

# Special Report Gold — July 2011

## In GOLD we TRUST

The foundation of a return to “sound money” has been laid

Guilt without atonement? Excessive structural debt suggests further appreciation of gold

Negative real interest rates continue to provide gold with a perfect environment

No reason for “AUROPHOBIA”

Adieu “Exorbitant Privilege“

Why gold is (still) no bubble

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

The monetary system at the crossroads – on the way to a new gold standard?

Gold as portfolio insurance

Gold mining shares with historically low valuations

Risk/return profile of gold investments remains very favorable

Next target price at USD 2,000

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

# Special Report Gold

## Table of Contents

	<b>Page</b>
1. Introduction	2
2. Guilt without atonement? Excessive structural debt suggests further appreciation of gold	7
3. Negative real interest rates continue to provide gold with a perfect environment	11
4. The law of diminishing marginal returns indicates that the level of debt has reached a saturation point	13
Social asymmetries as tinderbox	14
5. The monetary system at the crossroads – on the way to a new gold standard?	16
Is a gold standard deflationary per se?	19
Gold and silver as official means of payment vs. “Gresham’s Law”	21
6. Regression theorem explains why gold equals money	23
Stock-to-flow ratio distinguishes between gold and commodities	23
7. Gold as portfolio insurance	26
8. Possible targets for the gold price	29
9. Why gold is (still) no bubble	36
10. History repeats	43
11. Adieu “Exorbitant Privilege”	46
US Treasuries: from the risk-free fixed income paper to the risky no-income paper	47
12. China on its way to the leading global currency?	50
Yuan as leading currency?	50
13. Excursus: the creation of money from the perspective of the Austrian School of Economics	53
14. Inflation ≠ rising prices	55
15. Demand	57
Renaissance of investment demand – institutionals as “elephant in the room”	59
Central banks on the buyers’ side for the first time in two decades	60
De-hedging	63
16. Supply	65
17. Gold mining shares	68
Gold mining shares with historically low valuations	71
18. Technical analysis of the gold price	74
Ratio analysis	79
1) <i>Dow / gold (currently 8.1x)</i>	79
2) <i>Gold / S&amp;P 500 (currently 1.12x)</i>	80
3) <i>Gold / silver (currently 43x)</i>	80
4) <i>Disposable income / gold (currently 26x)</i>	82
5) <i>World Gold Mining index / gold (currently 1.5x)</i>	83
6) <i>Gold / HUI (currently 2.7x)</i>	83
7) <i>Gold / oil (currently 13.6x)</i>	84
8) <i>Home price / gold (currently 173x)</i>	84
Ratio analysis: conclusion	85
19. Conclusion	86

# Special Report Gold

## 1. Introduction

Many questions, golden answers

**The (financial) world is currently long in questions but short in answers. We believe that gold is still one of the few right answers in times of chronic uncertainty.** In what is now our fifth Gold Report we want to explain why our long-term target of USD 2,300, set for the first time three years ago, could come out on the conservative side.

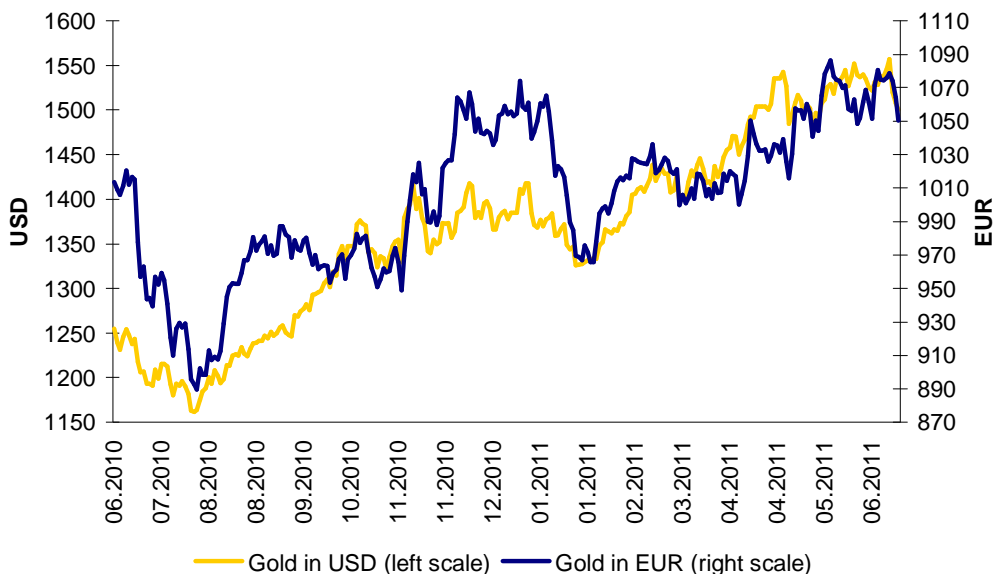
No reason for "AUROPHOBIA"

**Gold is a highly emotional topic.** It seems there are only two opposing fronts here: people who love gold (aka gold bugs), and people who hate it. There are only very few shades of grey between these two fronts, and people are extremely hesitant to defect from one to the other. It seems as if we were faced with something like "aurophobia"<sup>1</sup>, especially in the financial sector. This pathological fear of, or aggression towards, gold does not seem to exist for any other commodity. After all, we have not heard of such a profound aversion against copper, we do not know "bond haters", nor are militant property bashers a popular concept. We regard ourselves as analysts rather than psychotherapists, which is why we do not really want to dwell on the reasons for that strong aversion. **Instead we would like to continue substantiating with data, historical comparisons, and facts why we believe that gold should be a central module of the portfolio.**

+140% since the first Gold Report

**+25%, +140%, +460%, +4,322%.** These are the performances since the previous Gold Report, since the first Gold Report, since the beginning of the bull market in 2000, and since 1970. Gold set new (nominal) highs last year both in USD and EUR as well as in numerous other currencies. The following chart illustrates the fact that the bull market is intact in both EUR and USD, but also that we have not seen the trend acceleration yet.

Performance of gold in USD vs. gold in EUR since the most recent Gold Report



Sources: Datastream, Erste Group Research

*"Gold still represents the ultimate form of payment in the world... Fiat money, in extremis, is accepted by nobody. Gold is always accepted"* Alan Greenspan<sup>2</sup>

Return to the monetary status of gold...

**The past months have shown a clear trend: gold has been more and more regarded as the purest form of money and increasingly less as a commodity.** It has an international currency code (XAU<sup>3</sup>), and is still held by the global central banks as a key reserve. This underpins the monetary character of gold. We believe that the current return to a track record

<sup>1</sup> "Gold: The Currency of FIRST Resort", Hinde Capital, June 2010

<sup>2</sup> Economic Club of New York, remarks by Chairman Alan Greenspan, December 2002

<sup>3</sup> ISO 4217, International Currency Code List

# Special Report Gold

of millennia of monetary status indicates that the bull market and its acceptance have entered a new phase.

... and to  
“sound  
money”

**The possession of gold is tantamount to pure ownership without liabilities.** This also explains why it does not pay any ongoing interest: it does not contain any counterpart risk. Along with the International Exchange and the Chicago Mercantile Exchange, JPMorgan now also accepts gold as collateral. The European Commission for Economic and Monetary Affairs has also decided to accept the gold reserves of its member states as additionally lodged collateral. We also regard the most recent initiatives in Utah and in numerous other States as well as in Malaysia, and the planned remonaterisation of silver in Mexico as a clear sign of the times. **The foundation of a return to “sound money” seems to have been laid.**

Gold as perfect  
hedge against  
excessive  
expansion of  
the money  
supply and  
Black Swans

**Why do people place trust in the yellow metal?** Gold looks back on a history of success as the means of retaining value and purchase power that has spanned millennia. In that time span, the market has chosen the optimal currency from a logical and rational perspective. Among the criteria are high liquidity, indestructibility, a high ratio of value per weight and volume unit, negotiability, easy divisibility, global acceptance etc. The slowly but steadily growing supply from the mines (N.B. gold reserves grow at about the same pace as the global population) ensures stability and trust. **These unique features make gold one of the best hedges against excessive monetary expansion and black swan events.**

Gold shining  
its light for the  
10<sup>th</sup>  
consecutive  
time

**The performance of gold was positive in almost all currencies in the past decade as well as last year.** The key issue is the relative scarceness in comparison with fiat money<sup>4</sup>, which can be expanded at will. Due to the monetary excesses and the global depreciation race in the past years we expect the exchange rate of gold and paper to continue rising.

