

#### **ERSTE GROUP**

# **Special Report Gold**

### In GOLD we trust - June 2010

Gold outsparkling other assets for the 9th consecutive year

The bark is repaired, but the wood stays rotten

Soft metal, hard money: the REMONETISATION has started

Why gold is no bubble

The creation of money from the perspective of the Austrian School of Economics

Risk/return profile of gold investments remains very favorable

Gold mining shares on attractive levels

Central banks have adjusted their attitude towards gold

Next phase of the bull market: Parabolic phase ahead?

Next target price at USD 1,600

At the end of the parabolic trend phase we expect at least USD 2,300/ounce

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### INTRODUCTION

#### Shining performance in 2009 and 2010

2009 was an exciting and lucrative year for gold investors. Our first target price of USD 1,300 was almost reached, but to reiterate an earlier statement - our actual target is USD 2,300/ounce. The gold price broke the USD 1,000 mark on a sustainable basis and increased by 24% y/y in USD terms and by 20.5% y/y in EUR terms. But 2010 and beyond should turn out even more interesting for gold - and we would like to discuss the reasons in our fourth annual Gold Report.

Gold price development since the last Gold Report



Sources: Datastream, Erste Group Research

Gold outsparkling other assets for the ninth consecutive year

Gold has outperformed all other asset classes in the past ten years, gaining an annual average of 16.5% since 2001 (or 13.5% in euro terms). Although copper and oil recorded similarly positive performances, their volatility was considerably higher and the trends more erratic. Since our first recommendation in 2007 at USD 650, gold has outperformed every other asset class by a long way. And the 2010 development has been outstanding as well - the precious metal has increased by 10.5% (in USD) or 28.5% (in euro), respectively<sup>1</sup>.

#### Gold performance since 2001 in various currencies (%)

	EUR	USD	GBP	AUD	CAD	Yuan
2001	8.1%	2.5%	5.4%	11.3%	8.8%	2.5%
2002	5.9%	24.7%	12.7%	13.5%	23.7%	24.8%
2003	-0.5%	19.6%	7.9%	-10.5%	-2.2%	19.5%
2004	-2.1%	5.2%	-2.0%	1.4%	-2.00%	5.2%
2005	35.1%	18.2%	31.8%	25.6%	14.5%	15.2%
2006	10.2%	22.8%	7.8%	14.4%	22.8%	18.8%
2007	18.8%	31.4%	29.7%	18.1%	11.5%	22.9%
2008	11.0%	5.8%	43.7%	33.0%	31.1%	-1.00%
2009	20.5%	23.9%	12.1%	-3.6%	6.5%	24.0%
2010ytd	28.5%	10.5%	23.1%	16.7%	11.6%	10.59%
Mean	13.55%	16.46%	17.22%	11.99%	12.63%	14.25%
Median	<b>10.6%</b> n Erste Group F	18.9%	12.4%	13.95%	11.56%	17.00%

es: Datastream, Erste Group Research

<sup>1</sup> As of 1 June 2010

Gold as	Amid the global crisis of confidence, investors seem to be re-discovering the fact that gold has
seismograph	been used as money for thousands of years. In periods where "black swans" are no singular
for the	occurrences but are practically coming in flocks, the status of gold as a safe haven has yet
system's health	again proven its worth. Gold is the money that has won the favour of the free market over
-	the past millennia. Gold has always been a seismograph for the health of the financial and
	monetary system, as well as inflation. Although the focus is currently on the Eurozone, the turbulences should not distract from the problems in the USA and Great Britain.

The remonetisation of gold has started Gold is an excellent measure of the quality of paper money. It contains no liquidity risk, and it is globally accepted and traded around the clock. There is also no credit risk associated with gold, and gold cannot turn worthless. The urge to own gold is based on two basic human requirements: on the one hand, the need for safety, and on the other hand the longing for beauty. These two motives are a constant in history. The economy develops in cycles. In times of prosperity and growth, confidence surges, and so does the risk appetite. In such periods, the need for safety is relegated to the sidelines. This behaviour is currently undergoing a radical turn-around, and we believe that the remonetisation of gold has now finally begun.

> "Gold and silver are money. Everything else is credit" J.P. Morgan

Why gold is <u>no</u> <u>bubble</u> The statement that gold is "a bubble" has cropped up many times. We wholeheartedly reject this contention and will give you a number of reasons on the following pages as to why the parabolic phase is still ahead of us. And usually where the "bubble statement" is made, the claim that it is already too late to invest is not far either. But who bought for example shares at the low of the bear market in 1974, or oil in 1994 at USD 14? On the following pages, we shall give you a range of reasons why gold is still far from developing a bubble.

There are those who claim that gold is a bad investment. This would surely be a sound argument for anyone who bought gold at its cyclical high in 1980. But the most explosive increase only lasted three months (end-1979 to the beginning of 1980). The story changes once we compare gold to equities. It took the Dow Jones index until 1954 to pass its 1929 highs. The Nikkei index is still more than 75% below its all-time high of 1989. The Dow Jones has increased by a cumulated 1,400% since 1971, whereas gold (not being fixed anymore from 1971 onwards) soared by a factor of 40.



Gold vs. S&P500 since 1971 (starting point 100, both in USD)

Sources: Datastream, Erste Group Research

#### Gold as perfect portfolio insurance

Gold is often portrayed as the investment of doomsday prophets, pessimists, and fear mongers who are hoping for the collapse of the financial system. However, they tend to forget that **gold is an excellent portfolio insurance with a history dating back thousands of years**. Nobody taking out fire insurance would wish for their house to burn down. The goal is only to protect oneself against the negative consequences, and in doing so, one pays a premium. However, it is crucial to hold the insurance policy <u>before</u> the actual damage occurs. As the saying goes "hope for the best, but prepare for the worst".

"Betting against gold is the same as betting on governments. He who bets on governments and government money bets against 6,000 years of recorded human history" Charles de Gaulle

Gold is an excellent "event hedge" The following chart shows the development of gold in ten performance deciles of the S&P 500. The fact that on 40% of the weakest days of the S&P 500, gold not only outperformed the market in relative terms but also recorded the best performance in absolute figures, illustrates that gold is an excellent "event hedge".



#### Performance gold vs. S&P in deciles

Sources: Datastream, Erste Group Research

**Central banks** In 2009 we saw a paradigm shift: the central banks turned into net buyers for the first time in 20 years, even though gold had been repeatedly called "too expensive". Especially the Indian and net buyers for the first time the Chinese central bank were seen on the buying side yet again, whilst the Central Bank Gold since 1988 Agreement (CBGA) hardly reported any sales. We think that this structural shift heralds a new phase of the bull market. The ultimate In an environment where the one-eyed man is king among the blind anyway, gold - certainly currency? more than a one-eyed – should definitely retain its excellent outlook. One could also say that it is not gold that appreciates, but paper money that depreciates, leading to an ever increasing amount of monetary units required to buy one ounce of gold. Gradual depreciation of The following chart also highlights the clear downward trend of most fiat<sup>2</sup> currencies relative to gold. The currency basket contains equal weights of US dollar, euro, Swiss franc, yuan, Indian paper money against gold

<sup>&</sup>lt;sup>2</sup> Fiat money is credit money that does not oblige the issuer to convert it into full-bodied coins. The term is derived from the Latin word fiat ("let it be done"). Fiat money becomes money when the legislative bodies of a state declare it so. Nowadays, central bank money such as the euro or the US dollar is fiat money.

rupee, British pound, and Australian dollar. The downward trend is clearly intact and is in fact right on the trend line as we speak. There is little reason to believe that the downward trend would diminish in the near future, which is why we of course stick to our positive assessment of the gold price.



Currency basket vs. gold since 1999

Sources: Datastream, Erste Group Research

#### De-coupling from the US dollar suggests a new phase of the bull market

In 2010 the gold price has now also de-coupled from the US dollar. The latest development shows that a stronger greenback does not necessarily entail a weaker gold price. In spite of the dollar rally the gold price remained high and even set a new all-time high. This is even more remarkable in view of the weak seasonality, and might suggest a new phase in the current bull market. **Bull markets in gold are also characterised by two extremely strong human emotions: fear and greed**<sup>3</sup>. The combination of these two factors should trigger a parabolic increase in the last phase of this trend, and as a result we expect the gold price to reach our long-term target price of USD 2,300 at the end of the cycle.

Numerous aspects remind us of the last big bull market in the 1970s. In line with the development in the past decade, central banks were then selling massive amounts of gold prior to the last bull market (especially from 1961 to 1972). The following chart documents the increase in money supply, inflation, and the outperformance of gold in this period.

<sup>&</sup>lt;sup>3</sup> See "Beware Counterfeiters", in "Markets at a Glance" by Sprott Asset Management

#### Money Supply, Inflation and Performance of Gold 1971-1974



Money Supply Inflation Gold % Change

Sources: Bloomberg, Erste Group Research

"Nothing new ever happens. It is always the same old stories experienced by new people." William Faulkner

In a historical context, every reflation cycle led to another asset bubble; in the 1970s it was commodities. There are many signals that suggest that we may be facing a similar development to 1974. A drastic shortage in gold supply, growing risk aversion, a lack of trust in paper money, a substantial increase in money supply, and – sooner or later – the recovery of the global economic growth could lead to a development of a comparably parabolic nature. On top of that, while the mining industry has somewhat recovered, the margins are still low, and some of the marginal costs are dangerously close to the spot price of gold. But at the moment we seem to be going through a phase of re-evaluation of policies among the Western central banks; the time of big sales is definitely behind us, while the emerging markets are still buying. This means that as far as increases go, we might shortly be in for the phase with the biggest momentum. As a result we expect the gold price to reach our long-term target price of USD 2,300/ounce. The gold price increased by a factor of 24 during the bull market in the 1970s. In relation to the current bull market, this would mean a gold price of USD 6,000.

### Gold in the context of the financial crisis

Positive environment for gold likely in the coming years	The paradox is the trigger of the crisis, i.e. too cheap money, is now being treated as its medicine. This could be regarded as an absurdity of historical proportions. Three years ago probably nobody would have expected the Federal Reserve to take USD 1,250 worth of mortgage-backed securities (MBS) onto its balance sheet. This is certainly not a step that would be beneficial to building confidence in paper money– and neither are the countless desperate stimulus and bailout packages of the past few years. On the other hand <b>this represents a clear argument in favour of gold and should thus ensure a positive environment for gold investments</b> .
	The following quote is an impressive reminder that history tends to repeat itself:
	"We have tried spending money. We are spending more than we have ever spent before and it does not work We have never made good on our promises I say after 8 years of the Administration we have just as much unemployment as when we started, and an enormous debt to boot!"
	Henry Morgenthau, Secretary of the Treasury during the New Deal, May 1939
The stability of monetary value – talk is cheap	The Federal Reserve has not been publicly audited a single time since its incorporation in 1913. Now, after years of discussion, a watered-down proposal seems to be close to signing, although it will still have to pass the Senate. The Fed has so far shown dismay at the idea, and only Jeffrey Lacker, President of the Federal Reserve in Richmond, has had open ears for the proposal <sup>4</sup> . The claim that the stability of the value of money was the highest priority seems like a case of cheap talk. Since the incorporation of the institution in 1913, the dollar has lost 95%, and 82% since the end of Bretton Woods in 1971. On top of that, government debt has increased by a factor of 44. The closure of the "golden window" on 15 August 1971 by President Nixon was tantamount to the USA declaring bankruptcy, and the US dollar lost almost 40% relative to the German mark within 20 months. The depreciation against gold was even more dramatic: in 1971 USD 1,000 would have still bought you 25 ounces of gold, ten years later the same amount only bought you 2 ounces.
Exit strategy of the Federal Reserve most often too late	The question of the optimum timing to abandon the zero-interest rate policy is difficult to answer and - as is often the case - would require the benefit of hindsight. In their study "Exits from recessions" <sup>5</sup> , the two US economists John Landon Lane and Michael Bordo show that the Federal Reserve tends to raise interest rates too late. Even in "normal" recessions that were not accompanied by severe banking and financial market crises the Fed would usually react too late. Since the end of the 1960s, the Fed has attached greater importance to the labour market. Only once the labour market had recovered on a sustainable basis, would the Fed increase rates. The current situation is somewhat similar to the period of the late 1990s. At the beginning of 1997 the fed wanted to start to gradually increase interest rates. The Asian crisis, followed by the Russian crisis and the LTCM collapse rendered the increases obsolete, in fact, the Fed even continued to cut rates, which further fuelled the Nasdaq bubble.
From the biggest creditor to the biggest debtor nation	A few decades ago the USA was still the biggest creditor nation. In the 1960s private consumption started to grow faster than production, and wealth was gradually being consumed. Household debt in the USA (as measured by the ratio of debt to disposable income) increased from 55% in 1960 to 65% in 1985. In the course of the following two decades debt almost doubled to 133% in 2008. During this period the savings ratios were on a steep decline, which is why private consumption increased faster than disposable income and fuelled the US economy.

 $<sup>^4</sup>$  Reuters, 11 May 2010, "Senate OK's Fed audit as part of bank overhaul"  $^5$  Handelsblatt, 15 March 2010, "Searching for the exit strategy"

#### Real household debt, wealth and income



#### Conspicuous consumption cannot create wealth

This means that deleveraging on a household level cannot be avoided. If it were achieved through an increased savings ratio, this would affect US consumption and in turn the global economy. The other option is to shift the problems to the banking sector in the form of more foreclosures. The process will be painful in either case. The share of public transfers in the household income has recently increased to 17.5% – from 5.6% in 1960. The following chart shows that the US willingness to save experienced but a short renaissance. Currently around 3% of the disposable income ends up on savings books, whereas the historical median is 7.5%. The fact that wealth cannot be created by excessive and hedonistic conspicuous consumption seems to remain unknown to many.

