Gold



- Positive development of gold prices due to major economic imbalances
- Mining production set to decline until 2009, afterwards stagnation expected at best
- Demand still on robust uptrend
- Gap between supply and demand can only be closed by higher prices
- First price target is USD 730; Next target: Surpassing the alltime high of USD 875



Introduction

Gold has held a special attraction for people for centuries

Gold is used as a monetary asset and commodity Gold is a chemical element and a precious metal. The chemical symbol for gold is AU, which is derived from the Latin name aurum. Since the beginning of recorded history, the yellow metal has held a special attraction for people and was often the cause of wars and conquests. Gold was one of the first metals worked by humans, because it is found in nature as an element and can easily be alloyed with other metals and processed mechanically very well.

In the past, gold has been used as a currency, i.e., one unit of money corresponded to a certain amount of gold. For a long time, one ounce of gold was the equivalent of USD 20.67 in the United States. Under the Bretton Woods system, the parity was raised to USD 35. On 17 March 1968, the gold price was finally split and changed into a two-tier system. One price was permitted to adjust freely to the market, while the other one was fixed. During the period that gold served as a reserve currency, private ownership was partially prohibited in the US. Thus, from 1933 to 1975, it was only permitted to invest in jewellery and coin collections, while the purchase of bullion and investment coins was prohibited.

Over the course of time, gold lost its significance as a currency and developed into a commodity. New functions were defined for gold as a good, as a commodity for industry, science, medicine and for jewellery production as well as an investment asset.

The gold market is different from other commodity markets, because a considerable part is bought for investment purposes (e.g. hedging against inflation) and thus gold is a commodity as well as a monetary asset. Furthermore, gold is not depleted and can be returned to the market. The melting point of 1063 degrees Celsius and its high chemical consistency make it practically indestructible and therefore almost all gold ever mined still exists. Moreover, it is the most malleable of all metals and can be hammered out thin into a leaf only a thousandth of a millimetre thick or drawn out into a thread of 105 km (per ounce). A characteristic of gold is also its high electric conductivity and for this reason, it is used in electronic products of all types.

Supply and Demand

The supply on the gold market consists of the following components:

a) Primary supply

- Mining production

b) Secondary supply

Supply deficit is compensated by central bank selling and recycling Recycling/scrap gold

- Disinvestments (central bank sales, gold lending deals, supply from hedging transactions)

Demand breaks down into the following submarkets:

- Jewellery
- Industrial demand
- Investments
- Central bank purchases

The entire demand for gold is around 3,600 tons per year, while only 2,500 tons are extracted from mines. The deficit is compensated by sales by central banks as well as by recycling (so-called scrap gold).

The amount of gold mined in the history of man is around 153,000 tons, which can be visualized by imaging a cube with a side length of 18 meters. Most (around 63%) of this gold was mined after 1950.

The ownership structure is as follows:

Distribution of extracted gold





Largest owners of gold reserves



1) The supply side



The supply on the gold market consists of the following components:

Primary supply - mine production

Mining production will decline until 2009 at least; afterwards stagnation expected at best

Steep rise in production costs

After the price of gold fluctuated within a narrow bandwidth from the beginning of the 1980s to the end of the 1990s and demand for the yellow metal went on a decline, exploration projects were restricted to a few mining areas. Expanding production was not a viable proposition at a level of USD 300 to 400 per ounce. Mines with too high extraction costs were closed and personnel cut back. The consequence of lacking investment activity is that mining production will decline at least until 2009.

production Another reason for the shrinking primary supply is the steep increase in the production costs of mines. In 2006 alone, the costs of mining gold rose by 45 USD/ ounce or 17%. Decisive for this development was higher energy costs as well as the sharp increase in steel and copper prices. Production costs rose extremely in North America. This can be explained mainly by rapidly rising labour costs, which is an indication of a scarcity of qualified labour.



7 to 9 years until the first ounce is extracted - extremely inelastic mining products Since investments in new projects lead to higher production only with long lead times, mining production is extremely inelastic. The time span between the first trial drilling, further metallurgical testing procedures to optimize extraction, the subsequent feasibility study until the development of a mine and finally, the mining of the first ounce, is on average between seven and nine years. Stagnating production has been forecasted for after 2009 at best as well, because the extraction costs for deeper-lying deposits are rising rapidly. Similar to the situation for crude oil, the biggest, richest and most easily exploited mines are mostly known, have already been exploited or are in production.