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

	EUR	USD	GBP	AUD	CAD	Yuan
2001	8.10%	2.50%	5.40%	11.30%	8.80%	2.50%
2002	5.90%	24.70%	12.70%	13.50%	23.70%	24.80%
2003	-0.50%	19.60%	7.90%	-10.50%	-2.20%	19.50%
2004	-2.10%	5.20%	-2.00%	1.40%	-2.00%	5.20%
2005	35.10%	18.20%	31.80%	25.60%	14.50%	15.20%
2006	10.20%	22.80%	7.80%	14.40%	22.80%	18.80%
2007	18.80%	31.40%	29.70%	18.10%	11.50%	22.90%
2008	11.00%	5.80%	43.70%	33.00%	31.10%	-1.00%
2009	20.50%	23.90%	12.10%	-3.60%	6.50%	24.00%
2010	39.20%	29.80%	34.50%	-14.00%	24.30%	25.30%
2011 ytd	0.10%	5.80%	2.20%	3.30%	5.50%	3.30%
Mean	<b>13.30%</b>	<b>17.25%</b>	<b>16.89%</b>	<b>8.41%</b>	<b>13.14%</b>	<b>14.59%</b>
Median	<b>10.20%</b>	<b>19.60%</b>	<b>12.10%</b>	<b>11.30%</b>	<b>11.50%</b>	<b>18.80%</b>

Sources: Datastream, Bloomberg, James Turk Goldmoney.com

*“Confidence in central bankers’ ability to learn from past inflation is as likely to be misplaced as it was in their ability to learn from past credit booms. Gold remains the cleanest insurance against such overconfidence”* Dylan Grice<sup>5</sup>

The risk/return  
profile of gold  
remains  
excellent

**The gold price and trust in (central bank) policies are negatively correlated.** A falling gold price would therefore relate to rising or at least stabilising trust. It is said that “trust is a delicate flower; once destroyed, it will not return easily”<sup>6</sup>. We believe that the trust lost in the past years will not be regained any time soon, and that therefore gold still commands an excellent risk/return profile.

<sup>4</sup> Fiat money is credit money that involves no obligation of the issuer to exchange it for currency money. The term is derived from the Latin fiat, “let there be”. Fiat money turns into money when the governing bodies of a state declare it such. Today’s central bank money such as euro or US dollar, is fiat money.

<sup>5</sup> “Why this commodity-sceptic value investor likes gold”, Dylan Grice – Popular Delusions, March 2011

<sup>6</sup> Otto von Bismarck

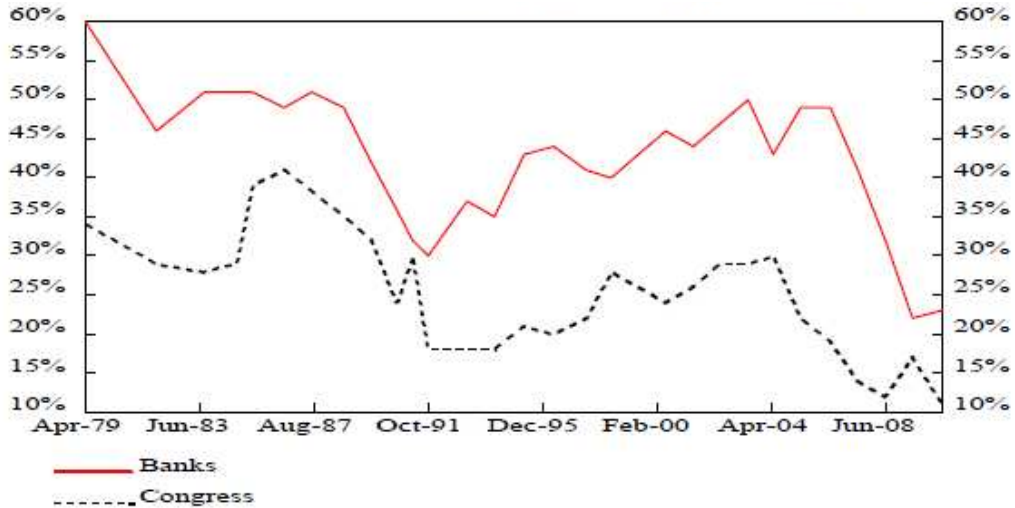
# Special Report Gold

**Trust erosion supports the safe golden haven**

The ECB, the Federal Reserve, and the Bank of England have expanded their balance sheets by more than USD 4.5 trillion since 2007. Only in the year to date the monetary base in the USA has increased by more than 30%. Government bonds had to part with their “risk-free” status last year, and the erosion of trust continues on a daily basis. In this environment investors like to head for the safe haven that is gold more and more often.

The following chart highlights the falling trust of the US citizens in banks and the US Congress.

**USA: percentage of citizens trusting the banks (right scale) and the US Congress (left scale)**



Source: A. Gary Shilling's INSIGHT, Gallup

**Extrapolation of the past leads to disastrous results**

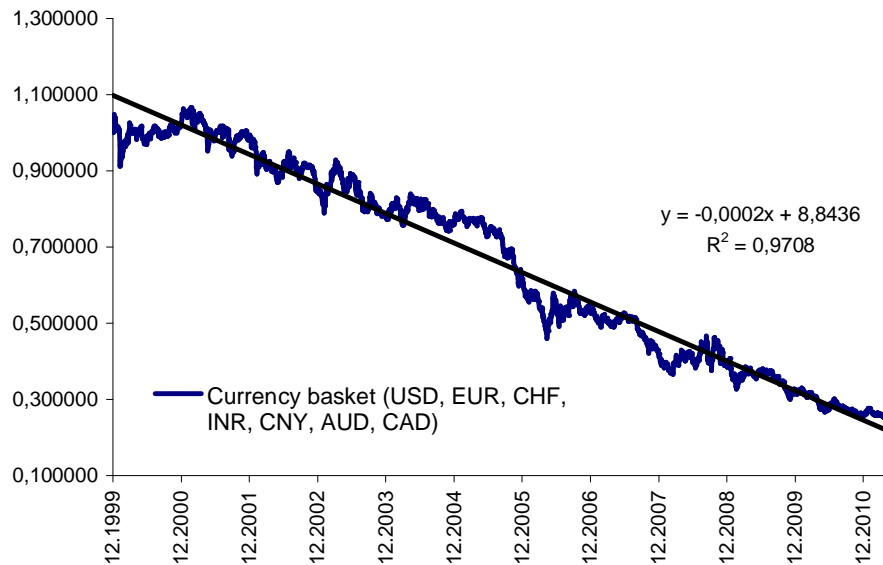
Even though critics will not tire of discrediting gold as the barbarous relic and yesterday's money that has no place in modern society, we would like to ask the question what timeline they have looked at. “Natural laws” such as “property prices don't fall”, “US Treasuries are risk-free”, or “The Earth is flat” may have applied in the (recent) past, but if we broaden the (time) horizon, we find that the picture changes. The mere extrapolation of the past leads to disastrous results in the long term. **Gold on the other hand has a track record of 6000 years as the currency of last resort and has never turned worthless.**

**Currency basket vs. gold still on a downward trend**

The following chart also shows the clearly intact downward trend of most currencies vis-à-vis gold. The equally weighted currency basket consists of US dollar, euro, Swiss franc, yuan, Indian rupee, British pound, and Australian dollar. The downward trend is intact and is at the moment only marginally above the trend line. We have little reason to believe that the downward trend should subside in the foreseeable future, which is why we stick to our positive assessment of the future gold price development.

