bloomberg

Conclusion

We expect the industry consolidation therefore to continue in 2008 and envisage even higher volumes of take-over activities than in the previous years. The most interesting take-over targets are the mid-tier producers and explorers that are on the verge of production.

Technical analysis of the gold sector

Seasonality

Indian wedding season and Christmas as reasons for strong seasonality

One reason for the most recent correction of the gold price is the pronounced seasonality of the price. Said seasonality is not the least due to the so-called wedding season as well as the Diwali Festival in India. Since people in India get married mainly in spring and autumn, the jewellery industry stocks up on material in the third and fourth quarter. The climax and end of the wedding season is May 7th, the day of the Akshaya Tritiya Festival. In addition, jewellers tend to stock up on gold for Christmas in the third and fourth quarter.

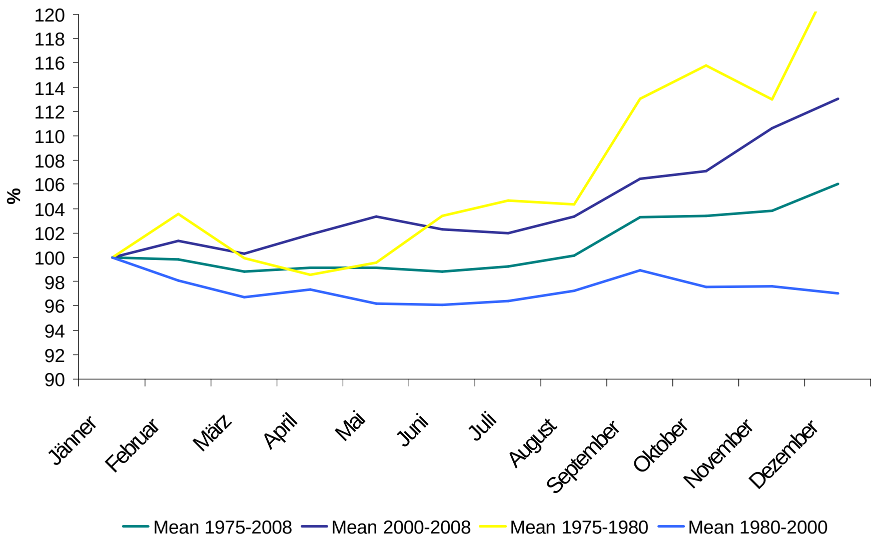
Distribution of highsand lows since 1980

Monat	High	Low
January	6.84	5.64
February	12.43	12.89
March	11.4	11.96
April	9.12	6.78
May	4.6	6.98
June	9.18	9.88
July	10.32	9.71
August	9.3	11.87
September	8.62	5.74
October	5.8	5.84
November	2.34	6.78
December	10.05	5.93
Total	**100**	**100**

Source: Bloomberg, JCF, own calculations

This is why the fourth and the first quarter show the best performance of the year. In the second quarter the price tends to correct significantly, and in the third quarter it would usually move sideways. This seasonality has been true for 75 to 80% of the cases.

Seasonality on annual basis

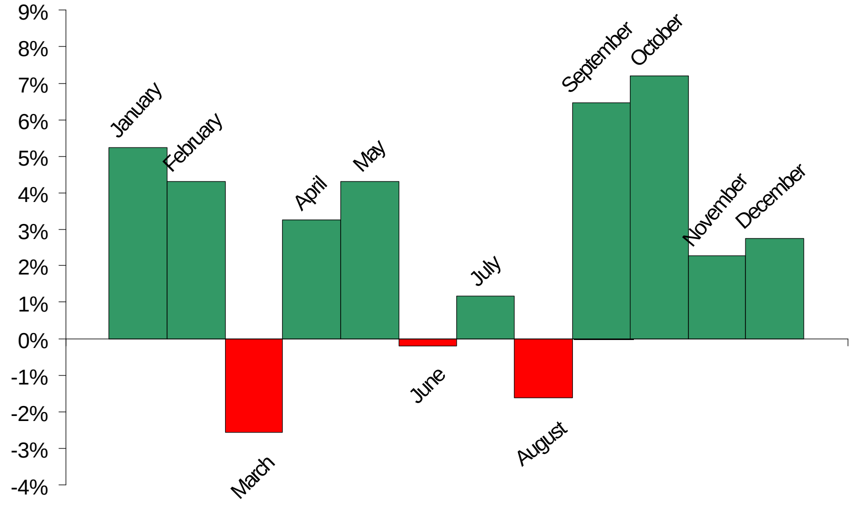


Source: JCF, Datastream, own calculations

Technical analysis of the gold sector

The following chart shows the average monthly changes of the gold price since 1992:

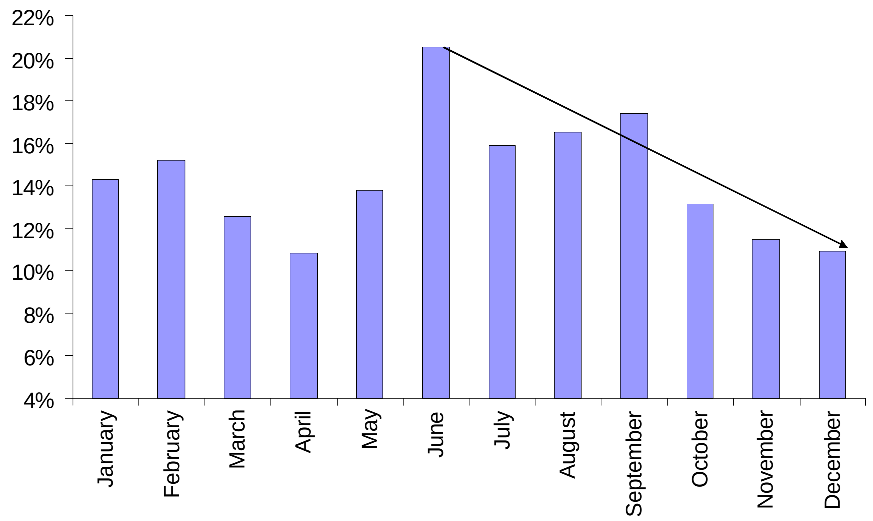
Average monthly change since 1992 in %



Source: JCF, Datastream, own calculations

The following chart illustrates the monthly volatility of the gold price since 1992. Clearly, volatilities reach their peak in June and subside thereafter:

Average monthly volatility since 1992



Source: JCF, Datastream, own calculations

The seasonal pattern has been confirmed this year in March, with the price backing down from the all-time-high of USD 1,030 from mid-March, and recovering temporarily in April, without any sustainable substance though. Should the distinctive seasonality of the gold price continue to hold, the end of June and the beginning of August would be good times to invest.

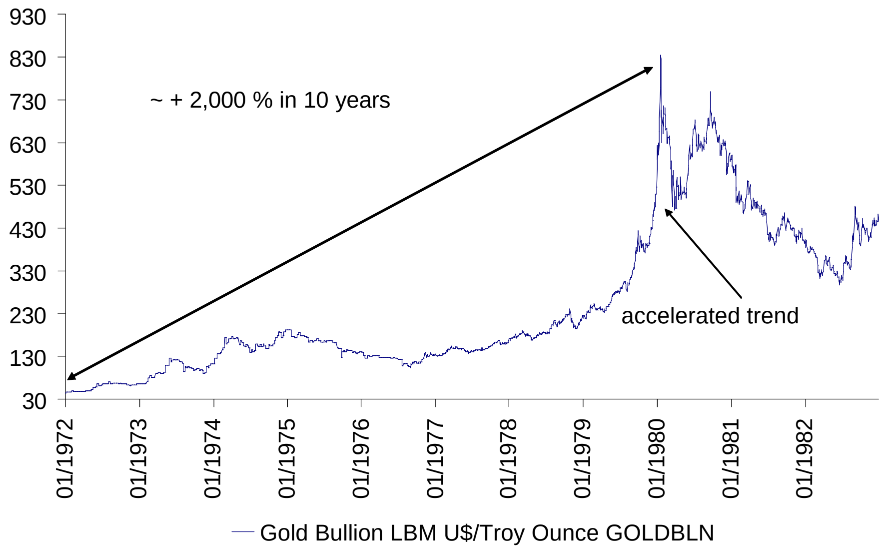
Technical analysis of the gold sector

Comparison of the current correction with the end of the bull market in 1980

In January 1980 the gold price climbed by more than 50% within a short period of time to its then all-time-high of USD 850 per ounce. Subsequently the price fell by 30% and remained in a state of lethargy for 20 years. Will the slump of 1980 repeat itself?