The chart below shows the declining mining production. After gold production hit a record level at the end of the 1990s, the production rate has been declining ever since.



Source: World Gold Council, Erste Bank calculations

Traditional mining countries are successively losing market shares As regards the regional distribution of mining production, it is pointed out that the position of traditional gold producers has been diminishing for years. Thus, South Africa's gold industry has been increasingly losing market shares. While in 1970, around 70% of worldwide gold production was mined in South Africa, output has since dropped to a mere 15% of global production, with a falling tendency. The lowest mining production in 84 years has been forecasted for South Africa for 2007. The second-largest production country, Australia, is likewise posting continuously decreasing production rates and, in 2007, production will hit a 14-year low.



World mine production (t)



Source: GFMS

China and Russia are increasing their extraction volume

Nonetheless, the traditional production countries are still among the top producers, but China and Russia as well as African countries and Canada recently made some enormous advances. Production output increased particularly impressively in Peru, where current production is 30% higher than only six years ago.

World mine production (t)

Rank	Country	Production in tonnes
1	South Africa	296.3
2	Australia	262.9
3	USA	261.7
4	China	224.1
5	Peru	207.8
6	Russia	175.5
7	Indonesia	166.6
8	Canada	118.5
9	Uzbekistan	79.3
10	Papua New C	Guinea 68.8
11	Ghana	62.8
12	Tanzania	48.9
Rest		595
Source: World	Gold Council	

Secondary supply

a) Recycling/Scrap Supply

Old gold accounts for almost one-third of gold supply An important component of the supply side is gold recycling. On average, the supply of old gold was almost one-third of total volume of available gold in the last decade. Apart from melted jewellery, the recycled gold comes from electronic scrap, galvanic sludge, filter dust, slag and dental waste. Due to the recent rise in the price of gold, the supply of old gold has also increased steeply. This means that the price sensitivity contributed substantially to balancing the supply deficit. The supply of recycled gold is also strongly dependent on the business cycle, however, and, for example, during the Asia crisis of 1997/1998, 300 tons of gold were melted in South Korea alone.

b) Central bank selling

CBGA - Central Bank Gold Agreement Since 1989, selling by central banks has been an important component of the global supply pattern of gold. This has been mainly a consequence of the so-called Central Bank Gold Agreement (CBGA), an agreement according to which the participating central banks committed themselves to sell gold. The ECB was one of the 15 signatories of the agreement as well as all major central banks with the exception of the US.

Switzerland sold 1,300 tons of gold during CBGA I The first agreement, CBGA I, entered into force in September 1999 and was binding for the following five years. The participating banks agreed to sell a maximum of 400t of gold per year. The agreed-on target of a total of 2000t was reached mainly through the sales by the Swiss National Bank (SNB). After the governor of the SNB declared in 1997 that around half of the gold reserves, i.e., 1,300 tons, were no longer needed for the monetary policy of the country, 1,170t were sold within the CBGA I, and the remaining 130 in the subsequent year.





Agreement prolonged until 2009 as CBGA II

Even before the end of the first agreement, CBGA II was accorded and the agreement prolonged for another five years. The participating banks were mostly the same ones. Greece joined as a new EU member state while England did not sign CBGA II. Slovenia joined in 2006 as well, shortly before the country became a member of monetary union. The biggest change was the hike of the maximum selling quantity from 400 to 500 tons per year, which corresponds to a maximum selling volume of 2,500 tons over the entire period.





Source: World Gold Council

As of 2009, end of massive central bank selling expected

However, during the year 2006, the banks released only 350 of the agreed-on 500 tons. France and Italy hold the largest gold stocks after the US, Germany and the International Monetary Fund (IMF), but up to now have sold only little of their reserves. While Italy did not announce any targets, France announced that it would sell at most 20% of its reserves under CBGA II. The second agreement ends in the year 2009, and a new agreement seems improbable from today's perspective, which was also confirmed by many central bank chiefs. Thus, the times of massive selling by central banks will probably end in 2009, which will significantly tighten the supply on the global market.