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Currency basket vs. gold since 1999



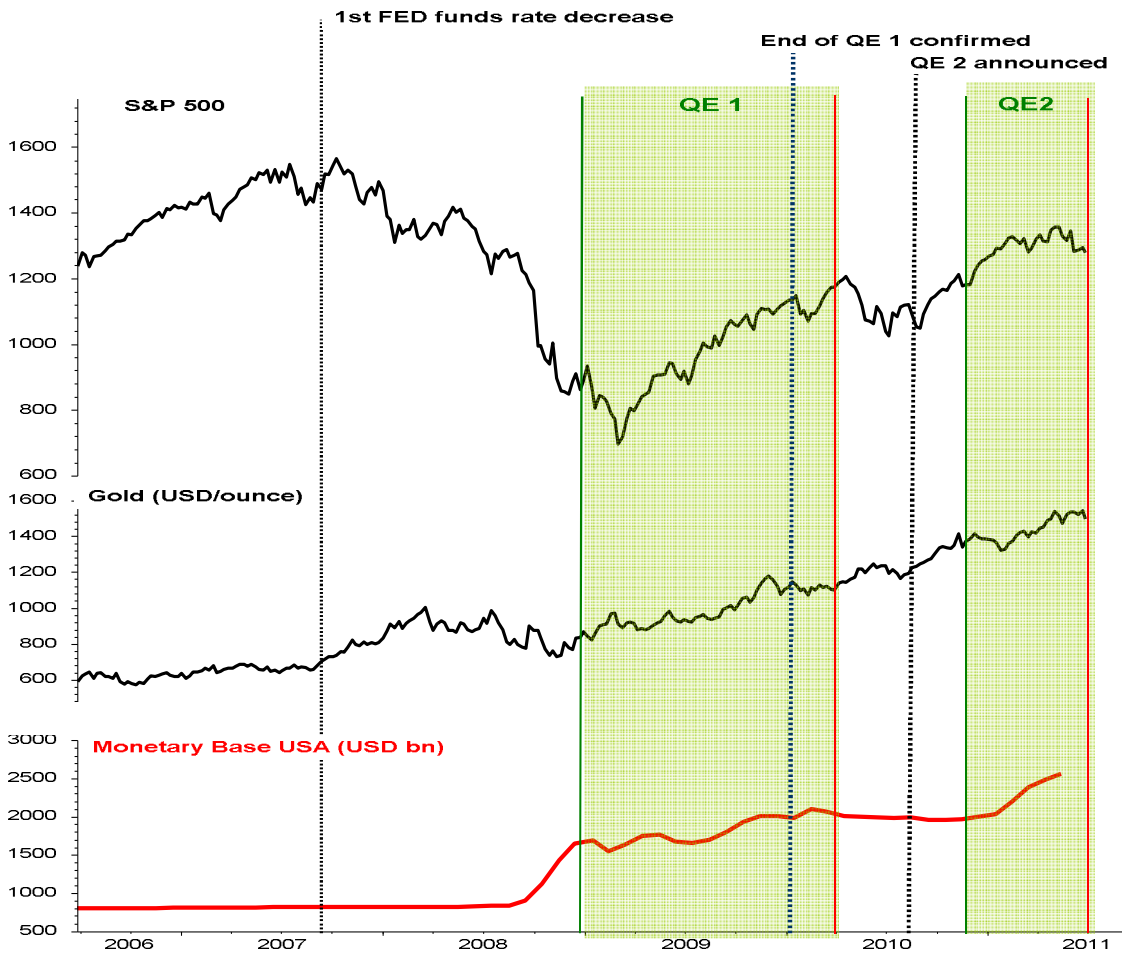
Sources: Erste Group Research, Datastream

**Monetary policy as most important determinant – supply/demand structure irrelevant**

**We underestimated the supply of “digital printing ink” by the Fed and the relentless deficit spending.** In June 2010 we had not expected the US central bank to attach as little importance to monetary stability as it ended up doing. We believe that the “Bernanke put” is the main reason for the rising prices in the commodity segment. The Fed has repeatedly referred to the positive effects of higher share prices. Gold also benefits from the decrease in risk aversion, as the following chart clearly illustrates. The higher correlation between the equity market and many commodities can hardly be explained by traditional supply/demand structures; in fact, the monetary policy seems to have turned into the most important determinant of the financial markets.

# Special Report Gold

## S&P vs. gold vs. monetary base and QE



Source: Erste Group Research, Datastream

**Fed cannot influence where the newly created liquidity is going**

We strongly doubt that the goals of the Quantitative Easing scheme(s) have actually been achieved. However, if a sharp increase in share prices, low volatility, and excessive speculation in agricultural commodities (as confirmed by the CoT reports), energy, and precious metals had been the goal, QE could be called a tremendous success. The Fed may well step up the incentives to lending (low interest rates, bank reserves filled up by the purchase of assets), but it has no influence on where the loans ultimately go.

### Performances during QE1 and QE2

	QE1	QE2
Crude Oil	65%	29%
Copper	113%	20%
Gold	35%	21%
Dollar-Index	-5%	-10%
S&P 500	37%	21%
EuroStoxx	27%	5%
Bovespa	126%	-7%
Silver	69%	78%
Cotton	62%	77%

Source: Erste Group Research, Datastream

*“The more capital can be raised by bonds, the better. Resorting to the help of the central bank let alone the option of printing money have to be seen as only temporary financing means for as long as possible ....”* Karl Theodor zu Helfferich, member of the central committee of the German Reichsbank, March 1915.

# Special Report Gold

## 2. Guilt without atonement? Excessive structural debt suggests further appreciation of gold

*“Jesting is the third-best disguise. The second-best: sentimentality. But weirdly, the best and safest disguise is still the blatant, naked truth. Nobody will believe that.”<sup>7</sup>*

**Fiscal gap currently USD 200 trillion**

The debt of the USA currently amounts to USD 14.3 trillion<sup>8</sup>. Debt in terms of economic output is 93%, i.e. the highest ratio since the end of the 1940s. The new debt taken out since 2008 alone accounts for more than 40% of the aggregate government debt amassed in the past 240 years. Inclusive of the debt and entitlements of the States, authorities, pension funds etc. the situation is dramatic, painting a picture of vastly excessive debt. The fiscal gap<sup>9</sup> amounts to USD 200 trillion, i.e. 14 times GDP. According to the IMF<sup>10</sup> in order for the gap to be filled, a yearly adjustment of 14% would have to be implemented.

**Consolidation on the back of revenues unrealistic**

However, the GDP is of limited explanatory power as far as the payoff of debt is concerned, as has been criticised many a time. Rather, the discussion should focus on tax revenues. And for the case of the USA, the picture looks even more dramatic from that angle. In the past 40 years government spending has averaged 21% of GDP, while tax revenues have typically amounted to 18%<sup>11</sup>. In 2010 the tax revenues were down to 14%, which represented the lowest percentage since 1950, whereas government spending in terms of GDP had increased to 24%. This means that it is virtually impossible to consolidate the budget from the revenue side. If one wanted to balance the deficit of 2010, the tax rates would have to be raised by the factor of 2.4x according to the US Tax Foundation.