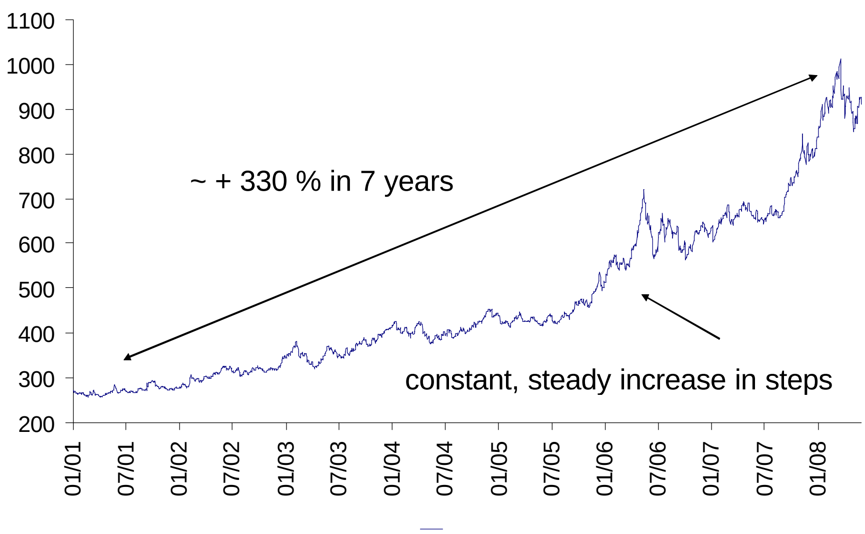
In contrast to 1980, we have had a continuous increase in steps since the turn of the millennium, which supports the notion of a sustainable paradigm shift. In 1980 the increase was mainly fuelled by speculation, whereas today it is sustained by more and different market players and is based on a structural supply/demand deficit. In addition, we have not seen the "blow-off top" yet, i.e. a parabolic increase within a short period of time (similar to 1980), which is a common sight in the commodity segment.

Gold Bullion LBM U$/Troy Ounce 1972 - 1982



Source: Datastream

Gold Bullion LBM U$/Troy Ounce 2001-2008

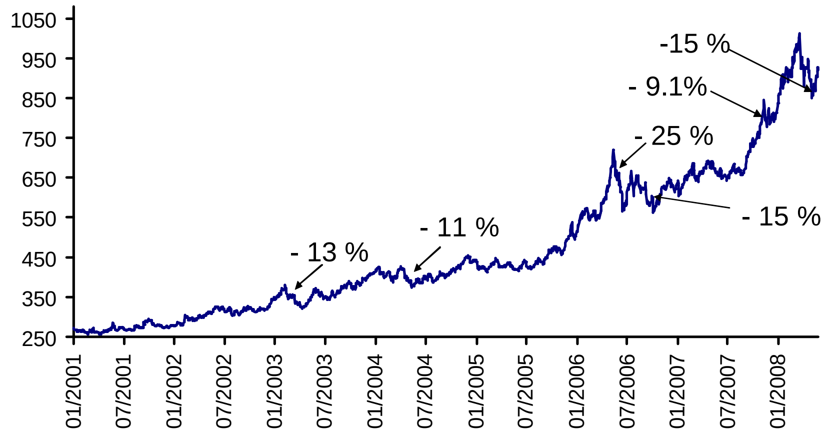


Source: Datastream

Technical analysis of the gold sector

A look at the price chart since the beginning of the bull market illustrates that corrections of up to 25% are not unusual. We therefore regard the current decline as healthy intermediate correction of an intact upward trend. A trend reversal would be the case if the price fell below USD 700.