When a European central bank buys, is this an indication of trend reversal? After in the past the supply deficit was compensated largely by selling by central banks, a trend reversal is now apparent on the horizon. Recently, it was announced that at least one European central bank will act as a seller on the market. Additionally, Asian central banks are successively building up their gold reserves.



c) Gold lending transactions

Gold lending transactions increase supply on market	In gold lending transactions, central banks lend physical gold, which lies unused in their strongrooms, to buying mines. The mines sell the borrowed gold on the market and use the proceeds to finance investments, for example, in extraction equipment. These investments make it possible for mines to continue extracting gold and thus, among other things repay their gold debt to the central banks. As is usual in a lending transaction, not only is the commodity borrowed returned upon maturity, but the mines must also pay interest for the loan of the gold. However, as the debt due is gold instead of a currency, the mines are secured against falling gold prices. However, they do not profit from a rise in the gold price. So-called bullion banks act as mediators between the two parties, charging a commission for the successful brokerage.
Lacking transparency in accounting rules for central banks obfuscates gold lending transactions	The way gold lending transactions work make it clear that it is not the same gold that is returned, but rather the gold mined by the borrower. As this makes it possible to sell the gold on the market in the interim period, the supply of gold is increased by such a transaction, which has negative effects on the price. Due to this influence, it is possible to manipulate the price of gold. To avoid manipulation and to increase the transparency of gold reserves, the IMF is planning to change the accounting rules for central banks. Up to now, it has not been possible to find out how much gold was actually held as reserves and how much was lent by looking at the financial statements. Banks must report gold lending transactions in the future to make it clear who is acting in which manner.
Gold carry trades as risky speculation	A risky form of gold lending is the gold carry trade. In such a transaction, banks do not hedge against risk from mining firms, but sell the gold on the market and invest the proceeds mostly in bonds. Thus, the banks earn money on the interest rate spread. The risk consists of the dependence on the development of the gold price. In times of sinking gold prices, these transactions were very profitable for investment banks, because falling prices enabled them to make a profit. On the other hand, a steeper increase in the gold price means a loss for the banks. This conflict of interest between investors speculating on rising prices and banks incurring losses as a result has led to the formulation of the theory of so-called gold price manipulation revealed by Dimitri Speck. According to Mr. Speck, the Fed has intervened in the US gold market regularly since 5 August 1993. The manipulation was proven, as the interventions always took place on the key dates: the fixings and the openings.

Demand shows robust growth in all three subsegments

2) The demand side

The demand side of the gold market has shown a clear rising tendency in the past decade. The three most important components - jewellery, industry and investment - have posted significant rises. This was driven mainly by the diversification tendencies of investors, the strongly rising demand from the emerging markets, and the growing industrial applications of gold. The price shock of last year, when gold rose by 35% in only three months, caused lower demand in the jewellery industry, but this was compensated largely by the other two principal components.

Another reason for a higher demand for gold is the high internal and external deficit of the US, which can only be solved by an adequate depreciation of the USD. It is, above all, Asian countries producing high current account surpluses and holding most of their currency reserves in USD-denominated assets that are successively increasing the share of gold in their portfolios.

India is the world's The higher demand of the private sector can be explained mainly by the enormous largest gold consumer social significance of gold (e.g. in India). India has always been a major consumer of gold in the world and substantially widened the spread to the US in the past few years. Private purchases of gold have recently become legal in China. This fact in combination with the high savings ratio of the Chinese population will probably also have an effect on demand and the gold price.



a) Jewellery

Flourishing Asian jewellery industry livens up demand

Demand from the jewellery industry accounts for around 75% of total demand. The largest share in the robust demand of this segment is accounted for by the Asian jewellery industry led by India and followed by People's Republic of China, the Southeast Asian tiger states, and the Gulf region. The growing prosperity of these emerging economies in which gold jewellery has a high standing is expected to continue boosting demand for jewellery.

Two motivations for buying gold must be differentiated. While in a) Europe and the US, jewellery is bought mainly as an adornment, in b) Asia and the Near East it serves as a savings vehicle.



Ad a)

Demand depends strongly on personal income and consumer preferences, and correlates positively with the business cycle. There are clearly perceptible seasonal fluctuations (Christmas season). Usually, there is a high mark-up for jewellery versus unrefined gold, which means that demand is barely influenced by the fluctuations of the gold price.