### Outlays, receipts, and budget deficits USA (logarithmic scale)



Source: James Turk: [www.fgmr.com](http://www.fgmr.com)

**The budget reflects the state of a nation**

The Congressional Budget Office (CBO) forecasts deficits until at least 2021<sup>12</sup>. The aggregate deficit will hit USD 8,400bn in the next ten years. And the dimensions are changing fast as well. Whereas in fiscal 2001/2002 the USA recorded a fiscal deficit of USD 120bn, the deficit in October 2010 alone reached USD 140bn. For the first time since WWII, the US debt will exceed the GDP, and the long-term outlook is “discouraging” according to the CBO. By 2035 the government debt could increase to 185% in terms of GDP. These numbers sound disillusioning, and the CBO forecasts are actually based on very optimistic estimates. The Office expects real economic growth of +4.4% until 2014 and of +2.4% subsequently. It also assumes a continuous decrease in the unemployment rate to 5%, low interest rates, and

<sup>7</sup> “Biedermann und die Brandstifter“ (The Firerisers), Max Frisch

<sup>8</sup> Total Treasury securities outstanding, as of May 2011

<sup>9</sup> Financing gap between net present value of all future expenditure and all future tax revenues

<sup>10</sup> “United States: Selected Issues Paper”, IMF, July 2010

<sup>11</sup> Michael Tanner, Cato Institute

<sup>12</sup> “The Long-term Budget Outlook”, Congressional Budget Office, June 2010

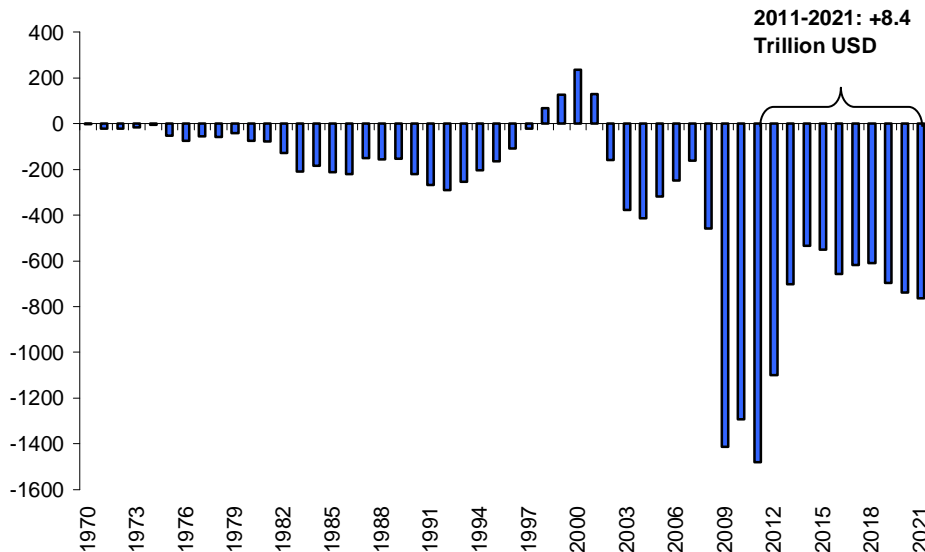


# Special Report Gold

a moderate increase in spending. The CBO model does not allow for another recession.

**Given that from our point of view the forecasts are unrealistic, we expect the new debt to climb much higher than to the estimated USD 8,400bn.**

**CBO forecasts: budget deficits until 2021 (in USD bn)**



Sources: Erste Group Research, Datastream, Congressional Budget Office

*"I wish it were possible to obtain a single amendment to our Constitution... Taking from the federal government the power of borrowing" Thomas Jefferson*

**BIS recommends "drastic measures"**

**The Bank for International Settlements (BIS) also comes up with a shattering assessment of the US budget<sup>13</sup>.** From the analysis of the public debt ratios the BIS concludes that the current fiscal policy is unsustainable. It recommends "drastic measures" in order to slow down current and future debt and to mitigate the negative consequences in the long run for growth and monetary stability. The clear and straightforward way of communication by the BIS these days indicates the precarious situation and the urgency of drastic reforms. **The future of the next generation has already been mortgaged to a large extent.**

**Excessive debt is due to systemic reasons**

**The official financial report of the US government<sup>14</sup> for 2010 also contains numerous charts that illustrate the gloomy future.** In the meantime the majority of items on the expenditure side has been earmarked. Due to the sharply increasing healthcare costs, the advancing retirement of the baby-boomer generation, and the rising life expectancy the costs for Medicare, Medicaid etc. have recorded a substantial increase.

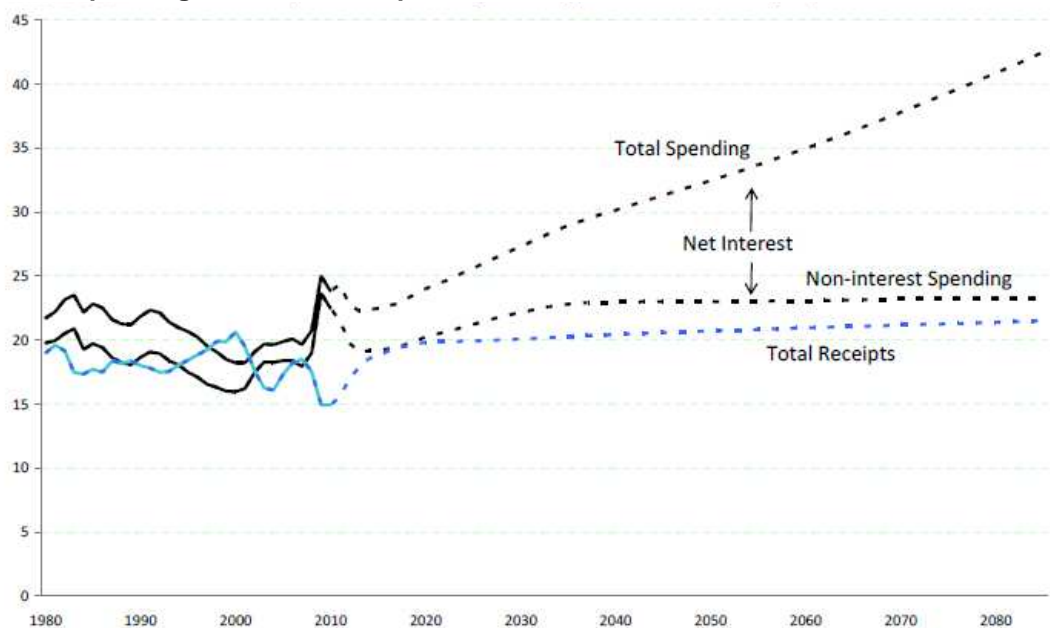
**If it is not even possible to generate a surplus in times of economic prosperity, then it become clear that the problems are of a systemic nature.** As a result of compound interest, debt can grow exponentially, which in the long run causes enormous trouble. As soon as debt and interest rise at a faster pace than revenues, the vicious circle of excessive debt is set off. The growing gap between revenues and spending clearly shows that the path the USA is on cannot be sustained for much longer.

<sup>13</sup> "The future of public debt: prospects and implications", March 2010

<sup>14</sup> <http://www.fms.treas.gov/fr/10frusg/10frusg.pdf>

# Special Report Gold

Total spending, interest rate expenses, and tax revenues until 2080 in % of GDP



Source: 2010 Financial Report of the United States Government

## The debt ceiling has been raised 93 times already

The quarrels over the debt ceiling will probably only be sorted out shortly before 2 August because we are looking at a political power game here. There seems to be no doubt about the fact that the ceiling will be raised, as a look back into history shows. The debt ceiling, or debt limit, was introduced in 1917 and fixed at USD 11.5bn. Since then it has been raised 93 times, and the momentum seems to be accelerating. Since 1962 it has been raised 74 times, and since 2001 ten times already. It therefore makes sense to question the point of such a limit<sup>15</sup> altogether.