Corrections since the beginning of the bullmarket



Source: Datastream, own calculations

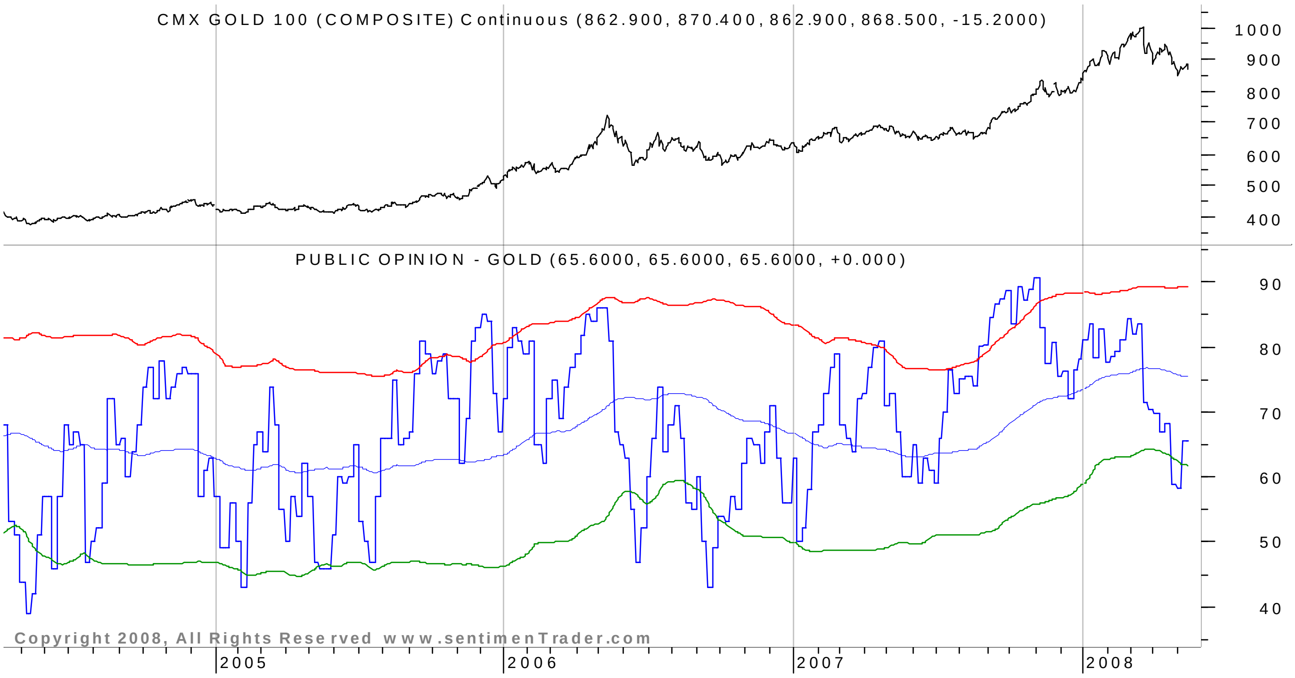
Sentiment

After a 20% increase in 2008 the gold price embarked on an urgently needed technical correction. The numerous dojis in the weekly chart had already indicated the correction. Due to the hefty overshooting of the sentiment indicators, the setback was only a question of time. The market participants had suffered from the proverbial gold rush, as the positioning of 97% (DSI) and 93% (Market Vane Bullish Consensus), respectively, was bullish. The fact that an increasing number of gold recommendations had made it into the mass media represented a reliable counter-indicator as well.

The following chart clearly shows that the increase from the end of 2007 to the all-time-high in March was driven by overly positive sentiment. After the correction the overbought scenario changed noticeably, which means that the current price level seems well-supported on the downside.

Technical analysis of the gold sector

Sentiment-Analysis



Source: www.sentimentrader.com

Commitment of Traders (CoT) with insightful indications

The Commodity Futures Trading Commission (CFTC) publishes weekly information on long and short positioning. In the so-called Commitment of Traders (CoT) Report, the market participants are broken down into three categories:

1)Commercial hedgers:

- Large traders using futures contracts to hedge the risk (e.g. gold producers, jewellery manufacturers).
- Often called "smart money", as these market participants have the most thorough knowledge of the framework and possibilities.
- Anti-cyclical behaviour
- Turning points tend to be identified correctly

2)Large speculators:

- This group mainly consists of institutional investors (banks, clearing houses, hedge funds)
- Positions are opened due to speculative interest
- Usually trend followers
- Often late at trend reversals