#### US PERSONAL SAVING AS % OF DISPOSABLE PERSONAL INCOME



Sources: Datastream, Erste Group Research

No budget surplus until 2080? But not only private households are heavily indebted – governments are faced with the same problem. The "Long Term Budget Outlook"<sup>6</sup> of the Congressional Budget Office (CBO) paints a bleak picture. The report for the period of 2010 to 2080 (!) starts with the words *"Under current"* 

<sup>&</sup>lt;sup>6</sup> http://www.cbo.gov/ftpdocs/102xx/doc10297/06-25-LTBO.pdf

*law, the federal budget is on an unsustainable path – meaning that federal debt will continue to grow much faster than the economy over the long run…"* According to the report the <u>USA will not be able to produce a budget surplus in the next 70 years</u>.



**CBO BUDGET PROJECTION: DEFICIT OR SURPLUS** 

Source: CBO Budget Estimates, Datastream

Problems with government debt of similar magnitude in USA and UK	Even though at the moment the limelight is on Greece and the other PIGS countries, the situation in the USA and the UK is just as precarious. We cannot see any austerity measures in the USA. In August 2009 the forecast for the new debt of the coming decade was revised upwards from USD 7 trillion to 9 trillion. From May 2009 to April 2010 debt increased by USD 1,710bn or 11.7% in terms of GDP. A little side note – in 2000, Bill Clinton had announced that by 2010 all US government debt should be paid off. Currently US government debt amounts to USD 13 trillion, which equals USD 42,000 per capita.
High debt sets off vicious circle	If it is impossible to generate a surplus even in prosperous times, clearly the problems are of a systemic nature. Due to compound interest, debt grows exponentially, which causes massive problems in the long run. As soon as debt plus interest is growing faster than revenues, a vicious circle of debt is set off. The following chart illustrates the gradual divergence of expenditure and income (or outlays and receipts).





Source: www.fgmr.com, James Turk

The bark is repaired, but the wood stays rotten

The USA is expected to issue more Treasury bonds in 2010 than the rest of the world combined. The balance sheet of the Federal Reserve has deteriorated dramatically as well. Between December 2008 and March 2009 it purchased fixed-rate securities worth USD 1,700bn, or almost 12% in terms of GDP. The majority (USD 1,250bn) was made up by mortgage-backed securities of highly dubious value.

**Deleveraging takes 6-8 years on average** In one of its reports, McKinsey<sup>7</sup> analysed 45 deleveraging phases since 1930. In 50% of cases the debt was paid off through a stepped up savings ratio, which would typically lead to deflation almost every time. The growth path has been chosen three times in the more recent history, but this often turned out expensive and bloody, i.e. it would typically involve war. On average the payoff would commence two years after the onset of the financial crisis and last six to eight years according to the study. From 1929 to 1933, i.e. in the thick of the Great Depression, the private household debt fell by 32%. As a result of the reduction of private debt, the public sector had to step up its debt so as to offset the lack in demand. Thanks to these measures, the economic growth rates are positive, but clearly below the potential.

**History repeats itself** History offers a number of interesting analogies with regard to the status quo. In the Roman Empire, the silver content of the denarius coin was gradually reduced. Bread and circuses, the bloated bureaucracy, and the rising military expenses led the public finances to get out of hand. In addition, the production of goods was moved further and further into the peripheral areas of the empire. The overall tax ratio increased to two thirds of income, and the size and complexity of the administrative organisation were constantly rising. Therefore the currency was subject to a gradual depreciation. In the 1<sup>st</sup> century B.C. the silver content was close to 95%, but by 286 AD the denarius only consisted of 0.5% of silver<sup>8</sup>. The example of the decline of the Roman Empire highlights impressively how swelling bureaucracy and the misallocation of resources can lead to inflation and in the long run to collapse.

<sup>&</sup>lt;sup>7</sup> McKinsey&Company, "Debt and deleveraging: The global credit bubble and it's economic consequences", January 2010

<sup>&</sup>lt;sup>8</sup> Please see "Inflation and the Fall of Roman Empire", Joseph R. Peden, Mises Institute



Sources: Société Générale, Tulane University

"The Budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled, and the assistance of foreign lands should be curtailed lest the Republic become bankrupt. People must again learn to work, instead of living on public assistance."

Marcus Tullius Cicero, 55 BC

### Inflation vs. deflation

Liquidity during deflation, substance during inflation – gold fulfils both criteria The central question of whether the next few years will be dominated by inflation or deflation still remains unanswered. In periods of inflation, tangible assets are the preferred asset class, whereas in times of deflation, cash is king. Gold is liquid, divisible, indestructible, and can be easily transported. It has a worldwide market and there is no default risk associated with it, which means it is cash of the highest quality. **Therefore gold is the optimal investment both in deflation.** 

The following chart supports this notion. Gold shows a positive performance in the first (deflationary) decile. It offers the weakest return during times of low inflation, whereas it is a clear outperformer again in the  $7^{th}$ ,  $9^{th}$ , and  $10^{th}$  decile of the CPI development.



#### Gold vs. inflation in deciles

#### Deliberate inflation as only exit strategy?

Nowadays there are a substantial number of experts who regard the concept of inflating the economy as the only possible solution to the excessive level of debt. Kenneth Rogoff, former chief economist of the IMF was already quoted at the end of 2008<sup>9</sup> in the Central Banking Journal as claiming that a higher but controlled rate of inflation of 5-6% over the next couple of years was healthier than a deflation of 2-3%. Exceptional times require exceptional measures, according to Rogoff. He believes that otherwise taxes would have to be raised by 30-50% in the USA, which is illusory. Thus, inflation is the only feasible "exit strategy". And his successor, chief economist Olivier Blanchard, recommended to the central banks they should accept rates of inflation of up to 4% instead of 2% in the future. This is particularly remarkable seeing as the IMF would traditionally consider monetary stability as no.1 priority.

Although the inflation rate is currently on its way down, this is not the least due to the statistical base effect. The gold price correlates very strongly with inflation as soon as the latter hits extreme values. From 1971 to 2009 the monthly correlation coefficient of gold and the inflation rate was 0.48. In the period of high inflation from 1978 to 1982 it soared to 0.76. When the rate of inflation in the USA and Europe soared to new highs at the end of the 1970s, so did the gold price. We know a similar situation from history, i.e. from WWI and the Weimar Republic. From 1914 to 1918, the German money supply soared from 8.5bn to 55bn Reichsmark, which paved the way for hyperinflation of historic dimensions. In January 1919 one ounce of gold would have set you back by 170 Mark, whereas by November 1923 the price had shot up to 87 trillion Mark. An important feature of high inflation is the rapid loss of trust in the own currency.

Source: Erste Group Research

<sup>&</sup>lt;sup>9</sup> "Ken Rogoff says Fed needs to set inflation target of 6% to help ease crisis" Telegraph, 20 February 2009

The gold standard is proven to offer the best protection against inflation: annual price inflation from 1879 to 1914 was 0.2% at a volatility of only 2.2%. Since 1971 (i.e. the end of Bretton Woods), volatility has been 2.8%, with average price inflation at 4.6%.



Sources: Bloomberg, Erste Group Research

#### "You have a choice between the natural stability of gold and the honesty and intelligence of the members of government. And with all due respect for those gentlemen, I advise you, as long as the capitalist system lasts, vote for gold" George Bernard Shaw

Gold is an excellent hedge in periods of deflation

flourished

during the

Great

Gold is also an excellent hedge in periods of deflation. What is happening in times of pronounced deflation? Public budgets are strained, the financial sector is faced with systemic problems, currencies are depreciated in order to reflate the system, and the money supply is continuously rising. The creditworthiness of companies and countries is gueried, the confidence in paper currencies falls, and gold is subjected to remonetisation.

Deflation	Gold	Silver	Commodities	
1814-1830	100%	89%	-50%	
1864-1897	40%	27%	-65%	
1929-1933	44%	-5%	-31%	
Courses Doubles	two we " The o O a late	··· O ································	"Citizen des Desdess Matel" F.	

Sources: Roy Jastram," The Golden Constant" and "Silver, the Restless Metal", Erste Group Research

**Gold sector** In 1933 President Roosevelt raised the gold price - in an effort to re-start the economy - from USD 20.67 to USD 35, and private gold ownership was banned. The confiscations led on the one hand to a booming black market, and on the other hand to the mining sector recording an enormous inflow of funds. According to the US Bureau of Mines 9,000 producing gold mines were in operation in the USA in 1940. Many gold mining shares increased tenfold, including the Depression majors. Today, the US gold reserves are still valued at USD 42.22, but an adjustment to the market price has been demanded by many. Given that the gold price was fixed in the 1930s, the development of the shares serves as a good indicator:

#### Price and dividends of Homestake Mining and Dome Mines 1929-1936

	Homestake Mining	Dividend	Dome Mines	Dividend	
Low 1929	USD 65	USD 7	USD 6	USD 1	
High 1931	USD 138	USD 8.45	USD 13.5	USD 1	
High 1933	USD 373	USD 15	USD 39.5	USD 1.8	
Hig 1934	USD 430	USD 30	USD 46.25	USD 3.50	
High 1936	USD 544	USD 36	USD 61.25	USD 4	
Source: Jan Gordon, Longwaye Group, 19 October 2009					

Source: Ian Gordon, Longwave Group, 19 October 2009

price increase in inflationary phase

Most significant However, the most significant share price increases happened only after the deflationary period (1929-1932) and at the sudden onset of inflation 1932-1935. We can well imagine a similar scenario for the foreseeable future. The stability of the gold shares during the share price crash is probably due to the fact that the gold price was fixed and the revenues of the producers thus remained stable, whereas all other commodities collapsed.

> Taking into account the fear of deflation and numerous texts and speeches by Ben Bernanke (e.g. "Deflation: Making Sure "It" Doesn't Happen Here" <sup>10</sup>), we believe that further interventions are likely. **The natural shakeout during a deflationary recession will probably be fended** off at all costs. This scenario should ensure a sustainably positive environment for gold.

### Criticism against the conceptual definition of inflation

The discussion about inflation nowadays focuses mainly on the effects of the price increases rather than on the causes. The fact that the expansion of the uncovered money supply is to be blamed for the rising level of prices tends to be forgotten. The focus is now on the development of the basket of goods, which only highlights the symptoms of the price increase.

Geometric weighting and hedonistic calculation have led to a drastically lower reported inflation	The reported inflation data are definitely questionable. According to Shadow Stats gold would have to rise to USD 7,494 in order to reflect the real value of 1980. In 1999 the CPI calculation was drastically changed. The geometric weighting (N.B. rising prices are attached a lower weighting than falling ones) and especially the hedonistic calculation have reduced inflation in the years 1999-2003 by more than 20%. This method takes quality improvements of products into consideration <sup>11</sup> . For example, more powerful PCs cause the reported inflation to fall drastically. Say you buy a PC for USD 1,000: in the hedonistic approach, the inflation rate would be recorded as -50% (for this sub-component of the basket of goods) two years later when you buy a new PC for USD 1,000 that is twice as powerful and thus offers twice the power for the same price. Even alleged "quality improvements" in bananas and milk have a negative effect on inflation, whereas a deterioration in quality has no effects on the inflation model.
Numerous reasons for (too) low inflation rates	Also, the weightings in the basket of goods are dubious. For example, healthcare costs account for close to 17% of GDP, but for only 6% of the price index. On top of that, the development of asset prices is not taken into consideration either, as the basket of goods only contains consumer products. And we also criticise the fact that the increased tax ratios have been ignored in the contents of the basket. Why would one wish to report lower rates of inflation? – Elementary: a large part of the expenditure that hinges on social security expenditure, transfers, wages in the public sector, meal vouchers etc depend on valorisation. Also, low inflation makes it easier to justify (too) low interest rates.
	A few samples taken from daily life show that the (at least, felt) inflation substantially exceeds the reported one: the price of a gallon of petrol has increased by 2,150% since 1960, and an average house sets you back by 1,400% more. By comparison, the monthly social security taxes have increased by 1,900% since 1970 <sup>12</sup> .
Cantillon effect describes the distribution of newly created money	Also, inflation affects people at different degrees. The Cantillon effect describes the fact that newly created money is distributed neither equally nor simultaneously among the population. This means that people handling money partially benefit from inflation and partially suffer from it. Monetary expansion is not neutral. Market participants who receive the new money early and exchange it for goods benefit in comparison with those who get the newly created money later. We can see a transfer of assets from late money users to early money users.

<sup>&</sup>lt;sup>10</sup> http://www.federalreserve.gov/BOARDDOCS/SPEECHES/2002/20021121/default.htm

<sup>&</sup>lt;sup>11</sup> http://www.gold-eagle.com/editorials\_04/evans061304.html

<sup>&</sup>lt;sup>12</sup> Grandfather Economic Report, "Who says Inflation is dead ?"