***“Public debt has gradually enfeebled every state which has adopted it.” Adam Smith<sup>16</sup>***

At the moment interest payments amount to almost USD 230bn. per year; should the interest rate rise to 5%, interest payments would increase to USD 900bn. If we were to assume that the CBO forecasts are correct, we would be looking at aggregate debt of about USD 24 trillion in 2021. At an interest rate of 5%, interest payments would therefore exceed USD 1 trillion. For this reason we expect interest rates to remain low for a while, with the Fed having to stay behind the curve by a mile and then some. **This is one of the strongest arguments for real interest rates to remain negative or at least low, and as a consequence, in favour of the gold price.**

## Demographics as sword of Damocles

The aging population is gradually turning into a sword of Damocles for the public finances, and not only in the USA. According to the study “Global Aging 2010 – An Irreversible Truth”<sup>17</sup> by S&P, which analysed 32 OECD countries and 17 emerging markets, the burden caused by pensions, healthcare, and eldercare will push up debt in the industrialised nations dramatically. For example the net debt in Germany will increase from 75.2% in 2010 to 97.1% in 2020, to 155% in 2030, to 254% in 2040, and to 400% in 2050. The referential figures for Austria are 88.5% of GDP expected for 2020, and 328% of GDP for 2050.

There are only a few ways out of the debt trap: growing out of one’s debt much like the USA did after WWII, or alternatively drastic spending cuts and rigid budget consolidation like Scandinavia in the 1990s. Massive tax hikes, the repeated calling on seigniorage<sup>18</sup>, the creation of inflation, the depreciation of the currency as in 1934 in the USA (Gold Reverse

<sup>15</sup> Please refer to “False Belief #3: There is a Debt Ceiling” Louis Boulanger, The Gold Standard Institute Magazine Journal, April 2011

<sup>16</sup> “The Wealth of Nations”, Adam Smith

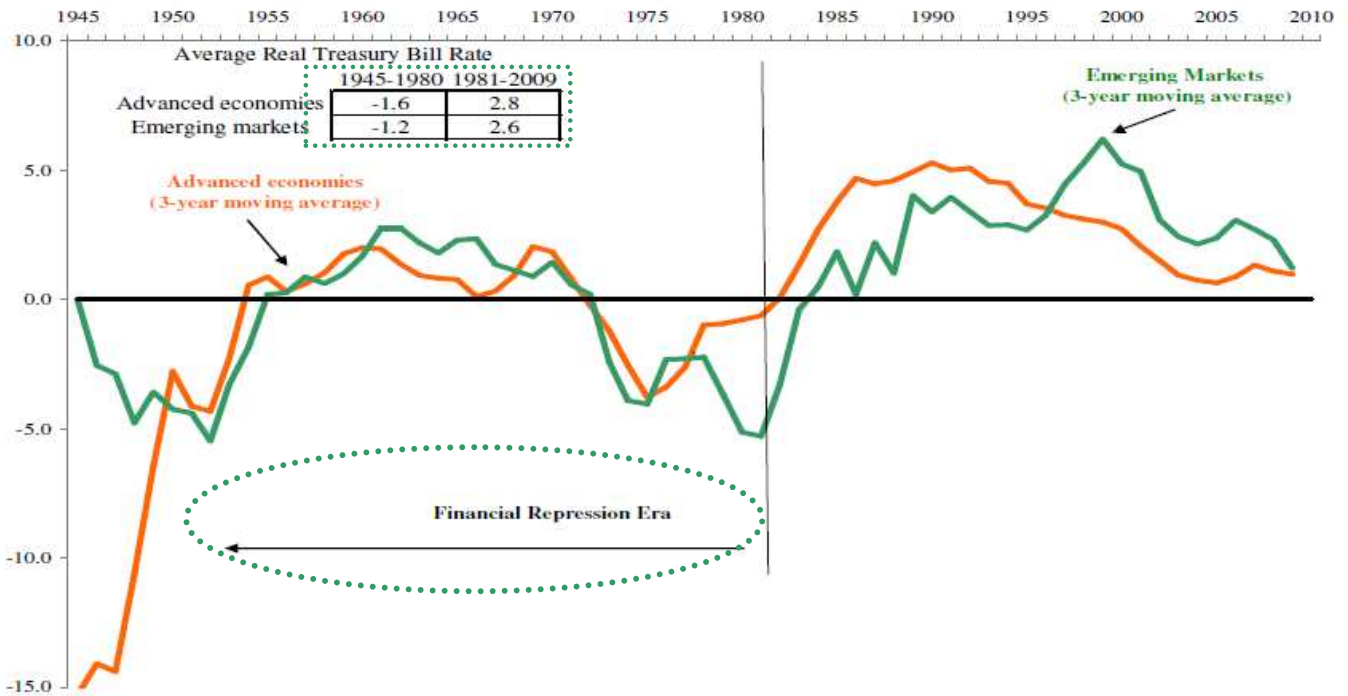
<sup>17</sup> [http://www2.standardandpoors.com/spf/pdf/media/global\\_aging\\_100710.pdf](http://www2.standardandpoors.com/spf/pdf/media/global_aging_100710.pdf)

<sup>18</sup> “The ability of the government to finance expenditures by issuing money is the ‘seigniorage’ associated with its sovereign monetary monopoly”, James Tobin: On the Welfare Macroeconomics of Government Financial Policy

# Special Report Gold

Act), a continuous dose of financial repression in combination with negative real interest rates, or ultimately, national bankruptcy<sup>19</sup>. **We expect gold to benefit in practically all of these scenarios.**

## Average real T-bill rate: industrialised nations & emerging countries 1945-2010



Source: *The Liquidation of Government Debt*, Carmen Reinhart, Belen Sbrancia, NBER Working Paper

**“A hundred wagon loads of thoughts will not pay a single ounce of debt.” Italian saying**

Nikolaus von Oresme warned against inflationary public financing as early as in the 14<sup>th</sup> century<sup>20</sup>: “If it is the prince’s prerogative to implement a minor adjustment to the currency in order to reap some profit from it, surely it is also his prerogative to implement a major change and reap an even bigger profit; and also to do so more than once and benefit even more profoundly... Eventually the prince would be in a position to seize almost all funds or wealth of his subjects and to enslave them. And this would be a tyrant’s work, and it would be a true and absolute tyranny, much like the ones the philosophers and the ancient world have shown us so hauntingly.”

<sup>19</sup> Please refer also to “The Liquidation of Government Debt”, Carmen M. Reinhart, M. Belen Sbrancia, 7 April 2011, IMF

<sup>20</sup> Please refer to “Geld und Inflation – Die Sicht der Wiener Schule”, (Money and Inflation – The Perspective of the Vienna School), Gregor Hochreiter, July 2008