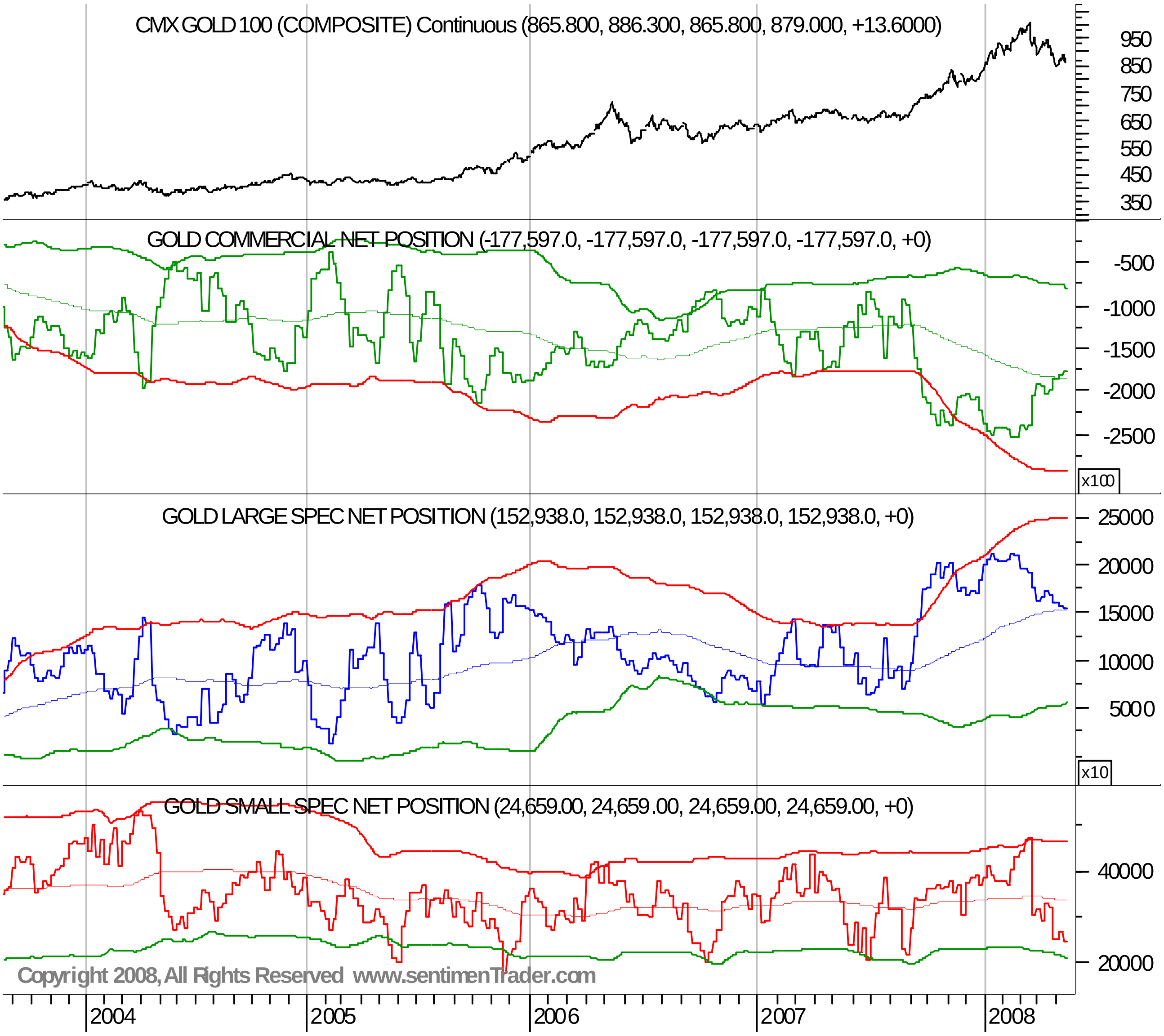
3)Small speculators:

- Small traders
- Often called "dumb money"
- Reporting limits not exceeded
- Trend followers
- Good counter-indicator in the case of extreme values

Technical analysis of the gold sector

The net position is arrived at by subtracting the open short contracts from the long positions. The red and green bands, respectively, represent 2 sigmas of the one-year average. The absolute values are an additional source of reliable signals. The net positions of the commercials were at a many-years low at the end of 2007/beginning of 2008, heralding the correction already. The latest increase should therefore have set a good floor in this area.

Reported net positions



Source: www.sentimentrader.com

Traders like to use the CoT data in the decision-making process of their transactions, but they should not be the only criterion for decisions. After all, the CoT report only contains US futures markets and does not cover other countries or OTC options.