Ad b)

Demand depends just as strongly on the business cycle, but there is only a slight mark-up on unrefined gold, i.e., the price is based primarily on the weight of the jewellery. Thus, this type of demand is more dependent on the price of gold.



Source: GFMS

b) Demand for investment purposes

Gold as a safe haven

The steep increase in demand for investment gold is a key factor of the current gold boom. Thus, investment demand in 2006 was 636 tons, which is an increase of almost 7% vs. 2005. Investment demand corresponds to some 25% of total mining output. From 2001 to 2003, high inflows of funds into gold were observed, due mainly to its characteristic as a safe haven after the bursting of the Internet bubble, the recession in the US, and the growing fear of terrorism.





Investment demand



Particularly high volumes of funds were invested in so-called exchange-traded funds (ETFs). These are exchange-traded index funds that track the gold price 1:1 and which must physically deposit gold. The dynamic has increased in the past two years, with the volume of ETFs more than doubling since 2004. ETFs are popular among investors due to the high degree of transparency and the inexpensive cost structure.

ETF holdings (t)



Source: www.exchangetradedgold.com

Gold is also used to mint coins, with the bullion coins produced by the mining countries being the most popular products. In the last three years, demand for coins increased again slightly. In Europe, an additional incentive was created by abolishing the value added tax on investment coins.

This form of stocking of gold is widespread especially in the Middle East and Asia. At the end of the 1980s, there was a steep rising trend followed, as of 1990, by a downwards correction. This may indicate, on the one hand, that stocking bullion is being displaced by other financial investments, and on the other, it could be interpreted as a sign of saturation.



c) Central banks

Asian central banks stock up gold reserves

Central banks in the Far East buy gold to hedge their USD reserves and to diversify into alternative asset classes. This was also confirmed by the Chinese Prime Minister Wen Jiabao (Financial Times, 25 September 2006) who stated in an interview that gold would be bought to hedge the existing USD assets.



d) Industry

Many applications in industry Industrial demand has also grown in the past years. Around 50% is accounted for by electronic components in which gold is used due to its high conductivity and resistance against corrosion. Industrial demand therefore depends on the general economic development and the industry environment. While in the past few years, growth was seen mainly in the IT sector, the increase in demand in coming years is expected to come from the nanotechnology and biotechnology industries. In the area of medicine, gold is used primarily in dentistry and in pacemakers as it is tolerated well due to its high compatibility and because of its antibacterial effect. Thus, there is no price elasticity in industrial demand for gold and it depends on the business cycle trends in the respective industries.





e) De-hedging by producers

De-hedging boosts demand

This concept is understood to mean the successive termination of long-term supply contracts to be able to participate in the rising gold prices. Therefore, gold is being taken out of the market. Mine operators usually sell their output in forward deals (up to five years), and when these supply contracts are prematurely terminated, one speaks of de-hedging. Producers terminate the forward contracts by delivering the agreed-on gold before maturity. In order to be able to deliver the precious metal not yet mined, the companies must become active on the gold market and buy additional gold. In the past few years, there has been a clear tendency in the direction of dehedging and the total volume of gold released by the closing out of supply contracts was 370 tons last year.



Source: Global Hedge Book

Conclusion

Gap between supply and demand can only be closed by higher prices	We expect the gap between supply and demand to continue to grow due to the still declining mining output, which subsequently can only be compensated by higher prices. Since the era of massive buying by central bank has probably ended as well, only recycling will allow the gap to narrow between supply and demand.
Positive development of gold prices based on key economic imbalances	The development, which is positive in our opinion, is probably based on key economic imbalances that will persist over the next three years and even longer. We also believe that the existing - and widening - gap between supply and demand is the primary argument for the positive tendency of the gold price. Recently, it was only the massive selling by central banks that was able to close the gap. It seems as if there is a change in sentiment, which would explain the sharp decline in CBGA2 selling and the buying by the central banks of Russia, China, South Africa, and Argentina.
<i>Demand still on stable uptrend</i>	As regards the demand side, the trend of the past few years will probably continue. Demand for gold is still on the rise both for investments and from the industrial sector. Demand from the jewellery industry declined in 2006, caused by the price shock of May. However, the year-long steady uptrend seems unbroken, as supported by the data for 2007 up to now.
	Gold is also a type of natural hedge against inflationary tendencies and serves as a safe haven investment instrument in phases of acute dollar slumps and periods of geo-political uncertainty. The current gold underweighting by institutional investors is another argument indicating that demand for the precious metal will continue to rise.
	Thus, we assess the return-risk ratio of an investment in gold as highly positive, and expect gold prices to surpass old highs over the medium term.