# Why the inflation-adjusted high of USD 2,300 is our target price

#### Inflationadjusted high at USD 2,300 and USD 7,500, respectively

A look at the inflation-adjusted gold chart puts the most recent price increase and the passing of the (psychologically) important USD 1,000 mark into perspective. On an inflation-adjusted basis, the high of 21 January 1980 (USD 850) amounts to USD 2,300/ounce. Of course this calculation is based on the official data of the Bureau of Labor Statistics<sup>13</sup>. On the basis of the old Shadow Stats<sup>14</sup> calculation model of 1980, gold would have to rise to USD 7,494 in order to exceed the 1980 high in real terms. And when resorting to the MZM (money with zero maturity) supply of 1980, we find that gold would have to soar to almost USD 10,000.



#### Inflation-adjusted gold price

However, one has to be aware that the USD 850 mark in 1980 was a short-lived spike. On the basis of the average price of USD 675 in January 1980 therefore the price today would have to rise to USD 1,897 on an inflation-adjusted basis. But one thing is sure which is the fact that **nominal comparisons are of little explicative value**. The quality of one US dollar today differs profoundly from that of one dollar in 1980 or in 2000.

Nominal While the gold price reached levels of up to USD 850 at the end of the 1970s and beginning of 1980s, the average American household income amounted to USD 17,000 per year. Nowadays comparison an annual income of USD 17,000 would put a family of four below the poverty line. The level of not very helpful debt has also increased dramatically over the past decades. Whereas private households were USD 10bn in debt in 1987, this amount has now increased to USD 28bn. This means that a nominal comparison of the gold price over decades is of limited significance, which is why our target for the inflation-adjusted price is USD 2,300. Oil has already Crude oil showed in 2008 that it was normal for a commodity to set new all-time highs on an exceeded its inflation-adjusted basis during a bull market. The oil price exceeded the inflation-adjusted high inflationat the end of the cycle in its parabolic phase by more than 50%. By analogy, gold would have to adjusted high rise to an inflation-adjusted USD 3,450 - when will gold follow?

<sup>&</sup>lt;sup>13</sup> http://data.bls.gov/cgi-bin/cpicalc.pl

<sup>&</sup>lt;sup>14</sup> http//www.shadowstats.com

#### Oil (left scale) vs. gold (right scale), inflation-adjusted



Sources: Datastream, Erste Group Research

### In what phase of the bull market are we?

A central pillar of the Dow Theory is the description of the phases of a bull market. According to Dow the three phases reflect the confidence of the investors:

- 1. Accumulation
- 2. Participation of the public
- Distribution

#### The longer the consolidation, the more impulsive the following bull market

The first phase is dominated by a drawn-out process. We think that this phase was happening in 1999 to 2003. At the beginning, only "early adaptors" are invested. The fundamental picture tends to be bleak, and there is a selling overhang. The longer this phase takes, the stronger the development in phases 2 and 3. For example, the oil price was traded within a bandwidth of USD 10-35 for more than 25 years. In 2004 it broke out of this range and increased to USD 147/barrel within four years. Something similar happened on the equity markets. The Dow Jones index traded within a bandwidth of 600 to 1,000 points from 1962 to 1982. The outbreak was followed by 18 years of bull market, which took the index to 11,700 points or +1,400% (annualised performance 16.5%). **This is the nature of a bull market**.

The second trend phase is characterised by improved fundamentals, higher confidence, and new groups of investors. And lastly, phase 3 is the euphoric phase that culminates in a "blow-off", i.e. in a parabolic increase. At the end of each cycle the smart money is distributed.

The following chart, depicting the sharply rising volume of contracts at the COMEX, highlights the soaring interest that is integral to a bull market.



#### Net long positions (COMEX)

Passing of the USD 1,000 mark as transition to phase 3? From our point of view we are currently located at the transition from phase 2 to phase 3. Gold is getting gradually more accepted as an investment vehicle. Legendary investors such as Paul Tudor Jones, John Paulson, and David Einhorn have reported purchases of gold, the turnover is increasing, and numerous new products are being launched. In addition, gold is becoming more and more important in the asset allocation of institutional investors. We think that the passing of the "magic" USD (or EUR) 1,000/ounce mark heralds the imminent start of the trend acceleration phase. We saw a similar situation when oil increased above USD 100/barrel.

Bull markets end in "blowoff" If we compare the current bull market to the most recent big gold rush, we can see a pronounced distribution phase that ended in a parabolic "blow-off". The finale phase ended in January 1980 at a high of USD 850/ounce. In the course of the previous ten trading days the price increased by 35%, in the previous six weeks the price had almost doubled (+94%). The same thing might occur in the final phase of the current bull market.



#### Gold price (indexed from 100) 1970-1980 and 1999 to date

Corrections are becoming shorter

"Buying the dips" seems to be the motto of the current phase. Within the corrections, gold moves from weaker to stronger hands. Consolidations in the current bull market have become shorter and less pronounced in terms of the underlying trend. We have seen this very development since the beginning of 2009. As soon as the corrections turn really small, the market will probably make the transition to its final phase. The transformation definitely has psychological reasons. The unshakeable myths and misunderstandings (gold does not pay interest, buying physical gold is expensive, gold is speculative and volatile...) are being demystified. Given that many of such arguments, defamations, and convictions were deeply engrained after a 20-years' bear market, the change of heart is accordingly drawn-out and tedious.

Bull market 1970-1980 (lower time axis) — Bull market 1999-??? (upper time axis)

Sources: Datastream, Erste Group Research

#### Corrections since the beginning of the bull market



Sources: Datastream, Erste Group Research

Gold is a gauge for risk, and thus the currency of fear. In that sense, both fear and greed can trigger the often-quoted "irrational exuberance" and thus the parabolic increase in the final phase.

It is a fact that gold is certainly no contrarian investment anymore, as opposed to 2000, although investors are still sceptical, and the same old arguments still abound in the market. Having a closer look at the sentiment, we find that we are far from anything like euphoria, so gold is definitely no mainstream investment. In comparison with the Nasdaq at the beginning of 2000, gold is certainly more of a dark horse. If one were to ask ten people for names of three gold mining shares, chances are they would not know any. This is a stark contrast to the situation a couple of years ago when the vast majority of people were talking about technology shares and invested in highly speculative start-ups, or US consumers who were taking out mortgages, hoping to benefit from continuously rising property prices.

"I can measure the motion of the heavenly bodies, but not the madness of crowds" Sir Isaac Newton The numbers, too, substantiate the notion that the parabolic phase of gold should still be ahead of us. For example, the Nasdaq 100 index increased by 85% in 1998 and by even 102% in 1999. It rose by an additional 27% in 2000 before collapsing at the end of March. At the end of the bull market, 30 shares had gained more than 1,000% by 1999. Is the comparison of trends in different asset classes admissible? We certainly think so, given that human behaviour patterns and emotions in extreme phases are the same. Greed and fear determine the beginning and the end of bull markets. Therefore we assume that gold and gold shares could show a similar performance to the one of the Nasdaq at the end of the 1990s.

The last bull market came to an abrupt end in 1980. The then chairman of the Federal Reserve, Paul Volcker, increased the key lending rates to 20% within only a few months. Could this be possible today? Definitely not! In 1980 the USA was one of the biggest creditor nations in the world and had a positive trade balance. On top of that, the financial industry was substantially smaller in terms of the GDP, and excessive debt was neither in the private nor in the public sector an issue.

### Why gold is definitely not a bubble

Many market participants and commentators are obviously having a hard time distinguishing between a bull market and a bubble. More and more articles are referring to the imminent burst of the "gold bubble" and to an alleged "crowded trade". But are the authors of these articles crying wolf?

Only 0.8% of all financial assets are allocated to gold

The facts quickly put the fear-mongering into perspective. Currently some 0.8% of all global financial assets are invested in gold, gold shares, and ETFs. In 1932 the allocation was 20%, and in the last bull market at the beginning of the 1980s it was 26%. If a total of 2% were allocated to gold, the additional demand would amount to about 85,000 tonnes – or the total global mining output of almost 34 years. Granted, this is only a numeric model, but it illustrates how unfounded the myth of a gold bubble is. According to an old saying, one tends to see the bubbles wherever one is not invested.



#### Gold and gold mining shares in % of global assets

Sources: Silberjunge.de, Erste Group Research

Amex Gold Bugs index with a market capitalisation of USD 200bn

The capitalisation of the equity market makes a similar point. Currently the Gold Bugs index is valued at close to USD 200bn. The index contains the 16 largest unhedged gold and silver producers. So it is definitely representative for the industry. In comparison with the S&P 500, the market capitalisation of the most important gold and silver producers is minute. As of 20 May it accounted for 1.9% of total market capitalisation. Even the capitalisation of Exxon Mobile alone is 50% higher than all 16 shares of the Gold Bugs index combined.



#### Market Cap Gold Bugs Index vs. other Indices and single stocks

Sources: Bloomberg, Erste Group Research, as of 20 May 2010

Physical market
 The physical market is set on an upward path. Münze Österreich (Austrian Mint; one of the five largest mints in the world) posted a record result in 2009. The company sold 1.6mn ounces (mostly Vienna Philharmonic coins), dramatically up from 137,000 units in 2007. On aggregate (including gold for trading purposes, bullions etc) the volume increased from 277,600 to 2,083,000 ounces in 2009. The trend seems to have continued in 2010. In the two weeks of end of April, beginning of May, almost 250,000 ounces were sold – that is more than in the entire first quarter. Due to the enormous demand, the online shops of Pro-Aurum (one of the biggest precious metal traders in Europe) had to be temporarily closed in order for the company to be able to catch up with the order backlog.

Sales figures<br/>low in<br/>comparison<br/>with the pastHowever, the last big gold boom puts the recent high sales figures into perspective. For<br/>example, Rand Refinery, which mints the world-renowned Krügerrand, expects to sell 1mn<br/>Krügerrand in 2010, which would be a 26-year high. But from 1974 to 1984, 2-6mn ounces<br/>were being sold per year<sup>15</sup>. And the sales figures of the US mint are only slightly above the<br/>historical average as well. A total of 521,000 ounces of gold were sold in the first five months of<br/>the year<sup>16</sup>.

<sup>&</sup>lt;sup>15</sup> Financial Times Deutschland, "Überstunden für den Goldkaufrausch" ("Overtime for the gold shopping spree"), 28 May 2010

<sup>&</sup>lt;sup>16</sup> http://www.usmint.gov/mint\_programs/american\_eagles/index.cfm?action=sales&year=2010#GoldTotals



#### Physical buying remains marginal

**g** Nevertheless the market resonates with warnings of purchases induced by panic and a gold bubble. But putting the figures into context, one will find that the scepticism is completely uncalled for. The record sales of 250,000 units of Münze Österreich in two weeks equal a value of EUR 250mn. Austrian savings books currently hold EUR 260bn worth of savings. In other words, only 0.0961% of Austrian savings was re-allocated to gold during the turbulent "Greek weeks". A bubble surely looks different. According to Bloomberg, USD 82 trillion are currently invested in bonds. Where's the bubble then?

A comparison with institutional cash yields a similar result. The market capitalisation of money market funds amounted to USD 4,123bn as of 20 May. The aggregate market value of gold ETFs currently comes to slightly less than USD 70bn, i.e. only 1.7% of the volume.



Volume gold ETFs vs. money market funds (bln USD)

Source: Bloomberg, Datastream, Erste Group Research

The forecasts by the analysts are anything but euphoric, as the following Bloomberg screenshot illustrates. The target prices (median) are USD 1,147 (2010), USD 1,163 (2011), USD 1,035 (2012), and USD 988 (2013):



#### Analyst forecasts (Bloomberg screenshot)

**Gold shares** still a contrarian investment

On top of that, many major producers are currently traded below their all-time highs and even their book value. The Barrons Gold Mining index is quoted below its all-time high and below its 1981 value.



Barrons Gold Mining Index 1981-2010

Source: Sharelynx.com

The general public is hardly invested in gold yet A bubble would require the general public to be invested. But in contrast to the housing bubble and also the internet bubble, the investment of the public in gold is more of a private club. Also, we sometimes read that the TV commercials trying to push gold are also a sign of a bubble. We actually think that the opposite is true. In the case of a bubble, the TV consumers should be discouraged rather than encouraged to buy gold.

### Gold is the optimal portfolio insurance

Gold has a very low or in some cases even negative correlation with other asset classes While a popular opinion contends that gold is volatile and thus risky, facts clearly prove the opposite. A look at the past few months as well as the long-term history shows that gold is substantially less volatile than shares (e.g. the MSCI World index) or commodities (oil, silver, copper). A study by the World Gold Council<sup>17</sup> confirms this. In the past 20 years, volatility was significantly below that of oil, other precious metals, the GSCI commodity index, and most of the equity indices. Only the shares of junior explorers with low market capitalisations can be deemed "highly speculative".

#### 50 45 40 Volatility in % 35 30 25 20 15 10 Copper Silver Composite **ISCI World Crude Oil** S&P 500 Gold Nasdaq

#### Volatility over 10 and 2 years

Volatility 10 years Volatility 2 years

Sources: Bloomberg, Datastream, Erste Group Research

Precious metals have a low correlation with equities. The correlation efficient of gold (weekly correlation, 3 years) with the MSCI is -0.18. It is -0.17 with the DAX, and is practically uncorrelated with bond indices. Since 1990, the correlation of gold with the S&P 500 has been - 0.15.

An indicator of remonetisation? The traditional correlations have recently changed a lot. The correlation with the euro, which used to be 0.52 on a 12M basis, turned around to -0.187 in May. The correlation of the US dollar and gold during the same period was 0.042, whereas the 12M figure was -0.54. The correlation with the commodity sector has fallen as well; for example from 0.48 on a 12M basis to practically zero in May with the VRB commodity index. This suggests that gold has de-coupled from commodities and the leading world currencies, and it could mean that the monetary relevance of gold has increased and that gold is now traded like a currency again.