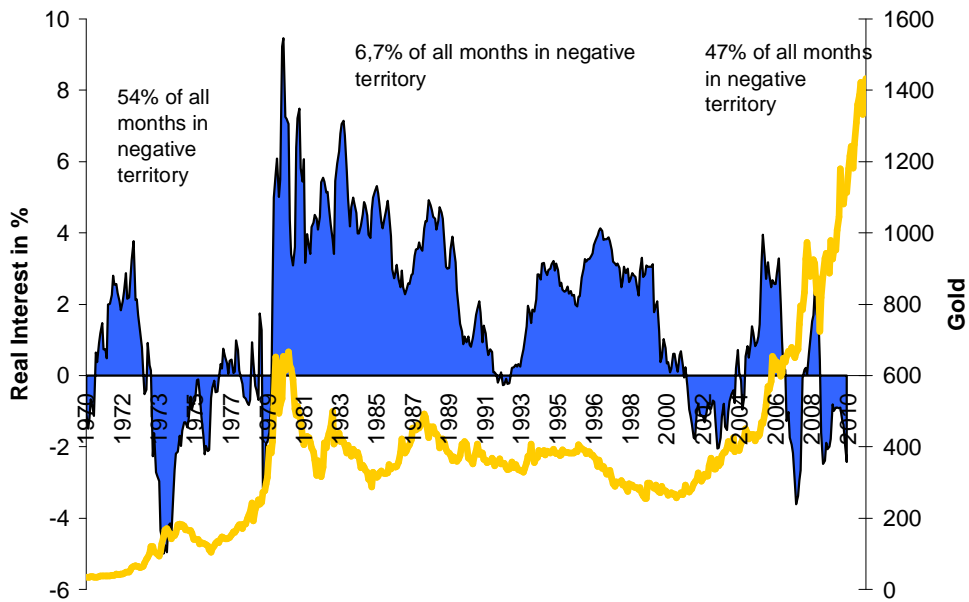
# Special Report Gold

## 3. Negative real interest rates continue to provide gold with a perfect environment

The level of real interest rates is a crucial factor for the gold price

Inflation has never been the primary driver of the gold sector on its own. Given that gold, as is well known, does not pay interest, the real interest rates equal the opportunity costs. During the 20 years of the gold bear market in the 1980s and 1990s, real interest rates were about 4%. They were negative in only 6.7% of the months. The situation was completely different in the 1970s. Real interest rates were negative in 54% of the months. **Since 2000 real interest rates have been negative in 47% of the months, which constitutes an optimal environment for gold.**

Real interest rates vs. gold price since 1970

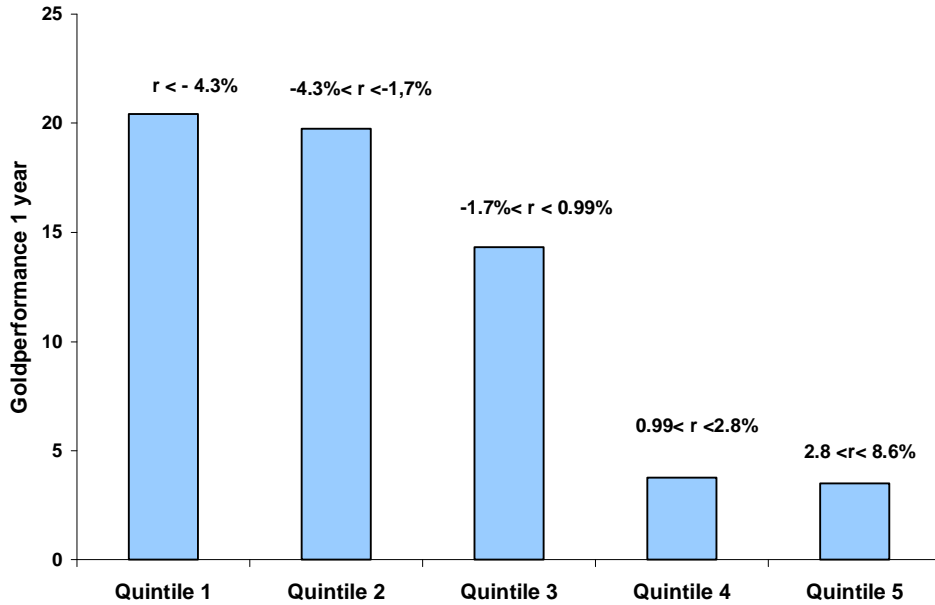


Sources: Erste Group Research, Datastream

When we break down the real interest rates (in this case 10Y yields minus CPI according to Shadowstats) into quintiles and analyse the performance of gold in the subsequent year, we find that there is a clear link between real interest rates and the development of the gold price. In the first quintile (annual real interest rates < -4.3%) gold increases by 21%. With the real interest rates between -4.3% and -1.7%, gold tends to gain close to 20%. **It is only when real interest rates rise above 0.99% that the performance of gold weakens significantly.**

# Special Report Gold

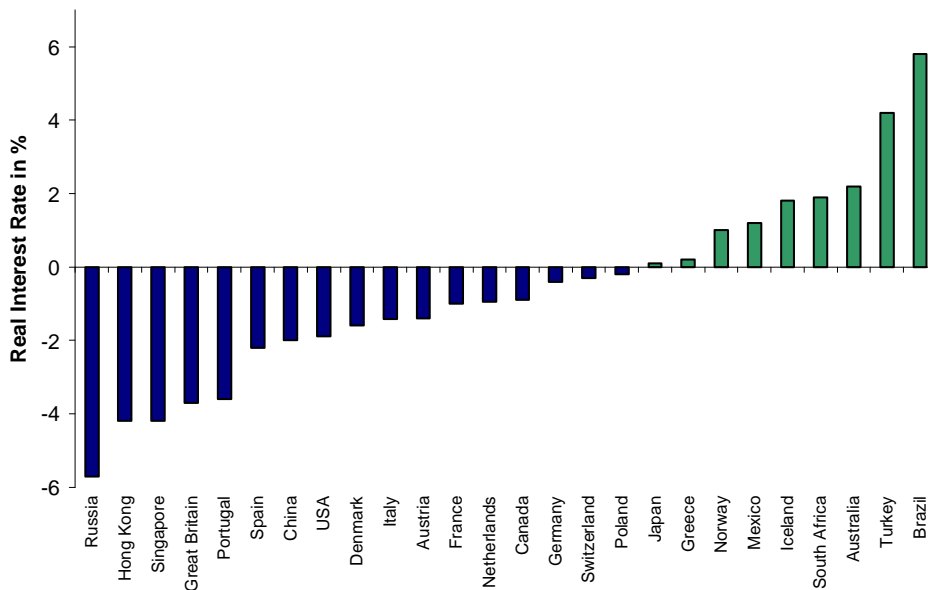
Real interest rates vs. subsequent gold price performance 1970-2010



Sources: Erste Group Research, Shadowstats

Negative real interest rates reduce interest expense by default and eat into the existing debt. They therefore constitute a transfer from the savers to the debtors<sup>21</sup>. **The following chart illustrates the fact that this form of financial repression seems to be in vogue among the majority of nations these days.**

Real interest rates worldwide



Sources: Datastream, Bloomberg, Erste Group Research

*“Throughout history, feckless governments have dodged their fiscal responsibility by turning to their monetary authority to devalue the currency, monetize debt and inflate their way out of structural deficits“*

Richard Fisher, President of the Federal Reserve Dallas, March 2011

<sup>21</sup> Please also refer to “The Liquidation of Government Debt“, Carmen M. Reinhart, M. Belen Sbrancia, April 2011, IMF