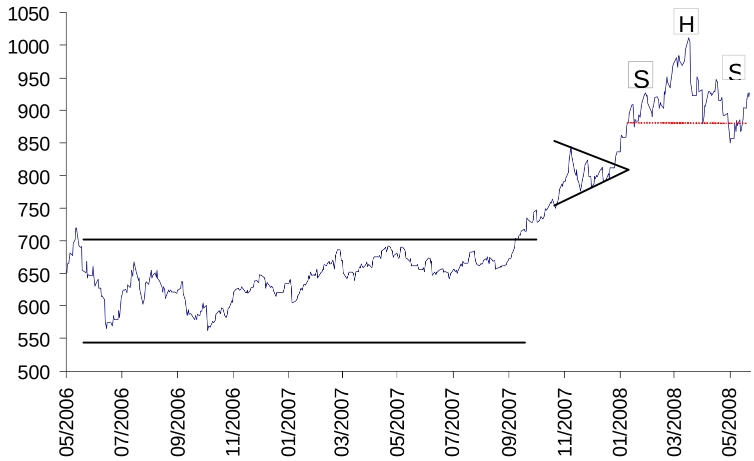
Technical analysis of the gold sector

Short-term analysis

Our short-term analysis of the gold chart reveals three important constellations. In September 2007 the sideways trend that had lasted for almost 1.5 years was broken. In addition the US dollar index fell below its support line almost at the same time, which confirmed the buying signals. From that point on the dynamics of the trend were speeding up, resulting in a symmetrical triangle at the end of the year (in the weekly chart this came up as so-called flag; this formation is regarded as very reliable at forecasting the continuation of the prevalent trend). The breakout of said trend resulted in another price hike. The textbook breakout lead to the dynamisation of the trend, pushing the chart above the all-time-high of USD 850 and later even beyond the infamous USD 1,000 threshold. Round numbers tend to invite sell-offs, and the sentiment was clearly overshooting at that stage. The so-called shooting star pattern had indicated the correction for a while. During this correction both support lines at USD 959 and at USD 937 were vehemently broken, yet no trend reversal occurred, as the massive support zone around the old all-time-high of USD 850 turned out to be a solid floor.

A shoulder-head-shoulder formation has emerged since the beginning of 2008, i.e. basically a bearish formation, with a target of USD 730. However, recently the chart has gone through the re-break of the so-called neckline, indicating the robustness of the current trend and representing a bullish signal. Since the neckline is situated in the massive support area of USD 850, we tend to expect a bullish scenario. A rise beyond USD 950 would trigger a strong buying signal. The Fibonacci projections yield short-term targets of USD 1,033 and 1,211, or in an extreme case, 1,398.

Short-term view



Source: Datastream

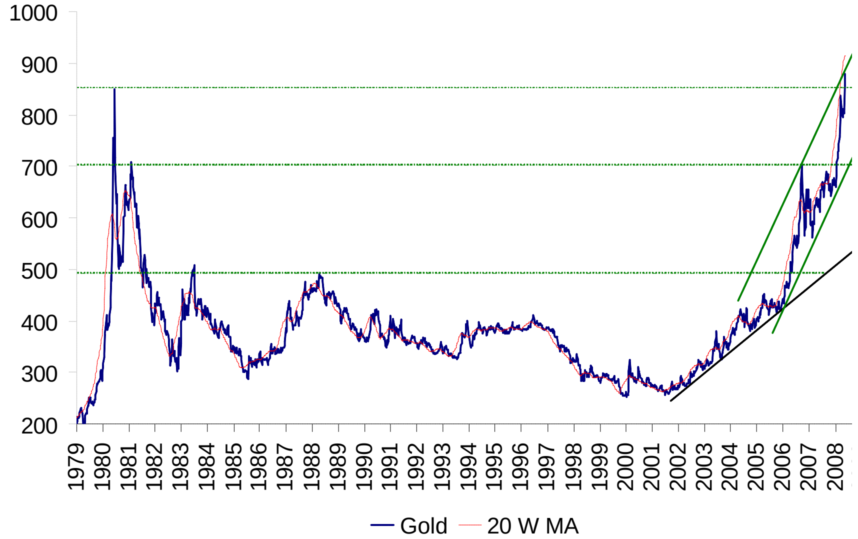
The downside potential is currently at USD 850. If the downstream support area of USD 833 - 845 (which further supported by a Fibonacci level) were broken, the correction target would be USD 770. Lower support lines are situated at USD 730 and 710. Below that there is a massive support around USD 695 - 700. Even this kind of correction would not endanger the primary upward trend in place since 2001. Only a sustained fall below these supports would constitute a clear signal for a trend reversal and indicate the end of the current gold bull market.