The following chart shows the 5Y correlation coefficients of the weekly performances with other commodities, equities, and commodity indices.

<sup>&</sup>lt;sup>17</sup> "Is gold a volatile asset?", Rozanna Wozniak, World Gold Council

#### Correlation gold vs. other asset classes



Sources: Bloomberg, Erste Group Research

The following graph highlights the fact that gold is an outstanding "event hedge". In 20% of the weakest days of the S&P 500, precious metals and especially gold have clearly outperformed the other asset classes.





Sources: ETF Securities, Bloomberg, Erste Group Research

Many studies show that gold, as part of the portfolio, reduces overall risk and improves portfolio performance. Especially in phases of high volatility, gold reduces the fluctuations. On top of that, gold and economic data show no statistically significant correlation with each other. This is probably due to the fact that gold contains no liquidity risk, is exposed to a lower market risk, and has no credit risk. **Gold is not linked to any form of liability or promise – as opposed to shares or bonds. We therefore highly recommend gold for diversification purposes.** 

### Gold in the context of a new global lead currency

The world is preparing for the end of the US dollar hegemony The diversification out of the dollar is a slow yet steady process. The greenback has suffered from a waning importance as global reserve currency. Whereas in 1999 70% of all central bank reserves were allocated in US dollar, this number has fallen to 63% in the meantime. According to a Reuters survey, it is expected to fall further in the next 20 years to 48%. The following graph also shows the sliding relevance of the US economy in relation to the world economy and the positive correlation of the US dollar.



#### US GDP in terms of global economic output vs. USD index

Sources: Datastream, Bloomberg, IMF, Erste Group Research

The Economist predicts "Phoenix" for 2018

The Economist predicted as early as in 1988 that we would have one world currency by 2018. The idea of a common currency called "Phoenix" came up after the crash in 1987 – the name referring to the bird rising from the ashes. The IMF was called on as the new central bank, and there would be no economic sovereignty anymore.

#### Economist, cover of 9 January 1988



Source: http://www.globalresearch.ca/index.php?context=va&aid=13070

According to an article in "The Independent" in October, China, Russia, Japan, and the Gulf States were planning on abandoning the US dollar for their transactions in oil trade by the year 2018. Instead, they were reported to be developing a currency basket that contained the yuan, the Japanese yen, the rouble, the euro, gold, and other commodities. The political explosiveness of such a decision would be enormous.

abia announced that it would withdraw all of its oil futures from the NYMEX. On top of that, ne countries from Central and South America and the Caribbean agreed to form a currency ates are Venezuela, Cuba, Nicaragua, Honduras, Ecuador, and Bolivia. Turkey will invoice its cernational business with Russia, Iran, and China henceforth in local currencies. Trade dume has reached close to USD 70bn recently. On top of that, Russia will accept the ttlement of its transactions with China in yuan and rouble. Similar negotiations are underway th India and Brazil. Byelorussia, Kazakhstan, and Russia will also strengthen their ties. The puntries set up a customs union as of 1 January this year, and they intend to establish a mmon economic area by 2012. A common currency would be the next logical step.
our Gulf nations (Saudi Arabia, Kuwait, Bahrain, and Qatar) have also agreed on setting up a
a nii a t t t

monetary union, and in the long run they intend to introduce a common physical currency, the plans to introduce the "Gulfo", and an own central bank. Within the area, oil contracts are not settled in US dollar "Gulfo" anymore. The area's GDP is USD 1.2bn, and it holds 40% of global oil reserves.

International The interest in US Treasuries seems to be gradually cooling down. In 2009 China only bought interest in US USD 62bn worth of these papers. Of course holding USD 790bn worth of Treasury bonds, Treasuries is China is still the biggest creditor. But in the year when the USA took out an unprecedented cooling down volume of new debt the biggest creditor seemed to be slowly losing its confidence. Last year only 39% of the bonds were placed abroad anymore, which means the lion's share remained inside the USA. In 2007 the majority was still going abroad.



#### Share of Chinese investments in US Treasuries auctions

Source: Bloomberg, Erste Group Research

The bond market seems to have concerns over whether the US still deserves its AAA rating. The fact that 2Y Treasury notes paid higher yields than comparable bonds issued by Berkshire Hathaway, Procter & Gamble, Johnson & Johnson, and Lowe's, shows that the creditworthiness of the allegedly "risk-free" US Treasuries has come under doubt. This has only happened a few selected times in history<sup>18</sup>.

<sup>&</sup>lt;sup>18</sup> Bloomberg, "Obama Pays more than Buffett as US Risks AAA Rating", 22 March 2010

### Chinese Gold Awakening (after a long slumber)

Gold comes with centuries of tradition in China. As early as 1024 AD, China started circulating official, governmental banknotes that were covered by imperial gold and silver and that established themselves as accepted and stable currency far beyond the borders of the realm<sup>19</sup>.

Central bank and private consumers remain on buyers' side In 1949 Mao Tse Tung banned the private ownership of gold, and said ban was in force until 2003. Not only the Chinese central bank, but also private consumers have been on the buying side ever since and have had a crucial role in the gold bull market. While China accounted for only 5% of total gold demand in 2002, this value has now soared to almost 12%. Nowadays public television even features commercials that advocate buying physical gold and silver. Demand per capita in China is currently only 0.26 grams, but it has increased by some 13% on average in the past five years. The USA and Japan consume about 1 gram of gold per capita every year. If the 1.3bn Chinese were to buy only 1 gram of Gold each, this would result in a demand of 1,300 tonnes – i.e. more than half the annual gold production.

The Chinese gold market continues to boom. Gold sales in May were up 70% relative to the same month in 2009, and the number of 50g bullions sold almost doubled. According to CNTV increasing volumes of capital seem to be flowing from the property market into the gold sector. We are worried about the Chinese housing market, but the property boom comes with different parameters than in the USA or even in Southern Europe, because a majority was financed by equity. The US crisis, on the other hand, was caused by excessive debt and the gradual lowering of lending standards to a level of almost non-existence. The vacancy rate in China is alarming, but the majority of private property transactions are settled in cash. Also, real estate tax is not due annually, but only once at the purchase of the property.

Hu Xiaolian, former director of the State Administration of Foreign Exchange, reported an increase in gold reserves last year by 454 tonnes to now 1,054 tonnes. However, the accumulation did not lead to an increase in the share of gold in terms of total reserves. On aggregate, the share fell from 2.2% to 1.6%, given that the Chinese foreign exchange reserves increased more significantly than the gold reserves alone. It is a given that China will continue to buy massively in the future, as confirmed by the statements made by many an honourable representative of the People's Republic of China. Experience shows that such statements are made in agreement with the central government.

10,000 tonnes<br/>of gold in 10<br/>years?Ji Xianonan, chairman of the State Council's State-Owned Enterprise Supervisory Board, has<br/>recently suggested that China's gold reserves be stepped up to 6,000 tonnes within the next 3-<br/>5 years. He pointed out that within the next ten years China wanted to own 10,000 tonnes of<br/>gold. In other words, China would have to buy almost 40% of the annual production every year<br/>until 2020.

**Gold now** with "Beijing put" This was also a point made by Cheng Siwei, a high-ranking economic representative of China. "Gold is definitely an alternative, but when we buy, the price goes up. We have to do it carefully so as not stimulate the market...China is buying the dips"<sup>20</sup>. These statements fit the current gold charts. China buys on an anti-cyclical strategy in downward stretches. The chairman of the economic committee of the Communist Party also gave a high-profile recommendation to buy gold.

China In September 2009 China announced it was going to offer the yuan-denominated government bonds also to international investors. Should the yuan in the long run become fully convertible, this would mean a big step towards a new global lead currency. This is clear testimony to the fact that China is preparing for the "post-dollar" era, with gold playing a central part in these plans.

<sup>&</sup>lt;sup>19</sup> http://en.wikipedia.org/wiki/Chinese\_currency

<sup>&</sup>lt;sup>20</sup> Telegraph, "China alarmed by US money printing", 6. September 2009

#### China similar to the USA of the 1920s

But the massive foreign exchange reserves might also be interpreted as a sign of weakness. Today's China is similar to the USA in the 1920s. The industrial growth was mainly fuelled by high exports, which in turn were supported by the artificially low currency. On top of that, China is today the world's third-largest creditor nation, and the debt ratio of households and the corporate sector is again similar to the one in the USA in the 1920s. Back then the USA had amassed almost 6% of global GDP in the form of currency reserves within a decade of outstanding prosperity. Should the analogy continue, China would be facing a crisis similar to the one the USA had to deal with in the 1930s. This would result in a deep recession and maybe a collapse of the banking sector. Due to the striking similarities we regard such a development as possible. But in the long run this would also mean that after overcoming this deep crisis China would emerge as strongest political, economic, and financial power. We also consider this a realistic scenario<sup>21</sup>.

We are therefore sceptical with regard to the – generally accepted – belief in the Chinese economic miracle. A mere extrapolation of the past yields a devastating result. The exorbitantly high stimuli managed to prevent the economy from slumping and compensated for the faltering export sector. However, the overcapacities – considerable as they had been before – have increased. The public share in total economic output has been growing steadily, with governmental infrastructure projects accounting for the lion's share of economic growth. On the other hand, the overdue appreciation of the renminibi was further delayed – China is worried about its exports to the EU. The Chinese currency appreciated by 22% against the euro since November 2009.

There is no escaping the basic laws of economics Dubai seems to have granted the world a sneak preview into a classic boom-and-bust cycle, although the Chinese dimensions are 81 times bigger (GDP Dubai: USD 54bn vs. GDP China: USD 4,400bn). Since China is no open economy, it may remain on the growth path for longer. But in the long term, China, too, will not escape the basic principles of economics. The consequences of such a scenario would probably fall on the slightly more positive side for gold. In the past boom-and-bust cycles, gold, traditionally seen as a safe haven, clearly outperformed other asset classes, especially the physical gold market.

<sup>&</sup>lt;sup>21</sup> Please refer to the Erste Group Special Report Oil 2010 "Too fast, too furious...now time for a break"

### Gold is money, nothing else

"...we have a problem, trying to define exactly what money is...<sup>22</sup>

Money is usually credited with three essential functions<sup>23</sup>:

- Means of exchange
- Value storage
- Value measure

#### Over the centuries, the market has chosen silver and gold

Gold fulfils these three central functions without a problem. Gold is universally accepted money. People from all sorts of races, classes, cultures, and religions regard gold as money. Sometimes the terms money and currency are confused with each other. People have needed a stable medium of exchange for as long as people have existed. Cigarettes, seashells, salt, or dried fish have all fulfilled this role temporarily, but in the long run gold and silver asserted themselves. Murray Rothbard realised that **the market had chosen gold and silver as money over the centuries.** Currencies are by definition mediums of exchange, but do not store value nor do they come with an intrinsic value.

Further essential functions of money:

- It has to be easily divided into standardised units
- It has to be negotiable
- It has to be durable and practically indestructible
- It has to be easily recognisable and fulfil standards that can be easily validated
- It has to have a high ratio of value per weight and volume unit
- It must defy random multiplication
- Aggregate supplies have to be high in relation to annual increase
- It has to be mobile, and storage costs have to be low
- Transaction costs have to be low

### The advantages of a gold standard <sup>24</sup>

In his highly recommended essay "Gold and Economic Freedom" from 1966, Alan Greenspan pointed out that without a gold standard there was no way of protecting savings from the devaluation caused by inflation, "*In the absence of the gold standard, there is no way to protect savings from confiscation through inflation. There is no safe store of value.*"

Currencies covered by gold should also contribute decisively to economic, political, and social stability. Many eras (the Roman Empire, the Republic of Venice) experienced centuries of price stability. It was only when they reduced the content of precious metal in their coins that the decline began.

**Gold =** England introduced a gold standard in 1815, and 50 nations followed the example over the next decades. The period of 1880 to 1914 is sometimes literally called the "Golden Era"<sup>25</sup>. The time of the classic gold standard was characterised by continuous economic growth, free flows of capital across country borders, peace in the largest part of the world, political and economic democracy, and cultural and social progress. The standard of living of the working class increased massively. Slavery and serfdom were abolished. Gold and freedom were inseparably linked. In 1914 the world ended up leaving the gold standard as the European governments could not afford to fight a world war under its limitations.

<sup>&</sup>lt;sup>22</sup> Alan Greenspan, 17 February 2000

<sup>&</sup>lt;sup>23</sup> Please see Gregor Hochreiter, "Krankes Geld, Kranke Welt" ("Sick money, sick world"), p.30

<sup>&</sup>lt;sup>24</sup> For further information, please refer to: http://www.goldstandardinstitute.com

<sup>&</sup>lt;sup>25</sup> Murray Rothbard, 1980, "What has Government done to our Money ?", p.46

Gold standard is poison for governments A gold standard would also help regulate the public budget – it basically forces the government into producing balanced budgets. This is probably also why politicians hate it so much. And a gold standard is also independent of the varying economic opinions of the governments. Gold means freedom – a notion also highlighted by the fact that Lenin, Mussolini, and Hitler banned private gold ownership at the outset of their dictatorships<sup>26</sup>.