Technical analysis



Long and medium-term uptrend still intact

The gold price hit its all-time high on 27 January 1980 at USD 875 per ounce. The subsequent movements over two decades can be described at best as a sideways movement within a narrow bandwidth. Starting from its low of USD 255 in 2001, the precious metal established an upward trend that gained momentum from mid-2005 on. During this period, the gold price hit a 26-year high in May 2006 shortly before correcting drastically to USD 547 within a few weeks. This correction was followed by a strong rebound, but a second wave of selling tested the trend support line again. The positive trend continued in 2007, but suffered further setbacks from the global sell-off on the markets. However, the price quickly recovered and sustainably climbed over the resistance zone of USD 630 to 660, and a new year-high was hit at USD 694.

First price target at USD 730, next target USD 875	At present, the market seems to have shed the uncertainty of February and March. The current price trend is not signalling euphoria or an exaggeration like in the spring of 2006. The long-term uptrend is still intact. For this reason, our first target price is last year's high of USD 730. If the gold price breaks through this massive resistance line, we expect the upward trend to pick up speed. The subsequent technical resistance line would be at the all-time-high of USD 875. The price seems to be well supported from dropping further at the marks of USD 640, 615, and 560. Only a sustained decline below these marks would be a clear signal of a trend reversal and of the end of the current gold rally.		
Inflation softens price increases	A look at the inflation-adjusted gold chart sheds a different light on the most recent price increases and the 26-year high of May 2006. During the end of the 1970s and beginning of the 1980s when gold was trading at up to USD 875, the average American household income was about USD 17,000 a year. Today, a family of four with an annual income of USD 17,500 would be living below poverty level. Therefore, a nominal comparison of the gold price over several decades has limited explanatory power, which is why we have prepared a chart with inflation-adjusted gold prices:		
	Inflation-adjusted gold price since 1975		
	+157.2 M		



Over the long term, the development of gold prices does not appear at all overheated, but rather a reversal of the downward trend has taken place. The chart above shows that the gold price is still almost 160% from its highs of the beginning of the 1980s on an inflation-adjusted basis.

Many opportunities for gold investors

Mining stocks three times as volatile as the underlying metal

Investment opportunities

There are many opportunities for gold investors. Apart from buying physical gold (bullions, coins), there are numerous products traded on exchanges available for investment.

In addition to gold shares, exchange-traded funds have become particularly popular in the recent past. The funds traded on exchanges have the advantage that investors do not have to store the gold physically. It is up to investors to decide whether to invest in gold directly or through shares, or whether to mix the two. Investors must bear in mind that gold shares are much more speculative than a position in the physical metal. Mining shares are about three times as volatile as the spot price of gold. For this reason, we recommend avoiding large positions of mining shares as diversification in a portfolio.

Risk profile with gold investments



Source: Erste Bank

Investment ideas

1) Exchange-traded Funds (ETFs)

Exchange-traded funds are inexpensive investment instruments The physical ownership of gold (bullions, investment coins) may involve substantial buying and selling fees. In addition, the safecustody involves risk and incurs costs. Therefore, ETFs are a good alternative for investors who want to speculate on rising spot prices. These exchange-traded index funds track the spot price of gold 1:1 and physically deposit the underlying gold. However, investors should be aware of any foreign exchange fluctuations. Since gold - like all other commodities - is traded in US dollars, the development of the exchange rate does have a bearing on the price. Investors should make any decision to hedge the currency risk contingent on their personal expectations of future developments regarding foreign currencies. However, when in doubt, investors may opt for quanto contracts, which hedge currency risk.