# Special Report Gold

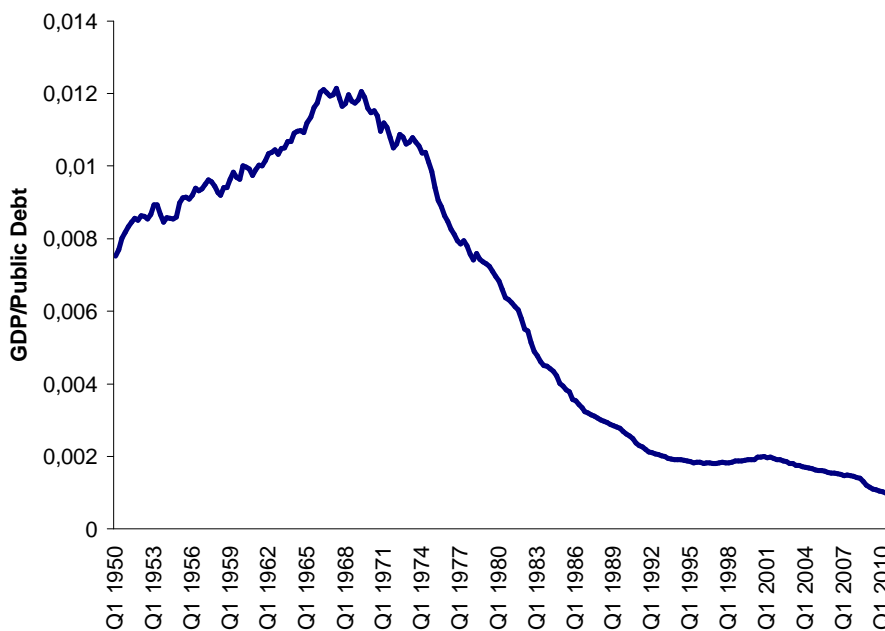
## 4. The law of diminishing marginal returns indicates that the level of debt has reached a saturation point

**“When there’s already a lot of red ink, Keynes does not work”  
Woody Brock**

The following chart will not exactly incite joy among Keynesians. It plots the ratio of GDP to government debt over time and highlights the falling marginal return created by GDP per additional unit of debt. In the 1960s the increase in debt still came with huge effects on the output, whereas nowadays the increase in aggregate output falls short of the growth in debt that caused it. This also explains why stimulus programmes only trigger rather lacklustre economic growth. **As soon as the dose of debt cannot be stepped up accordingly anymore, or indeed this course of treatment has to be discontinued altogether, the withdrawal effects will be painful. Gold should come out of this situation on the winning side.**

To use an analogy from nature: fertiliser will increase the productivity of the soil. However, if you overdo it, you have a case of over-fertilisation on your hands, and every additional unit of fertiliser goes basically down the drain, as the soil is destroyed.

**GDP/government debt**



Sources: Datastream, Erste Group Research

*“To combat the depression by a forced credit expansion is to attempt to cure the evil by the very means which brought it about; because we are suffering from a misdirection of production, we want to create further misdirection—a procedure that can only lead to a much more severe crisis as soon as the credit expansion comes to an end.”*

Friedrich August von Hayek

**Misery index as reliable leading indicator**

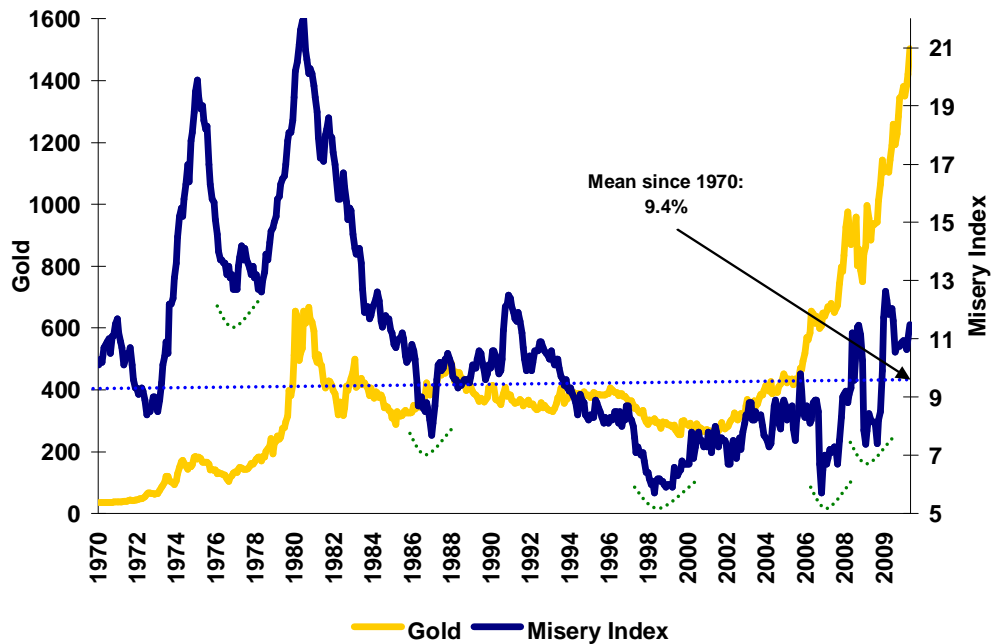
**There are also numerous other indicators that illustrate the predicament described above.** The Misery index is the sum of the rate of inflation and the unemployment rate. At almost 13%, the index is way above the long-term average of 9.4%. In the 1970s the index used to average 13.8%. Since the beginning of QE2 it has increased by more than four percentage points.

Due to the sensitive nature of the gold price with regard to inflation and general economic downturns, we can see a strongly positive correlation between gold and the Misery index. The

# Special Report Gold

following chart shows that the index tends to break out before the gold price, which would confirm a bullish scenario for the gold price.

**Misery index (right scale) vs. gold price (left scale)**



Sources: Datastream, Erste Group Research

## **Social asymmetries as tinderbox**

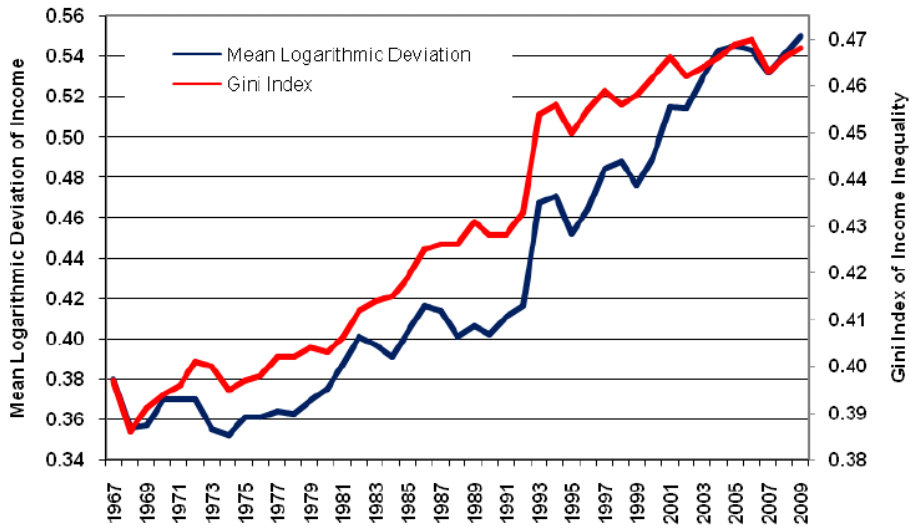
**The uneven distribution of income is escalating as we write, leading to growing social tensions.** The GINI<sup>22</sup> coefficient has reached highs in numerous countries, which means that the extrema at both ends – high and low – of the income scale are becoming ever more profound, whereas the classic middle class loses out. For example the GINI coefficient in the USA is at the same level as it was in the 1920s prior to the Great Depression. The share of the wealthiest percentile (1% of the world's population) in national wealth has increased from 9% to currently 24%.

**At the moment 44.2 million people in the USA (i.e. almost every seventh US citizen) receive food stamps, and according to Shadowstats the unemployment rate is clearly above 20%.** The youth unemployment is particularly worrying. From a historical perspective, such extreme values have often triggered sharp recessions and/or social unrest. But the gap is not only widening in the Western industrialised nations. In China the GINI coefficient has increased to almost 0.5, which means it has more than doubled in the past two decades.

<sup>22</sup> The GINI coefficient is a statistical measure indicating the uneven dispersion of income and wealth. The coefficient fluctuates within a band of 0 (wealth equally dispersed) to 1 (completely uneven dispersion, the entire wealth is owned by one person).