<sup>&</sup>lt;sup>26</sup> Please see Ferdinand Lips, "Why Gold-Backed Currencies Help Prevent Wars"

### Excursus: the creation of money from the perspective of the Austrian School of Economics

Money – a dark chapter of economics	In the preface to his classic work "The Theory of Money and Credit", Ludwig von Mises says: "Nevertheless, the problem of money has remained one of the darkest chapters in economics to this day" <sup>27</sup> . Unfortunately one has to admit the nothing much has changed. In the following we would therefore like to explain how and why money developed.
	Over the millennia people realised that an economy based on the division of labour yielded distinct material advantages due to the possibility to specialise. However, in order for individuals to survive in such an economy, they would have to resort to barter trade. Money was invented to facilitate the exchange of goods. Ludwig von Mises describes the precondition for money to emerge as follows: "The economic appearance of money requires an economic state that comes with the production based on the division of labour, and where private property does not only consist of goods of first order (consumer goods), but also of goods of more remote orders (capital goods) <sup>#28</sup> .
	Let us imagine a baker (we shall call him Ludwig) who lives in a free village 2000 years ago. His daily production is 10 loafs of bread. In order to keep his bakery running and to satisfy all his other needs on top of bread, Ludwig has to resort to barter. Let us assume that Ludwig fancies tomatoes. In order to buy tomatoes with his surplus bread, he has to find someone with a surplus of tomatoes who also has a need for bread. If Ludwig does not find anyone who is willing to exchange bread for tomatoes directly, he will probably try to find an exchange partner who is willing to exchange a durable good for bread. This means that Ludwig will try to reach his barter goal indirectly. He would also opt for the indirect approach if he wanted to swap one indivisible good for many different goods owned by different people.
Money is rooted in indirect barter transactions	In his indirect barter efforts Ludwig will take into account two essential factors: 1) the more durable a barter good is, the better, and 2) marketability: demand for some goods is more constant and general than for others; Ludwig will therefore try to acquire a very durable, marketable good in his indirect barter transaction.
	In a first step, Ludwig will therefore try to swap his bread against the most commonly used means of exchange. With said means in his possession, Ludwig can now comfortably and without any further detours (i.e. further indirect barter transactions) achieve his barter goals. This process creates a "positive feedback loop". Since the most marketable goods turn into means of exchange, their differentiation and marketability increases further vis-à-vis other goods. The choice of means of exchange differed at first from village to village and from country to country. But as the barter circle increased (N.B. globalisation is nothing but the continuous expansion of the barter circle), the choice of means of exchange narrowed down to two economic goods: gold and silver <sup>29</sup> . Over the centuries, gold and silver asserted themselves over all other contenders of marketable means of exchange due to the outstanding characteristics in terms of durability, divisibility, and of course the limited supply.
Money = most marketable means of exchange	Money is therefore nothing else but the term for the most marketable means of exchange in an economy. In order to acquire said means, every individual in the economy has to provide a service for which there is demand from the market. The money is therefore said to be covered by goods. The reader will agree that this system is very clever in that it guarantees that every individual has to provide the market with a service that is in demand in order to bring said means of exchange into their possession and thus ensure survival. Market participants making empty promises and providing the market with deficient services are quickly dressed down and cannot spread their influence. With the exception of theft, there is no alternative but to serve the general public in order to acquire the most marketable means of exchange and thus make a

 <sup>&</sup>lt;sup>27</sup> Ludwig von Mises: The Theory of Mooney and Credit , preface p. III
 <sup>28</sup> Ludwig von Mises: The Theory of Mooney and Credit, p. 3
 <sup>29</sup> Ludwig von Mises: The Theory of Mooney and Credit , p. 8

living. The most marketable means of exchange naturally turns into the means of payment of an economy.

Free market should be allowed to choose its means of payment

Unfortunately this clever system is undermined if it is not the market that decides on the means of payment, but if the means is set and controlled by a central authority. If the natural circuit is broken, all sorts of loopholes emerge. Individuals close to the central authority may cheat other market participants out of the fruit of their labour without the theft coming to the surface. This means that a free market economy needs more than property rights to production factors and consumer goods. The other important and indispensable component is the free choice of the means of payment. Remarkably, this fact has become completely absurd to us these days. It is almost impossible for us to imagine the free choice of the means of payment by market forces. This is probably also the fact because historically speaking, our means of payment has always been centrally controlled by whatever form of government we had. This situation is of course based on an elementary reason: it simplifies the control and manipulation of the resource allocation. The majority of the population is not even aware of the damage that is done to them by the central money manipulation. The free choice of the means of payment would lead to a fairer allocation of real goods and increase the standard of living for all individuals of an economy. Because without any service demanded by the market there is no chance for a barter service, i.e. no chance to acquire the most marketable means of exchange. A market based on a freely chosen means of exchange would be the controlling authority for the benefit of the general public; it would nip any misallocation in the bud. Every individual who is member a of the economy would have to excel for the benefit of his fellow man in order to ensure his own survival. It would be impossible to leech upon others, unless by means of straightforward theft.

Although we are not fully aware of it anymore, we still live in a society that is based on the division of labour and barter trade. Every employee and every company, in a first step, exchanges their goods and services to the most marketable means of exchange, or in other words, the official means of payment. Real growth in prosperity can only be achieved if more goods of better quality up for barter are available to all members of society. In contrast to what some theoreticians (wrongly) believe, the increase in the centrally controlled monetary units does not create an increase in prosperity. That is like believing that a formerly blue car that has been painted red now goes faster on account of it being red.

Keynes would shout "eureka!" on the island of Maupiti

Let us for example imagine a secluded island society. We shall call the island Maupiti. The Maupiti economy is based on the division of labour, and cowrie shells are the most marketable means of exchange – and there are exactly 1,000 units available. One night a tropical thunderstorm destroys a majority of the means of production. However, not only did all cowrie shells remain intact – the storm also washed ashore 1,000 more shells. In the face of the doubled number of cowrie shells in Maupiti, John Maynard Keynes would shout "eureka!" and contend that now, magically, every citizen of Maupiti is twice as rich as before and that the storm was a blessing. However, if you ask the citizens of Maupiti right after the catastrophe, they will hold a different point of view. As a result of the sudden loss of means of production, they will have to deal with a lower standard of living although the amount of monetary units has doubled. This example is supposed to illustrate that it is absurd to gauge the prosperity of a society in monetary units. We live in a society that is based on the division of labour and barter trade, and our prosperity depends exclusively on the number and quality of consumer and capital goods that we as society own.

Excursus by Gerald Walek, CFA

### Manipulation vs. intervention

There is a thin line between intervention and manipulation... There is a thin line between intervention (normally by the government, government-related institutions, or more generally, politicians) and manipulation (negative connotation - as in "influence"). The (sometimes massive) interventions on the bond and currency (foreign exchange) markets are official and legitimised. The German minister of economic affairs, Rainer Brüderle, has recently confirmed that the Federal Reserve Bank intervenes on the foreign exchange market<sup>30</sup>. He pointed out that it was normal and customary for the central banks to do so, as every central bank had a target band for the exchange rate of the own currency. It would therefore be naïve to think that this was not happening in the gold market.

"So far as manipulation was concerned, it appeared to have one of 3 objects: Making the public buy, sell or keep out. And I judged that the manipulators were endeavouring to do the opposite." Richard D. Wyckoff

The gold sector is "blessed" with its daily dose of conspiracy theories. However, evidence has been found in the past years that clearly points to efforts to push the price of gold and silver down. It is obvious that a rising gold price signals a falling confidence in the financial and currency system. It is also logical to assume that neither the central banks nor the governments are thus interested in such a scenario. This means the motives for a lower gold price are clear and plausible.

The quotes of numerous well-respected protagonists are taking the same line:

"That's why the possibility that gold would be sold caused the gold price to drop by \$5. You don't have to sell gold, you just have to breathe [that you may] one day<sup>31</sup>

"...Joint intervention in gold sales to prevent a steep rise in the price of gold, however, was not undertaken. That was a mistake"<sup>32</sup>

"Nor can private counterparties restrict supplies of gold, another commodity whose derivatives are often traded over-the-counter, where central banks stand ready to lease gold in increasing quantities should the price rise."<sup>33</sup>

"If we are dealing with psychology, then the thermometers one uses to measure it have an effect. I was raising the question on the side with Governor Mullins of what would happen if the Treasury sold a little gold in this market. There's an interesting question here because if the gold price broke in that context, the thermometer would not be just a measuring tool. It would basically affect the underlying psychology.."34

The last statement is particularly remarkable because it likens the gold price to the thermometer of the financial system. The discrepancy between Greenspan's line as scientist (compare "Gold and Economic Freedom") and later as chairman of the central bank is enormous.

We can also substantiate the fact that the gold market is subject to interventions with numbers. The following chart shows the intraday fluctuations of gold in the past four years. The past approximately 1,000 trading days show a clear intraday pattern: while the gold price tends to rise in the early (Asian) trade, it falls dramatically after the first and second fixing in London (as New York starts to trade) and then slowly recovers throughout the rest of the day.

<sup>&</sup>lt;sup>30</sup> "German Economics Minister confirms Federal Reserve Active in FX Markets", The Prudent Investor, 28.May 2010 <sup>31</sup> Chairman Miller (Fed chairman 1978 - 1979)

http://www.federalreserve.gov/monetarypolicy/files/FOMC19780321meeting.pdf <sup>32</sup> Paul Volcker, formerly Federal Reserve Chairman and now advisor of Barack Obama, 12 February 1973 <sup>33</sup> Alan Greenspan, 24 July 1998

http://www.federalreserve.gov/boarddocs/testimony/1998/19980724.htm

Alan Greenspan, 18 May 1993

www.federalreserve.gov/monetarypolicy/files/FOMC19930518meeting.pdf, p. 42

#### Average intraday pattern 2006-2010 The average gold price has been obtained from 4 years of data – fron March 2006 through to March 2010 approximately 1000 trading days 817.75 817.7 817.65 817.6 817.55 8175 muntum 817.45 817.4 817.35 817.3 817.25 817.2 817.15 817.1 York Open Outcry York Electronic Mark Londo Hong Kong Istanbul Mumbai Shanghai Tokyo Tokyo 100 20:00 21:00 22:00 23:00 00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 NYT 00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 GMT

Source: www.sharelvnx.com

"Whistle blower" Andrew Maguire Andrew Maguire In April another piece was added to the big manipulation puzzle. Andrew Maguire, a professional silver trader in London, explained the role of the large banks in interventions on the gold and silver market<sup>35</sup>. On top of that, Maguire had warned the CFTC a few days in advance of manipulations in silver. The predicted price pattern came through 1:1. A few days later Maguire was severely injured in a mysterious car accident. According to the NY Post<sup>36</sup>, an investigation into the manipulations on the silver market seems to be underway. Should the allegations be confirmed, a short squeeze would be the result.

That said, the primary trend in gold and silver is clearly headed upwards. According to the Dow Theory, the primary trend cannot be manipulated because the inherent market forces are too strong.

### Paper gold vs. physical gold

Discrepancies<br/>between<br/>physical market<br/>and paper goldThere are massive discrepancies between the contracts based on gold price quotations at the<br/>COMEX and the price of physical gold. At the moment physical gold commands a premium of<br/>up to 20%. According to Paul Mylchreest the London OTC market trades 2,134 tonnes of gold<br/>every day. This is 346 times the daily production and close to the global annual production.

**Gold market based on fractional reserve system** According to Jeff Christian, founder of CPM Group, the trade on the LBMA is based on a leverage factor of 100:1<sup>37</sup>. This means that physical gold is traded at a factor of 100. If a number of market participants were to demand physical delivery at the same time, the contracts could never be settled. Normally only a small percentage is actually delivered in physical terms,

<sup>&</sup>lt;sup>35</sup> www.gata.org, "A London trader walks the CFTC through a silver manipulation in advance"

<sup>&</sup>lt;sup>36</sup> "Feds probing JPMorgan trades in silver pit", New York Post, 16 May 2010

<sup>&</sup>lt;sup>37</sup> www.gata.org, "It's admitted to the CFTC: London gold market is a Ponzi scheme"

but physical delivery remains the core clause of the contract. This is some cause for concern given that gold is often bought as a safe haven.

From a historical perspective, a default would not be unusual. At the LME, the largest base metal exchange in the world, physical deliveries of nickel had to be suspended in 2006, which was equal to a default. The principle of "overbooking" is well-known from airlines or restaurants, but the situation of gold and silver is of course much more dramatic.

Financial weapons of mass destruction The volume of gold derivatives is worrisome as well. According to the Bank for International Settlements, the nominal value of all gold derivatives at the end of 2009 amounted to USD 423bn. The value of all OTC derivatives (as of the end of December) increased to USD 615 trillion. According to OCC the aggregate volume of derivatives at the end of 2009 in the USA amounted to USD 212.8 trillion. Only five banks account for 97%% of the market.



#### OTC gold derivatives

Sources: BIS Dec 2009, Erste Group Research

#### CFTC hearing / position limits

Although limits (caps) on positions on the future exchanges are currently subject to discussion, their introduction would not have much of an impact. The markets would probably adjust quickly. In a historical perspective, the main gold exchanges were based in Spain, Antwerp, Amsterdam, and most recently London and New York. On top of that the trend is intact: according to the Futures Industry Association (FIA) trading volume in Europe and the USA has fallen by some 9%, whereas the futures turnover in Asia has increased by almost 26%. Turnover on the MCX (Multi Commodity Exchange of India) increased in 2009 by 273%, while the Shanghai Futures Exchange reported an increase of 210%. Asian futures exchanges nowadays account for almost 35% of global trading turnover.