Technical analysis of the gold sector

Long-term analysis

The long-term chart shows that the years of the gold bear market have only ended recently. The gold price has established a long-term upward trend and embarked on an accelerated upward trend in 2006. A long-term consolidation and correction, respectively, would even support the overall very robust technical picture in the long run, because the overbought scenario would ease off and could thus lay the foundation for a new boost of momentum.

Gold price 1968-2008



Source: Datastream

The next hurdle of USD might be a tricky one, but beyond that there is enough upward potential. The Fibonacci projections of this bullish scenario are USD 1,219, 1,426, 1,816, and 2,000.

A negative scenario would entail a possible fall below USD 800 or 790. But even the testing of the May 2006 high of USD 730 could not be excluded over the course of the next couple of months.

The following overview illustrates that while the current bull market has been running for longer than average, the percentage change has not seen the extreme end so far. This would lead as to conclude that the current bull market is driven by a much larger variety of factors, in other words it is resting on a broader base.

Conclusion and outlook

Secular bull market still intact, opportunities outweigh risks

In spite of the recent correction the yellow precious metal remains in a secular bull market. The positive fundamental outlook will presumably not change a lot over the rest of 2008 and beyond.

But the gold price is clearly driven by two parameters:

a) the shape the financial markets are in and, in connection, the level of interest rates, the inflation expectations, and the scenario of the currencies

and

b) the status of the real economy and thus the situation of production and of demand (as mainly determined by the jewellery industry)

Since the relevance of gold in an industrial context is very limited (as opposed to copper or oil), the price depends much more crucially on the status of the financial sector (in the short run).

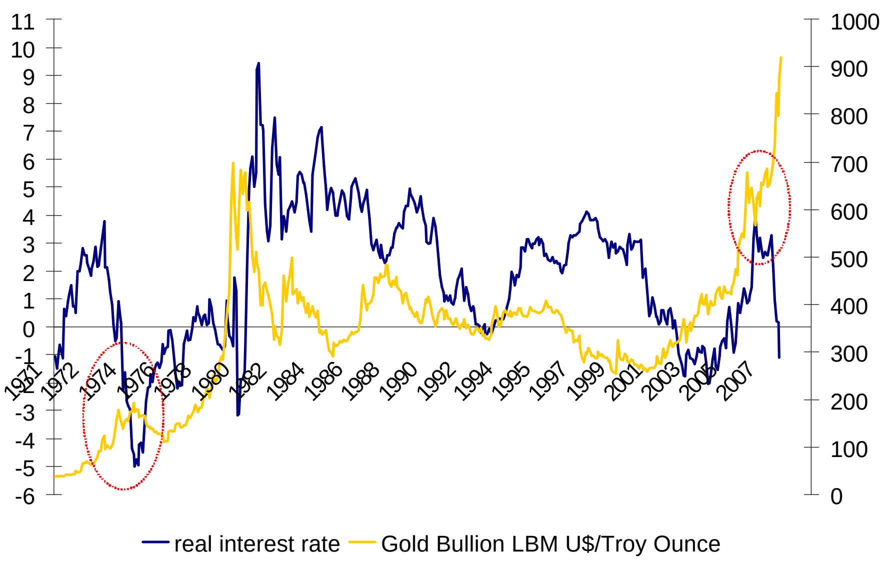
The following factors support the scenario of a continued rise in the gold price:

- The tense constellation of supply and demand will not improve in the medium term. Only the dramatic decrease in gold imports from India or a fast expansion of production could change this setting. But from today's perspective, this seems unlikely.
- The continued fall in primary production and the increased demand from central banks in the emerging markets should lend further support to the price. Jewellery demand from emerging markets should record a long-term increase as well. The gap between supply and demand will widen progressively and cannot be closed by recycling or central bank sales anymore in the future.
- Due to the massive loss of trust on the capital markets and the still smouldering dangers from inflation, the crisis-proof metal should remain in high demand over the coming months.
- Gold and precious metals are the only assets class capable of retaining its value in inflationary and deflationary settings on a sustainable basis.
- The fast expansion of production capacities seems unlikely. Although the gold price has increased by 400% over the past years, many companies still find it hard to achieve profits. The drastic rise in production, energy, and staff costs has more than made up for the gold price increase in some parts. In addition, the easily minable reserves are largely exhausted, which means that mining operations are going deeper and deeper and thus production becomes more expensive. This should provide the gold price with solid support.
- According to the IMF, foreign exchange reserves increased between 1997 and 2007 from USD 1.4 trillion to USD 6.4 trillion. If the central banks in Russia, China or the Arabic region wish to diversify their portfolio of reserves more aggressively out of their dollar dependence, gold investments should record a considerable inflow.
- We regard the significant rise in mining costs as robust support against gold price decreases. Many deposits cannot be profitably mined below a price of USD 600 per ounce. This means that any price lower than that would automatically curtail supply.
- The fact that institutional investors, state funds, and oil-producing countries are still underweighted in commodities and particularly in gold would argue for a sustainable increase in demand.