2) Index funds

a) Amex Gold Bugs Index (HUI)

Index of unhedged gold stocks profits extremely from rising gold price

The Amex Gold Bugs Index, which contains the most important unhedged gold and silver mining shares, offers an interesting investment opportunity from a diversification point of view. This means that the companies have sold their future gold production forward for a maximum of 1.5 years and can thus benefit disproportionately from any increase (but are negatively affected by any decrease) in the gold price. The companies listed in the index account for around 25% of global gold production.

Gold stocks issued by gold producers participate disproportionately in gold price trends. This can be explained by the gold reserves that appreciate or depreciate as result of forward deals. The higher the share of the production sold forward, the smaller the leverage effect.

Index composition Amex Gold Bugs Index

			M.Cap.	
Amex Gold Bugs Index (HUI)	Subsector	Country	in USD mn	Weighting
Goldcorp Inc	Gold Mining	UNITED STATES	17,973.81	14.784
Newmont Mining Corp	Gold Mining	JERSEY	19,960.15	14.385
Freeport-McMoRan Copper & Gold Inc	Metal-Diversified	SOUTH AFRICA	26,709.71	10.733
Golden Star Resources Ltd	Gold Mining	SOUTH AFRICA	1,062.07	5.634
Harmony Gold Mining Co Ltd	Gold Mining	UNITED STATES	6,631.90	5.624
Hecla Mining Co	Metal-Diversified	CANADA	1,106.19	5.298
Gold Fields Ltd	Gold Mining	CANADA	12,249.50	5.111
Meridian Gold Inc	Gold Mining	UNITED STATES	2,702.00	5.066
Randgold Resources Ltd	Gold Mining	CANADA	1,696.78	5.024
Eldorado Gold Corp	Gold Mining	UNITED STATES	2,031.60	4.927
Kinross Gold Corp	Gold Mining	UNITED STATES	7,879.65	4.872
Yamana Gold Inc	Gold Mining	CANADA	4,987.73	4.803
lamgold Corp	Gold Mining	CANADA	2,235.05	4.71
Coeur d'Alene Mines Corp	Precious Metals	UNITED STATES	1,120.46	4.552
Agnico-Eagle Mines Ltd	Gold Mining	CANADA	4,389.95	4.478
	-		112,736.55	100.0

Source: Bloomberg

b) Philadelphia Gold and Silver Sector Index (XAU)

The Philadelphia Gold and Silver Sector Index is probably the best-known North American mining index, better known as the XAU Index. The index contains the 16 most important hedged and unhedged gold and silver producers and was created in 1979 with a staring value of 100 points. The XAU is the only mining index that serves as an underlying for futures contracts.

Index composition Philadelphia Gold and Silver Sector

Philadelphia Stock I	Exchange			M.Cap.	
Gold & Silver (XAU)	-	Subsector	Country	in USD mn	Weighting
Freeport-McMoRan Co	opper & Gold Inc	Precious Metals	CANADA	26,709.71	17.646
Barrick Gold Corp		Gold Mining	SOUTH AFRICA	24,930.12	16.755
Newmont Mining Corp		Gold Mining	UNITED STATES	19,960.15	13.414
Goldcorp Inc		Gold Mining	CANADA	17,975.42	12.004
AngloGold Ashanti Lto	Ł	Gold Mining	SOUTH AFRICA	12,816.94	8.614
Gold Fields Ltd		Metal-Diversified	CANADA	12,249.50	8.218
Kinross Gold Corp		Gold Mining	CANADA	7,879.65	5.299
Harmony Gold Mining	Co Ltd	Gold Mining	UNITED STATES	6,631.90	4.446
Yamana Gold Inc		Silver Mining	CANADA	4,987.73	3.354
Agnico-Eagle Mines L	td	Precious Metals	SOUTH AFRICA	4,389.95	2.951
Meridian Gold Inc		Gold Mining	UNITED STATES	2,702.00	1.816
PAN American Silver	Corp	Gold Mining	JERSEY	2,321.07	1.559
Silver Standard Resou	rces Inc	Gold Mining	CANADA	2,326.99	1.559
Randgold Resources	Ltd	Silver Mining	UNITED STATES	1,696.78	1.141
Coeur d'Alene Mines (Corp	Gold Mining	UNITED STATES	1,120.46	0.754
Royal Gold Inc		Gold Mining	CANADA	834.72	0.47
ora				149,533.08	100

Source: Bloomberg





The outperformance of the XAU Index by the unhedged shares (i.e. HUI Index) is quite evident. Throughout the gold rally that started in 2001, the HUI Index has increased by 724% while the hedged shares (XAU Index) have risen by only 166%, and the spot price of gold by only 143%.