Mumbai and Shanghai instead of London and New York? The equity market has already seen the paradigm shift: Shanghai passed the Tokyo stock exchange last year in terms of turnover. Only the NYSE trades higher volumes. Therefore we believe that the relevance of the COMEX will shrink in the future. The benchmark exchanges for gold will probably be located close to the biggest demand: in Shanghai and Mumbai.

### Demand

Gradual shift in investor preferences

For the first time in many years investor demand might exceed jewellery demand in 2010. In 2000, investment demand accounted for only about 4.8% of total demand, in 2009 for as much as 37%. We think that this marks a clear bullish trend reversal, setting a new phase of the bull market. In our opinion investors will be dominating the demand side from now on.

#### Jewellery demand

Jewellery demand on the decline consumers are proving pricesensitive

Jewellery demand continued to fall in 2009, with consumers showing an elevated degree of price sensitivity. Thailand and Turkey recorded the most significant decreases, whereas China actually posted a small increase. The Indian jewellery demand plummeted by almost 20% in 2009 to 340 tonnes. This was due to the high price and the extreme drought, which destroyed a large part of the crop. The Indian farmers were having a hard time compensating for the low income, as illustrated by the low purchases made during the Diwali festival. In the fourth quarter demand picked up substantially again and exceeded 100 tonnes. This improving trend has so far continued in 2010. In the first four months of 2010 jewellery demand was significantly up on the figure of the referential period in 2009. The Bombay Bullion Association reported an increase in demand of 74% to 126 tonnes in the first four months of the year. This is particularly remarkable given that the import tax on gold was raised by 50% to INR 300 (ca. USD 18/ounce). The tax had been raised already in July 2009, which led to an increase in the supply of recycled gold and a decrease in imports.



#### Inflation rate China vs. India

Sources: Datastream, Erste Group Research

### Investment demand

The demand for gold by investors is still on the rise, soaring to 1,270 tonnes in 2009. ETFs especially increased by a substantial amount (594 tonnes). Gold seems to be making it into the asset allocation slowly but steadily, given that it comes with many features that help optimise the portfolio. Because of their negative correlation to numerous other asset classes, the relatively low volatility, and the optimisation of the so-called efficient frontier<sup>38</sup>, precious metals are going through a renaissance of their investment class (please also see the chapter "Gold is

<sup>&</sup>lt;sup>38</sup> The efficient frontier is the maximum expected yield at a given level of risk

the optimal portfolio insurance"). On top of that, investors are realising that gold's value is not contingent on any promise by a government, institution, or person.

"Smart money" still welldisposed towards gold

A trend that we described two years ago has now gained more ground: famous hedge fund managers have been gradually discovering their fondness for gold. John Paulson, one of the best-known hedge fund managers in the world, has recently launched a gold fund. Paulson holds large investments in AngloGold Ashanti, Gold Fields, Kinross Gold, Gabriel Resources, and Centamin. On top of that he holds close to 8% in the SPDR Gold Trust, the largest gold ETF worldwide. George Soros, who in Davos had announced that gold was currently the "ultimate asset bubble" with "excessive" valuations<sup>39</sup>, doubled his investment in SPDR Gold last year. The negative public statement thus seems to have been fuelled by self-interest. And Thomas Kaplan<sup>40</sup>, CEO of Tigris Financial, has funnelled all of his assets into gold – both physical gold and companies such as NovaGold and Gabriel Resources. The fact that junior explorers seem to attract a higher volume of investment these days suggests the confidence in the duration of the bull market.

*"I have never been a gold bug, it is just an asset that, like everything else in life, has its time and place. And now is that time!"* Paul Tudor Jones <sup>41</sup>

Holder Name	Portfolio Name	Source	Amt Held	% Out	Latest Chg	File Dt
1) PAULSON & CO	PAULSON & CO	13F	31,500,000	7.90		12/31/09
<ol> <li>BANK OF AMERICA CORP</li> </ol>	BANK OF AMERICA	13F	8,750,532	2.19	2,304,053	3/31/10
<ol> <li>BLACKROCK ADVISERS</li> </ol>	BLACKROCK ADVISOR	13F	6,320,705	1.58	-59,000	3/31/10
4) SOROS FUND MANAGEME	SOROS FUND MANAGE	13F	6,178,342	1.55	3,728,022	12/31/09
5) MORGAN STANLEY & CO 1	MORGAN STANLEY	13F	6,131,890	1.54	-339,298	12/31/09
6) JP MORGAN CHASE & CO	JP MORGAN CHASE &	13F	4,739,869	1.19	-434,554	3/31/10
<ol><li>7) NORTHERN TRUST CORP</li></ol>	NORTHERN TRUST CO	13F	3,653,559	0.92	365,931	12/31/09
8) WELLINGTON MANAGEMEN	WELLINGTON MANAGE	13F	2,791,370	0,70	-30,870	12/31/09
<ol> <li>9) MASON STREET ADVISOR</li> </ol>	MASON STREET ADVI	13F	2,774,800	0.70	97,500	3/31/10
10) SCHRODER INVESTMENT	SCHRODER INVESTME	13F	2,655,425	0.67	2,581,925	3/31/10

#### Screenshot: Largest shareholders SPDR Gold Trust

Source: Bloomberg Screenshot, 14 May 2010

But not only the hedge funds have discovered the attractiveness of the yellow precious metal. Most recently numerous US pension funds (e.g. Teachers Retirement Scheme Texas and New Jersey Division of Investment) have reported investments in gold ETFs and mining shares.

Generally the investment demand from Asia should continue to pick up speed on the back of the new futures markets, the deregulation of physical trading, and the new ETFs that are currently being promoted massively in Asia. The emerging nations such as China and India, but also Russia, Brazil, and Indonesia show a significantly higher affinity towards gold than the G7 states. That population growth in the emerging markets, which outpaces the growth rates in the developed countries by a sizeable degree, should have positive implications for gold demand in the long run.

For example in Vietnam gold has a higher significance than in the Western world. The Vietnamese per capita demand is more or less on par with the German one, although the German GDP is 40 times as high as the Vietnamese one. According to the World Gold Council (WGC) the Chinese gold consumption should double within the next ten years. If China were to attain the same per capita consumption as Hong Kong or Saudi Arabia, jewellery demand would rise to at least 4,000 tonnes.

<sup>&</sup>lt;sup>39</sup> Bloomberg.com, "Soros signals Gold Bubble as Goldman Predicts Record", 1 March, 2010

<sup>&</sup>lt;sup>40</sup> Wall Street Journal, "A billionaire goes all-in on gold", 22 May 2010

<sup>&</sup>lt;sup>41</sup> FT Alphaville, "Paul Tudor Jones loves gold", 29 October 2009

#### Gold demand in grams per capita



Sources: Bloomberg, Datastream, Erste Group Research

Meanwhile the number of counterfeit gold bullions has been on a rapid rise. A number of goldplated tungsten bullions were discovered in Hong Kong. Moreover, rumours are rife that numerous 16-ounce gold plated tungsten bars had been offered to W.C. Heraeus (the largest private refinery).

### ETFs

#### "A Gold Mine is a Hole in the Ground with a Liar on Top", Mark Twain

Since the introduction of this financial instrument in 2004, the market capitalisation of all ETFs has increased to currently USD 70bn. We think that the gold mining shares have suffered from this surge and that new gold exposure has been mainly allocated to ETFs. The specific valuation criteria, the operational risk, political uncertainties (nationalisations, legal framework), old scandals (Bre-X), and a lack of experience seem to have led many investors to prefer ETFs over gold shares.



#### ETFs covered by physical gold

### **De-hedging**

De-hedging of gradually receding relevance to demand At the end of 2009 the hedged position of gold miners amounted to almost 8mn ounces (i.e. close to 250 tonnes). Barrick Gold reduced its hedge book dramatically. The Canadian market leader has cut its hedged positions by 5.3mn ounces (165 tonnes). In order to fund this strategy, the company increased its capital by USD 4bn and also issued USD 1bn worth of bonds. Barrick's hedged positions had seen a high of more than 20mn ounces. AngloGold and Ashanti account for the majority (i.e. close to 45%) of the existing positions. We expect dehedging demand to gradually decrease and believe that in the long run the gold industry may shift towards hedging again so as to ensure that major projects can be planned with a certain level of accuracy.

### Central banks

In 2009 we experienced one of the most dramatic trend reversals of the past decades: for the first time since 1988, central banks were net buyers of gold again. On aggregate, almost 400 tonnes were bought. This number includes China's purchases. Given that central banks are not gold traders but investors with a long-term horizon, this constituted a clear rupture of the former trend. For 2010 and beyond we expect this new trend to continue.

### Changes in the officially documented gold reserves of central banks and international organisations 1989-2009



Sources: Wirtschaftswoche, Bloomberg, Wikipedia

**CBGA 3 clearly positive for the gold market** The Central Bank Gold Agreement (CBGA) was renewed in August 2009 for a period of five years. It now stipulates a maximum volume of 400 tonnes of gold (formerly 500 tonnes) to be sold per year. Along with the central banks of the Eurozone, the Swedish and the Swiss central banks also ratified the agreement. We interpret the renewal of the agreement as clearly positive. Generally the agreements tended to stabilise and calm the gold market in the past. After the first agreement had been announced, the gold price increased by 14% in three days.

Maximum sales quota of CBGA 3 not likely to be called on The CBGA 3 takes into account IMF sales of 403.3 tonnes. 200 tonnes have already been sold to the Indian central bank, 10 tonnes to Sri Lanka, and 2 tonnes to Mauritius. This means that the transactions were settled outside the market. The remaining 191.3 tonnes are supposed to be sold on the market whilst attempting to keep a lid on the impact on prices. Eric Sprott from Sprott Asset Management was interested in buying the 191.3 tonnes but was turned away for paltry reasons. In 2010 the IMF has sold 5.6 tonnes in February and 18.5 tonnes in March on the market. The central banks have only sold 1.3 tonnes since the beginning of the third

agreement. We do not expect sales to even get close to the region of 400 tonnes, i.e. the maximum quota, given that the major sales programmes of the European central banks have already come to an end.

The top three holders of gold are Germany, France, and Italy with an aggregate 8,305 tonnes. Germany already announced it would only sell small quantities at best, as did France. Italy may be the biggest question mark. Axel Weber has repeatedly advised against the Bundesbank selling any of its gold, pointing out that "gold sales cannot replace sustainable consolidation strategies in financial politics"<sup>42</sup>. The PIGS countries (Portugal, Italy, Greece, Spain) own more than 3,300 tonnes of gold. There is a chance that these countries may consider selling some of their gold in order to consolidate their budgets in the short run.

Within the framework of CBGA 2, a total of 1,876 tonnes of gold was sold, i.e. 616 tonnes less than the maximum quota.



#### Volumes of gold sold within the framework of CBGA2

Sources: Bloomberg, Erste Group Research, FuW

The Indian central bank bought gold worth USD 6.7bn in December – compared to the Chinese reserves of USD 2.27 trillion, this is a negligible quantity. The Royal Bank of India currently holds close to USD 20bn or 6.5% of its reserves in gold. But the purchase shows a clear paradigm shift: central banks of emerging countries are nowadays prepared to buy gold at market prices in order to diversify their reserves. Venezuela has announced it will continue buying, with 20 tonnes coming from domestic production and the remaining 20 tonnes to be sourced from the world market. Russia has also bought 20 tonnes already in 2010, and Kazakhstan 3.1 tonnes.

 $<sup>^{\</sup>rm 42}$  Die Welt, interview with Axel Weber, December 2004



Central bank holdings in million ounces vs. gold price

Source: Bloomberg

China's <u>official</u> records show holdings of 1,054 tonnes, i.e. some 1.8% of foreign exchange reserves. However, should China actually hold 5% in gold, this would be equal to almost 2,400 tonnes. If China wanted to pass the USA, it would have to buy the entire gold reserves of France, Italy, and Germany. Either way, China will continue to accumulate gold, if only to maintain the current share in terms of total reserves (close to 1.9% at the moment).

### Industrial demand

Industrial demand fell by almost 13% from 2008 to 2009. In Q3 and Q4 demand increased noticeably from the electronic sector. The rising gold price tempts some manufacturers into using copper instead, but copper tends to come with suboptimal characteristics in most industrial applications in comparison with gold. On top of that, the input is minimal anyway, and so therefore is the cost factor.

The chemical properties of gold and its relevance for a whole range of technological applications are astounding. For example it is possible to extend an ounce of gold into a thread of 150 kilometres of length. It is highly ductile, which means that one ounce can be transformed into a plate of almost 40 m<sup>2</sup>. Gold is used as light reflector, in the high-wave infrared region (e.g. in aerospace), and as thermal insulator (in windows).

### Supply

Recycled gold supply smoothes the trend Mining production covers only some 60% of the supply side. The supply of recycled gold increased last year to almost 40%. The price increase also led to an increase in the recycling of gold. We think that this is a healthy process, and while slowing down the upward trend, it also makes it more stable. It prevents an overheating and facilitates a continuous, stable, and long-term upward trend. The investor structure is undergoing a shift that will result in the gradual decrease in physical holdings.

#### Gold supply 2009 (3,890 tonnes)



Sources: Bloomberg, Erste Group Research, VM Group, Kitco.com

### Mining production

Supply from mining marginally higher – "peak gold" scenario still intact

We saw the all-time high in annual gold production in 2001 at 2,600 tonnes. Although the 2009 production was up from earlier years, this is still in line with our <u>peak gold scenario</u> postulated three years ago. The production in 2009 was still 9.6% lower than it had been at its 2001 high. We believe that gold production might again record a slight increase in 2010, but this would not solve the long-term structural deficits.