Conclusion and outlook

- Commodities will become more important as asset class within the framework of strategic asset allocation over the next couple of years among private investors as well due to the aforementioned characteristics.
- The gold price will be supported by a range of additional factors. The credit crisis is not over yet, and the US macroeconomic data are ambivalent. The problems on the US housing markets are actually getting worse.
- Because of the latest crisis people seem to remember the actual benefits of gold. The remonetarisation of gold has begun.
- In order to combat the current problems the Fed (and in the event also the ECB) will be forced to cut interest rates even further or keep them at low levels, respectively. Traditionally, negative real interest rates and the gold price have displayed a strong correlation. The opportunity costs of holding gold, i.e. the loss of interest income, decrease as interest rates fall. The lower yields are, the less attractive bonds become vis-à-vis gold. The primary driver of the gold bull market, i.e. negative real interest rates, should therefore constitute a positive basis for the gold price in 2008 and beyond.

Real interest rates vs. gold price



Source: Bloomberg, Datastream

Currently only massive interest rate hikes could weaken the gold price in the long term. But in contrast to the situation in 1981, this seems unlikely to happen. At the end of the 1970s the period of high inflation in the USA could only be remedied through massive interest rate hikes by then-chairman of the Fed, Paul Volcker. Nominal interest rates were at 20%, while real rates were at 8%. The USA was net creditor and had a positive trade balance in 1980, but the situation has reversed in the meantime. Private household debt and public debt have reached alarming levels. Therefore an imminent rate increase under the current chairman seems unlikely - a scenario that should lay a solid foundation for future gold price increases.

Conclusion and outlook

We would seize the current opportunity of general profit taking to buy as soon as the short-term downward trend is over.

The following risk factors could have a long-term negative effect on the gold price:

- A falling oil price could cause the gold price to ease off. Also, we cannot fully exclude that mining companies will decide to hedge their future production again.
- Given their current levels, jewellery demand will probably come down, and recycling supply will rise drastically. Whether or not the investment demand for bullions, coins, and paper gold can close the gap, is difficult to project.
- A severe and long-lasting recession would dampen the demand for commodities and absorb the inflationary pressure. Gold would display weakness in such a scenario.
- Even though the positive correlation with the US dollar has recently shrunk quite a bit, weeks of technical rebound of the greenback would certainly have a negative knock-on effect on the gold price.

Therefore the fundamental analysis leads us to conclude that the gold bull market of the past years is based on tangible causes that really exist. However, the almost exponential increase in the gold price recently was mainly due to the current financial crisis.

The gap between supply and demand can only be compensated by price increases The combination of inflation, weak dollar, oil boom, and economic and political uncertainty has set the stage for rising gold prices. Therefore we still rate the risk/ return ratio of gold investments very positive and expect higher price levels in the medium term. That said, the downside risk has increased drastically since the publication of our previous report.

We do not expect the bull market to come to an end in the foreseeable future given that the market rests on a more solid base than the previous huge bull market in 1980. The massive support at USD 850 has so far proven robust. From a seasonality perspective, June tends to be a bit dodgy for the gold price, and a sideways movement within a band of USD 850 - 950 until the end of summer seems quite realistic.

Due to the above mentioned factors we still see an attractive opportunity / risk profile. We regard the current consolidation as good buying opportunity and envisage higher gold prices in the medium to long term. The infamous USD 1,000 per ounce threshold should be clearly passed again in 2008, and positive seasonals should lend further support to the price from the third and fourth quarter. We believe that gold investors will encounter a highly attractive opportunity / risk profile in 2008 and beyond. Passing USD 1,200 is the first target, and in the long run the price may well pass the inflation-adjusted all-time-high of USD 2,300.

"Gold is money, and nothing else!"

JP Morgan, 1913 in front of the US Congress

Ronald Peter Stoeferle

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