However, the leverage of the gold price is of course a doubled-edged sword, as the following chart from May 1996 to November 1999 clearly shows. While the spot price of gold fell by 27%, the hedged, and particularly, the unhedged gold shares of the HUI Index plummeted by a much more dramatic 53% and 63%, respectively.



Performance comparison Gold vs. HUI vs. XAU (falling gold price)



3)	Stoc	k-pi	cking
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Industry consolidation expected to continue	The year 2006 was one of consolidation in the industry. On the one hand, the war chests of the large mining companies are flush with cash because of years of booming commodities; on the other hand, the companies have to replenish their reserves continuously. Since the development of new mining sites at a reasonable cost-benefit ratio is becoming increasingly difficult, taking over other mines has become a popular way of increasing reserves. The focus here is on junior explorers with proven resources and/or are planning to start production in the near future.
	The total volume of mergers and acquisitions in 2006 was around USD 40bn. The most spectacular acquisitions were the purchase of Placer Dome by Barrick and that of Glamis Gold by Kinross Gold. The average premium of the largest deals in 2006 was 27%. The volume of acquisitions in 2007 up to now has reached around USD 6bn, and the premium on the last price prior to the bid averages 26%. Among the largest transactions were the acquisition of Bema Gold by Kinross (USD 2.9bn) and the acquisition of the Canadian Rio Narcea by Lundin Mining with a total volume of USD 1.22bn.
Special features of the valuation of gold mining stocks	The expected useful life of the mine is an essential factor for the valuation. The useful life is determined by dividing the proven reserves by the respective annual production. Generally, the expected reserves also tend to be included in the calculation, which increases the degree of uncertainty. The useful life decreases if the volume of gold extracted outpaces the development of new reserves. According to a rule of thumb, the useful life of a mine should be at least ten years, as otherwise it is very difficult to recover the high investments of developing the mine.
	Valuing reserves is another method. The reserve is valued as a ratio of market capitalization and current volume of gold reserves. The reciprocal value of the reserve valuation can be used to derive the reserve ratio. The lower the gold reserves are valued, the higher is the reserve ratio, and thus the earnings potential of extraction. The reserve ratio makes it easier to compare different mines. The higher the reserve ratio, the more attractive the valuation of the company with regard to the gold reserves.
Gold price sensitivity and forward deals	The share of gold sold forward has an impact on the gold price sensitivity of the gold mining share. Therefore, forward selling influences the leverage of the share price with respect to the gold price. Since the gold sold forward has to be delivered at the agreed price, companies with large volumes of hedged gold cannot benefit from rising prices, and vice versa. Of course, open forward contracts can be closed out ("de-hedging"), but this entails a number of risks. If the market does not behave as expected, (i.e. mostly rising prices), substantial losses may be incurred. The advantage of selling forward is that it facilitates the budgeting and planning process, and insures the output against falling gold prices. As companies tend to be very secretive about the amount of forward contracts on their books, this remains a critical issue. Data for specific dates are usually only available in annual reports.



Production costs

Production costs are decisive

There are two types of costs: cash costs and total costs. The cash costs include the extraction costs plus license fees, if any, less the income from by-products such as copper, silver etc. The total costs per ounce have to be compared to the realized gold price per ounce. The difference between the two yields important information on the cost structure of the gold mining company and should be as high as possible.

Why gold shares have higher PERs

Gold is much more difficult to extract than, for example, oil. While a large oil or gas field can be explored for a few decades, a mine may be depleted within several years. Therefore, gold mining companies are constantly exploring new sites for drilling, and the ratio of capital employed to return is much lower than that of oil companies.

We would like to state our principal arguments again:

Mining production is set to decline until 2009, afterwards stagnation is expected at best

- Investment demand is picking up
- Decreasing central bank selling within the scope of CBGA II
- Recent purchases by major central banks outside of CBGA II
- Consumption demand from Asia is still rising (esp. India and China)

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