#### Production of the largest producing nations

#### Traditional producing nations losing importance

Last year Russia, Indonesia, and China were among the countries to report a particularly strong increase in output. The traditional producing countries (USA, Canada, Australia, and South Africa) still account for 45% of mine production. All four nations are probably past their production peak. Although Canada is the leading nation in terms of gold mining (more than 50% of all companies in the sector are listed in Canada), Canadian production itself remains on a downward path, having fallen by 43% since 1991. A few interesting projects taking up production in 2011 (among others Malartic of Osisko Mining) should slow down the downward trend.

#### Gold production by countries



Source: USGS 2009

China remains the no.1 producing nation In 2007 China took over from South Africa as the world's biggest gold producer. In 2009 the country produced 314 tonnes of gold (up 11% on 2008). Production has increased by 80% in the past ten years. However, it will be difficult for China to maintain the lead. According to USGS China currently holds close to 6% of worldwide gold deposits. Provided the estimates are correct, the proven reserves would be exhausted in seven years. But in contrast to South Africa, which exports most of its gold, China keeps it inside the country. Australia managed to move up to second place in spite of a decline in output of 2.3%.

South Africa is a good example of peak gold The gold veins in Witwatersrand look a lot like huge oil fields (such as for example Ghawar), which also experienced their peak output 30 years ago. According to the South African Journal of Science, the world-renowned mines in Witwatersrand are already 95% exploited. Within the next ten years production will finally fall below 100 tonnes. On top of that, the energy utility company Eskom announced it would increase electricity rates by 45% p.a. by the year 2013 in order to be able to modernise the chronically dilapidated grid. More stringent environmental regulations and excessive demands by the unions add to the predicament. As a result, total cash costs of Harmony Gold increased to USD 829/ounce.

#### South Africa production 1930-2010



Source: Sharelynx.com

#### New discoveries only replace half of the production

According to Metals Economics Group, 62 significant discoveries were made in 1997 (i.e. more than 2mn ounces of reserves and resources). These discoveries totalled about 377mn ounces worth of deposits, which is about half of the production in the same period of time. The majors (with a production of more than 450,000 each) were successful in replacing their reserves in 1999-2008. The costs of replacing an ounce of gold reserves (including exploration and acquisition) amounted to USD 83/ounce. According to MEG out of the 228 projects in advanced stages, 19% are within politically stable jurisdictions, 57% in dangerous regions, and 24% in high-risk regions. Gregory Wilkins, former CEO of Barrick Gold, said that the list of countries that Barrick avoided, was getting longer by the day. The instability of many countries in Latin America, influenced by Hugo Chávez, is too high a risk to bear for Barrick. And Peter Munk, the legendary founder of Barrick, called the situation on the supply "tragic", with large deposits nearing the end of their useful lives while new production is becoming ever more difficult and expensive.



#### Resources vs. gold production 1997-2008

Source: Metal Economics Group

The easy-to-reach fruits have already been picked, as is also illustrated by the constantly falling degree of mineralisation. From 1830 to 1920 the average content of gold per tonne was 22g, today it is 0.8g per tonne. On the one hand this is due to economies of scale, the increased gold price, and new technologies (heap leaching etc), on the other hand the easily extractable, high-grade deposits are already depleted.



#### Average degree of mineralisation vs. gold price

"All-in" costs at As a result, cash costs increased substantially, reaching almost USD 500/ounce in 2009.
 USD 740/ounce Meanwhile the "all-in costs" increased to USD 740/ounce. Not only the production costs are rising exponentially – the expenditure involved in building new mines is as well. Jamie Sokalsky (CFO of Barrick Gold) recently said that while a new mine would have set you back by about USD 300-500mn only a few years earlier, the costs had now increased to USD 3-5bn in many cases. Barrick continues to budget for production declines of 1mn ounces per year; 2009 was a statistical outlier.



#### Cash costs 2003 - 2011e

Sources: Erste Group Research, Company Data

Brownfield instead of greenfield

The investment outlays for greenfield exploration projects are clearly too low. We can see considerable potential in the segment of junior explorers. The focus of explorations is obviously on the development of brownfield operations and existing resources rather than on the hunt for

Sources: Company Data, MEG, Bloomberg, Erste Group Research

new deposits. In 2003, greenfield operations accounted for 50% of total exploration activities, whereas this number has now fallen to 38%. This is not the least due to the decidedly more difficult access to financing for juniors since 2008.



### Resource nationalism

"If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidise it." Ronald Reagan The plan of the Australian government to introduce a resource tax called a 'Super Profits Tax' of 40%, triggered bad sentiment and a crash in share prices. The introduction of the tax was scheduled for 2012, and the law was supposed to be passed at the end of 2010. The tax would severely burden the earnings of the big players BHP Billiton, Xstrata, and Rio Tinto, which in a first reaction cut their exploration budgets for Australia. We do not think that the tax will be introduced in the current draft form. Lobbyists and the massive resistance of the population should facilitate a compromise. However, to us the Australian mining tax exemplifies the future of the industry, and there is a chance that other countries will follow suit. Or so some initial press articles in Brazil, South Africa, Peru, and Canada would suggest. In Chile a temporary tax hike has gone through, with the revenues earmarked for the re-development of the areas hit by the earthquake. Brazil is considering a tax on the export of iron ore. These measures illustrate impressively the shortsightedness of the legislation.

### **Gold shares**

In 2010 only a few sectors will experience a combination of high sales growth, rising margins, and earnings growth. The gold sector will definitely be among those.

Changes in earnings per share Gold Bugs Index 2000-2013e (%)



Sources: JCF Factset, Bloomberg, Erste Group Research

Net margin Gold Bugs Index 2000-2013e (%)



Sources: JCF Factset, Bloomberg, Erste Group Research

On this basis we compiled a basket of goldmining shares (ISIN: AT0000A0DY51), which contains companies that should benefit particularly from this development. At the moment the following shares are in the basket (N.B. the new company selection and rebalancing is due at the end of July).

Goldmining-Basket				
ISIN-Code	Company			
CA0084741085	AGNICO EAGLE			
CA0115271086	ALAMOS GOLD			
CA1520061021	CENTERRA GOLD			
CA2506691088	DETOUR GOLD CORP			
CA2849021035	ELDORADO GOLD			
CA3809564097	GOLDCORP			
CA36467T1066	GAMMON GOLD			
CA3901241057	GREAT BASIN GLD			
CA6882781009	OSISKO MINING			
CA7562971076	RED BACK MINING			
CA98462Y1007	YAMANA GOLD INC			

Since its issue in July 2009 our basket has almost doubled in value and has thus outperformed all benchmarks:



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Dilution as most negative factor of gold shares
 Our analysis shows that the companies relying on organic growth (i.e. on exploration rather than acquisition) were clear outperformers and generated a substantially higher ROCE. The number of shares outstanding in the sector has doubled since 2005. This massive dilution – as well as the emergence of ETF's - is a reason for the disappointing performance of the sector. Production per share has been on a gradual decline as well, from 2.4 in 2003 to 1.2 at the moment.
 Sector

Sector As already said in earlier Gold Reports, the consolidation of the gold sector should continue. The effects of the financial crisis were still felt in 2009. Although acquisition volume was substantially up at USD 7bn in comparison with the year 2000, it still only reached one third of the high in 2006. Among the biggest acquisitions were the takeovers of Comaplex by Agnico Eagle, Brett Resources by Osisko Mining, Underworld by Kinross, and Moto Gold Mines by Randgold and AngloGold Ashanti. 28% of all takeovers happened in Africa, 18% in Latin America, 18% in Asia, 15% in Australia, 14% in Europe, and 7% in North America<sup>43</sup>.

<sup>&</sup>lt;sup>43</sup> Metals Economics Group Strategic Report, May 18, 2010

#### Takeovers since 2000



Sources: Metals Economics Group Strategic Report, Erste Group Research

The long-term analysis of M&A activities reveals that the most attractive take-over targets were companies with market capitalisations between USD 200 and 500mn. The median of the past ten years is USD 140mn, the average USD 280mn. Whereas the focus used to be on producing companies in previous years, it has now shifted to companies in the development phase. On average, premiums were 32% with a clear tendency towards higher premiums recently.

The pressure on the companies is enormous. Barrick Gold for example has to replace almost 8mn ounces in reserves every year. Since extraction is never 100%, the company has to discover 10mn ounces every year. We expect consolidation to continue. The end of the cycle should see an increasing numbers of majors getting taken over as well.

Style analysis comes up with interesting results The style analysis shows what fundamental and technical factors have a significant bearing on the price performance of gold mining shares. We formed a basic population of 153 shares and analysed their performance over a duration of ten years. For the model we sorted the companies by 34 different factors and contrasted them with their respective monthly performance. Then we subtracted the average performance of the lowest quantile (20%) for every factor from the performance of the highest quantile (80%). The difference explains the magnitude of the relative performance of the lowest-valued shares for example on a PE basis in comparison with the shares with the highest valuations in a specific month. However, when considering this ten-year analysis one has to bear in mind that a certain survivorship bias (bankruptcies) cannot be ruled out.



#### Style analysis gold shares (monthly cumulative returns)

Risk, size, and momentum as most important factors

We have found three significant long-term trends in our population of gold shares: shares with high volatility (risk), low market capitalisation (size), and low price momentum were clear outperformers. Or in other words: the risk of investing in small gold mining companies with an up to that point weak performance and high volatility has rewarded investors in the past ten years with an above-average performance.

In contrast to the situation in classic equity indices, factors such as valuation, growth, earnings estimate momentum and even profitability of the companies have had no significant influence on the share price performance in the past ten years. Only high sales growth has had a somewhat positive effect on the performance since 2006. The recommendations by primary analysts on the other hand (both buy and sell as well as target price upside) were well worth disregarding and even ended up recording a small underperformance. With the exception of 2008 and 2009 it was also beneficial to hold shares that were recording an above-average increase in volumes (i.e. liquidity).

The estimated PE for the gold and silver producers in the Gold Bugs index amounts to 26x on the basis of 2010 results, and is expected to fall to 20x by 2013. This suggests that the market is by no means harbouring euphoric expectations.

Sources: Factset, Bloomberg, Erste Group Research



#### Gold Bugs Index - PE-Ratio

### **Technical analysis**

The long-term chart shows an **intact**, **long-term bull market**. The price constantly remains on the upper barrier of the Bollinger band, which indicates a strong upward momentum of the trend. At the same time, the RSI also remains in the bull market range, and the MACD shows convergence. In the monthly chart, the price is above the short/medium and long-term moving average. This means that the upward trend is intact for every single time horizon. After a number of all-time highs, the gold price is now in uncharted territory. The Fibonacci projection level (261.8% of the last correction) yields a target price of USD 1,600.



Sources: Bloomberg, Erste Group Research

Resistance becomes support The gold price broke out of 18 months of consolidation last autumn. The critical USD 1,000 mark was unsuccessfully tested four times before the impulsive breakout was launched. According to one of the basic rules of technical analysis, the USD 1,000 should now act as a massive support. An inverse shoulder-head-shoulder formation emerged during the correction, with a target price of USD 1,300. The indicators (MACD and RSI) show a convergence, i.e. they confirm the validity of the upward trend.



Sources: Bloomberg, Erste Group Research

The fact that gold has been showing such a strong performance during this weak seasonal phase, and is now increasing in synch with the US dollar, substantiates our optimism. Therefore the, from a seasonal angle, strongest phase could herald a period of substantially increased momentum. At any rate, the final blow-off phase with parabolic increases is still ahead of us. The Elliott Wave Theory calls this the "5<sup>th</sup> wave extension" that takes place in the commodity sector. In terms of sentiment, this phase is characterised by overwhelming optimism and a sort of "this time it's different" mentality. **We expect gold to reach our target price of USD 2,300 in this trend phase.** 

"Currencies don't float, they just sink at different rates" Clyde Harrison

The upward trend is intact for all time horizons. On top of that the (downward) trend is also
ey intact in almost all paper currencies around the world. The following chart shows the downward trend in the US dollar, the Swiss franc, the Chinese yuan, the Indian rupee, the British pound, the euro, and the Australian dollar relative to gold. Only when divergences emerge will it be time to re-assess the bull scenario.



Sources: Bloomberg, Erste Group Research

### Seasonality

As already explained in the last three Gold Reports, gold is highly seasonal. **Traditionally**, **June tends to be a good time to buy**. The upward momentum is strongest in the second half of the year. September is usually the strongest month, which is due to the wedding season and the Diwali Festival in India. On top of that, Ramadan, jewellery purchases in the run-up to Christmas, the Chinese National Day, and the Chinese New Year festival play an important role in the seasonality. And given that the seasonality is no secret anymore, it reinforces the performance as a self-fulfilling prophecy.

Seasonality of the gold price (average monthly returns)



Sources: Datastream, Erste Group Research

The following table illustrates the year-lows and highs since the beginning of the bull market in 2001. The lows were most often hit in the period of January to May, whereas the highs would most often occur from September to December.

	Year-low	Year-high	
2001	2 April	17 September	
2002	4 January	27 December	
2003	7 April	31 December	
2004	10 May	2 December	
2005	8 February	12 December	
2006	5 January	12 May	
2007	10 January	8 November	
2008	24 October	17 March	
2009	15 January	2 December	

Sources: Bloomberg, Erste Group Research

Clear patterns emerge also on a weekly basis: Wednesdays and Fridays tend to perform above average, whereas the beginning of the week is usually weaker.



#### Gold 3 Yr (1d-return: mean & median)

Source: Datastream, Bloomberg, Erste Group Research

The Hulbert Gold Newsletter Sentiment index (HGNSI) does not indicate any form of "irrational exuberance" either. The sentiment that surrounded the new all-time high in May was far less enthusiastic than the one at the previous all-time high in December. The index was at 46% in May after 68% in December. The sentiment index for May was lower than the one in December 2009 (and 2008) as well. This would clearly argue against the end of the bull market.



### Comparison: the current chart vs. the last bull market

In January 1980 the gold price increased by more than 50% within a short period of time to its then all-time high of USD 850/ounce. Subsequently the price plummeted by 30% within an equally short time frame and in the event fell into 20 years of hibernation. Will the slump of 1980 repeat itself?

#### Gold 1972 - 1981



Source: Datastream, Erste Group Research

In contrast to 1980, we have seen the gold price increase in steps since the turn of the millennium, which would suggest a lasting paradigm shift. In 1980 the increase was mainly of a speculative nature. Whereas today, it is carried by a much broader and more heterogeneous range of market participants and is based on a structural supply/demand deficit. Also, we have not seen the blow-off top yet, i.e. a parabolic increase within the shortest period of time (similar to 1980). This phenomenon is typical of the commodity sector.

Gold 2001-2010



Sources: Datastream, Erste Group Research

### **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 current market situation and reveal mutual over- or under-valuations.

### 1) Dow / gold (currently 9.4x)

At 9.4x, the ratio is currently slightly above the long-term median of 8x. This means that gold is still relatively inexpensive in comparison with the Dow Jones. But bull markets tend to end in euphoria and excess, which is why we expect substantially lower values. In 1932 the ratio was 2x, and at the end of the last bull market the ratio was 1x. We think that values of 1-2x might be reached again as a result of the secular bull market. Under the assumption of a constant Dow Jones index, gold would therefore have to rise to USD 10,400/ounce.



**Dow Gold Ratio** 

Sources: Datastream, Erste Group Research

### 2) Gold / S&P 500 (currently 0.99x)

Currently the ratio is almost exactly on its long-term median of 1x. Looking at the development in the 1970s, we expect a dynamic increase. Bull markets do not end around the long-term median – they end *in extremis*. In order to reach 6x, gold would have to increase to more than USD 6,000/ounce (given a constant S&P index).



### 3) Gold / Silver (currently 65x)

Currently the ratio is about 65x and thus above the median of 55x. This means that silver is attractively valued relative to gold. A low was hit in 1920, when 15 ounces of silver would buy 1 ounce of gold. In 1980 the ratio fell intermittently below. 1940 saw a row of historical highs, when one ounce of gold bought 100 ounces of silver. We experienced similar values in 1990.

Looking back over the centuries, we find that gold has been substantially more expensive since the beginning of the 20<sup>th</sup> century than in the previous three centuries. The long-term median (since 1687) is 15.7x. This also reflected the actual ratio of physical supplies: gold is about 17 times scarcer than silver. According to USGS, the measured and assumed silver resources are about 6 times as high as the ones of gold. Therefore silver is at the moment clearly undervalued at a ratio of 65x relative to gold.

Silver is, like gold, a monetary metal, but the relevance for the industrial sector is much higher than that of gold. This is why silver tends to outperform gold in economic upswings, whereas gold usually outperforms silver in periods of stress. The long-term average correlation since 1970 has been 0.68x.



Source: Datastream, Erste Group Research

### 5) World Gold Mining index / Gold (currently 1.7x)

Currently the ratio of the World Gold Mining index and gold is 1.7x and thus above the longterm median of 1.4x. A rise indicates that gold shares are outperforming gold. The chart shows that since the beginning of the bull market shares have not outperformed gold anymore. Gold mining shares have performed more or less in line with the gold price.



#### World Gold Mining Index / Gold

Sources: Datastream, Erste Group Research

### 6) Gold / oil (currently 13.3x)

Oil and gold have a strong positive correlation with each other. Both commodities are traded in US dollars and tend to increase when the dollar depreciates against the most important currencies. Also, oil is one of the most important indicators for inflation and thus also for the gold market. On top of that, the argument that oil production is about to see its peak ("peak oil") can also be applied to gold along similar lines. The constant purchasing power of gold can also be measured in terms of this ratio. For example, one ounce of oil today buys the same amount of oil as in 1945, 1982, and 2000.

The current ratio of 13.3x is only slightly below the long-term median. The all-time high was set in 1973, when one ounce of gold would have bought 42 barrels of oil. On the other hand, in 2008 the ratio hit its historical low at less than 6 barrels per ounce.



Gold / Oil

Sources: Datastream, Erste Group Research

### 7) Home price / gold (currently 250x)

At the moment it takes close to 250 ounces of gold to buy an average home in the USA. This means that in comparison with 2001, where the ratio was at 800 ounces per home, gold is relatively expensive and property is relatively cheap; the long-term median is 403x. However, we are still far away from the 1980 all-time low of 100x.



Median Home Price / Gold

Sources: Datastream, Erste Group Research

#### Ratio analysis: conclusion

The long-term comparison of gold and other asset classes paints a clearly positive picture. While many ratios are close to the median, this goes to show that the current valuation is certainly not excessive. It is therefore also very easy to rebut the heavily cited argument of the "gold bubble". **Bull markets end in euphoria, and this substantiates our argument in favour of an imminent transition to an accelerated trend phase.** 

### CONCLUSION

Paradigm shift has been hardly noticed	The gold price has increased by a factor of almost five since 2001 – yet the sustainable character of the increase has not entered the public mind. This is due to the 20-year bull market of equities, bonds, and property and the contrary development of the gold price. On top of that, there are not many market participants who actively experienced the last high of the gold price in 1980. In the 1970s it was an unwritten law to invest at least a fifth of one's portfolio in gold. In 1980, gold and gold mining shares accounted for 26% of global financial assets. Today this number has fallen to 0.8%.		
Deficit between supply and demand still intact	The cumulative demand has increased in the past three years by 62%, while the supply (mainly recycled gold) has risen by 59%. As pointed out four years ago, this supply/demand deficit can only by closed by price increases. Although both jewellery industry and recycling supply are price-sensitive, we believe that investor demand will be the determining factor in the coming years. Production continues to stagnate, and on top of that, central banks have shifted from the supply to the demand side. We expect central banks to step up their purchases from here on. Even traditional seller nations could jump ship within the framework of the CBGA and turn into buyers.		
Expansive monetary policy and excessive debt should guarantee a good environment for gold	The global race for monetary expansion should continue to prepare a fertile soil for gold investments. The reaction to the current crisis is already feeding into the next one. It is naïve to try to solve a crisis with the same means that caused it, i.e. an expansive monetary policy. Savings and investments are the driving force of prosperity, not consumption. In order to combat the current problems in the financial arena but also in the real economy, the Fed and the ECB will be forced to more or less continue their zero-rate policy. Negative real interest rates and the gold price have traditionally shown a high correlation. This is why we think that gold, especially in the current fragile environment, represents an essential base element of any portfolio.		
Differences to the last bull market in the 1970s	Comparing the current situation with the last bull market of the 1970s, we find a number of substantial differences. Back then, emerging markets were economically insignificant, and the purchase power was lower. Gold demand was mainly based in the industrialised nations. The Chinese middle class – meanwhile representing about 100mn people – was not allowed to participate in the last bull market, as private ownership of gold was banned until a few years ago. And a huge hike in interest rates (as happened at the beginning of 1980) is extremely unlikely.		
	The following factors would also suggest a rising gold price:		
	- Gold and precious metals are the only asset class that can sustainable stand its ground both in an <b>inflationary</b> and a <b>deflationary scenario</b> .		
	<ul> <li>Production capacities are not likely to be expanded in the immediate future. The substantial increase in expenses on mining, energy, and personnel has partially more than offset the price increases. Also, the easily extractable reserves are already exhausted. This means that the exploration has to go deeper and develop reserves that are more expensive to produce. This scenario should offer good support.</li> </ul>		
	<ul> <li>The fact that institutional investors, public funds, and oil producing nations are still underweighted in commodities, and especially in gold, should also support a further increase in investment demand.</li> </ul>		

	<ul> <li>The asset class of commodities will attract more attention in the coming year also from private investors within the framework of strategic asset allocation due to aforementioned aspects.</li> </ul>	
	- On top of that, <b>gold is perfect for diversification in a portfolio context</b> . It has a low correlation with equities and low volatility.	
	- The <b>geopolitical risks argue in favour of gold investments</b> . The smouldering conflicts in Pakistan, Iran, and Afghanistan, and the tensions between North and South Korea, fear of terrorism etc all make a case for the classic safe haven that is gold.	
	<ul> <li>The credit crisis is not over yet, the US macro data paint a contradictory picture of the US economy, and problems in the American commercial property market are on the rise. The heavily cited double-dip recession can definitely not be ruled out.</li> </ul>	
	- As a result of the recent crisis, people have apparently become more aware of the intrinsic value of gold again. The remonetisation of gold has started.	
	Negative influencing factors:	
	<ul> <li>Still receding jewellery demand</li> <li>Gold is often held as iron reserve and money of last resort and is thus liquidated in extreme financial situations. Given that nowadays 70% of jewellery is bought on the Indian subcontinent, the supply of recycled gold may continue to rise</li> <li>De-hedging is coming to an end</li> <li>Futures positions as indicated by the CoT would suggest a temporary correction</li> <li>Partially excessive sentiment; the "cover magazine indicator" would suggest an exaggerated degree of optimism, especially in Europe</li> </ul>	
Gold does not pay interest, but cannot turn worthless either	It is common knowledge that gold does not pay interest. But at the same time, it never became worthless either in the course of the centuries. Commodities such as oil, or technology shares do not pay interest or dividends either, yet this argument is only brought forward against gold. Money has to be exposed to risk for the investor to be able to expect interest income. The riskier the investment, the higher the possible return. Turning this argument around, this means that the risk associated with gold is very low. Gold is the only asset that is not based on a contractual agreement between a creditor and a debtor. It is the only supranational, internationally accepted means of payment, and has survived every war and every national bankruptcy.	
	"If I told you I was going to give you a large steel box for your kids, and that box was <b>not to be</b> <b>opened for 50 years</b> , would you rather put three million in cash in that box or three million in diamonds or gold? Me, I'd rather pick the diamonds or the gold. Which would you choose?" Richard Russel	
Gold is a soft metal but a hard currency	The monetary role that has been established and manifested over the past centuries is currently being re-discovered. For centuries, gold has represented consistency of value, independence, and stability. This has yet been proven again amid the current turmoil, and we expect this tendency to last throughout the coming years. We would like to leave it up to the reader to answer the question of whether gold is becoming more expensive or the purchase power of the paper currencies is falling.	
	A target price can also be established by putting government debt in relation to the volume of gold reserves of the respective central banks and then comparing this ratio to historical values <sup>44</sup> .	

<sup>&</sup>lt;sup>44</sup>Wellenreiter-Invest: "Deckung der Staatsverschuldung: Wie hoch müsste der Goldpreis steigen?", Robert Rethfeld, June 2010

		gold price @ 100% cover	gold price @ 10% cover
	Germany	16,000	1,600
	France	20,000	2,000
	Italy	20,600	2,060
	USA	45,000	4,500
	Spain	53,000	5,300
	UK	121,000	12,100
	Source: Wellenreiter	r-Invest	
Definitely <u>no</u> bubble	Many market participants find it apparently difficult to distinguish between a bull market and a bubble. A few historical examples show that gold is definitely no bubble. At the moment, the US gold reserves account for close to 1.85% of the US GDP. In 1940 the value was 20%, by 1980 it had fallen to slightly below 7%. Comparing gold with the historical money supply, we find that the current price level seems attractive as well. In 1980, 45% of the money supply (M1) was covered by gold, today close to 5%. This means that it would have to increase by a factor of 8.5. If one were to cover the MZM supply, the gold price would have to increase to about USD 10,000. If the central bank wanted to cover the money supply M2 with gold, the gold price would have to increase to almost USD 30,000/ounce.		
Still an excellent risk/return profile	We still see the <b>risk/return prof</b> assumption that support. We do it will be in the n	gold price in a long-term upward trend, in fact now more than ever. <b>The</b> <b>file of gold investments remains excellent.</b> On the basis of the technical "resistance turns into support", the USD 1,000 mark should represent a solid not think that the price will fall below this mark in the coming year, but if it does nature of a correction, not a change of trend.	
	A target price of thought at the be increase to 1,50 20/barrel, would essence of a bu	USD 2,300 may sound extrem eginning of the 1990s, when the 0 within a decade? Who, at the have thought that the oil price II market. <b>Every trend ends in</b>	ely optimistic or illusory. But who would have e S&P 500 index was at 300 points that it would beginning of 2002 and at an oil price of USD would rise to USD 150/barrel? That is the <b>euphoria and excess.</b>
At the end of the parabolic trend phase we expect at least USD 2,300	In the short run, would suggest a should be lendin trend phase to target of USD 2	the sentiment seems a bit over a correction. From the third and ag support. <b>Our next 12-month</b> still be ahead of us. At the er 2,300.	Iy optimistic, and also, the CoT positioning fourth quarter onwards, positive seasonals target is USD 1,600. We expect the parabolic of this cycle the price should reach our

#### Overview: fictitious gold price at 100% cover and 10% cover of government debt

Ronald-Peter Stöferle, CMT

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