# Special Report Gold

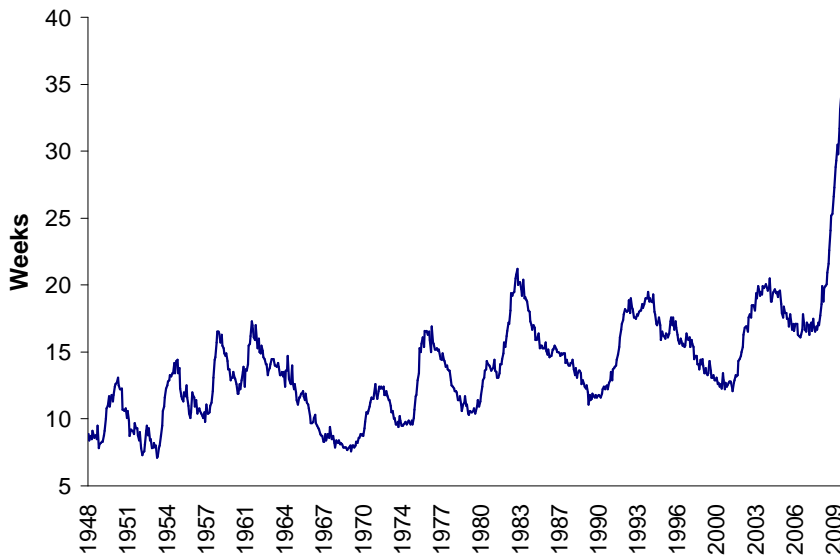
**Household Income Dispersion**  
**Gini Index versus Mean Logarithmic Deviation**  
 1967 to 2009 (Census Bureau, Poverty Report)



Source: Shadowstats.com

**The sharply rising inequality is highlighted by the ratio of management remuneration to average wages.** While in 1980 a CEO earned 24 times as much as a worker, s/he would take home 425 times the average wage today. – A dangerous situation, as history has shown, and definitely a result of the fractional-reserve system and the **Cantillon effect**. This 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 dispersion 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. **The lack of social symmetry is also apparent in the US labour market. At the moment it takes almost 40 weeks to find a job, i.e. significantly longer than the long-term average of 14 weeks.**

**Average duration of unemployment in weeks**



Source: Federal Reserve St. Louis, Erste Group Research

**The Federal Reserve continues to pursue its dual mandate. As the labor market remains weak, interest rates will continue to remain for a “prolonged period” at a low level. This should mean a positive environment for gold.**



# Special Report Gold

## 5. The monetary system at the crossroads – on the way to a new gold standard?

*“The modern mind dislikes gold because it blurts out unpleasant truths”*  
Joseph Alois Schumpeter

**Gold is slowly becoming “politically correct”**

**We have pointed at the gradual remonetisation of gold since our very first Gold Report.** While it had formerly been up to a handful of critical minds to question our monetary system, high-profile politicians and central bankers have meanwhile offered their opinion, too. Last year we saw numerous signals that indicated the fact that gold was gradually becoming “politically correct”. Robert Zoellick, President of the World Bank and former member of the Bush cabinet, had this to say about the gold standard<sup>23</sup>:

*“The system should also consider employing gold as an international reference point of market expectations about inflation, deflation and future currency values. Although textbooks may view gold as the old money, markets are using gold as an alternative monetary asset today. The development of a monetary system to succeed “Bretton Woods II”, launched in 1971, will take time. But we need to begin.”*

**Interpretations of Zoellick’s statements were largely lopsided**

Such statements would have been unthinkable only a few years ago. Since the mid-1970s hardly any high-ranking US politician has mentioned the gold standard in a positive context. This confirms the broad paradigm shift we are currently going through. Unfortunately many people interpreted the World Bank President’s statements wrongly, and he was immediately discredited. He did not argue in favour of an explicit return to the gold standard, but he commended its stability. On top of that he just wanted to launch a discussion and critically question our monetary system. We assume that Zoellick is thinking of a basket of goods that among other goods contains gold. Thomas Hoenig, President of the Federal Reserve Bank of Kansas City also called the gold standard a “legitimate monetary system”<sup>24</sup>. Moreover Prof. Robert Mundell – the “Father of the Euro” - urged gold convertibility for the euro and the dollar<sup>25</sup>. Steve Forbes, publisher and former Republican presidential candidate, was also optimistic that the USA could return to a gold standard because of its fiscal imbalances.

*“People only accept change when they are faced with necessity, and only recognize necessity when a crisis is upon them”* Jean Monnet

**Yesterday’s Smartphones are today’s gold standard**

**The thought of a currency not pegged to gold would have probably been absurd 100 years ago.** That’s how illusory a gold standard sounds to us today. However, 20 years ago mobile telephones with internet connection, digital cameras, and a digital music collection (aka Smartphones) were equally illusory. And we are in a similar situation with regard to the gold standard today. **Today even the thought that back in 1971 every 35 US dollars were backed by one ounce of gold is absurd.**

We believe that a return to the gold standard is no major economic or organisational problem. Rather, what we have on our hands is a highly political and philosophical question of principle that has to be answered. **We therefore believe that the strain has to become much bigger still before specific action will be taken.**

### **Money is measured in terms of gold – the price of gold vs. the price *in* gold**

The central feature of a gold standard is the fact that gold is used as measuring unit, much like litre, kilometre, kilogramme etc. To this extent, a system that measures gold in units of euros, dollars, or globos cannot be a gold standard, given that it refers to a paper money standard. This is what Nikolaus Kopernikus confirmed already in 1517 when he said *“Money is coined gold or silver and is used to calculate and pay the prices of items for sale, whether fixed by society or the ruler. In a certain way, it is therefore the measuring unit for valuations. But said*

<sup>23</sup> “The G20 must look beyond Bretton Woods II”, Financial Times, November 2010

<sup>24</sup> “Fed’s Hoenig says gold standard ‘legitimate’ system”, Reuters, January 2011

<sup>25</sup> „The emerging new monetarism“, Ralph Benko, Forbes

# Special Report Gold

*unit has to be of a fixed and stable magnitude, or else the order of society would certainly be disrupted*<sup>26</sup>.

**From the golden to the heliocentric world view**

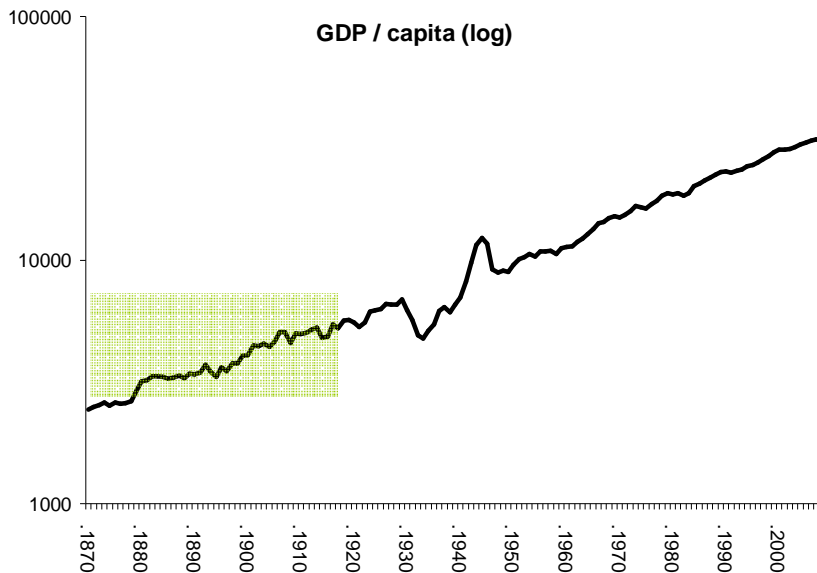
**Gold is therefore in the centre of the system while the currencies oscillate around it.** In his classic work “When Money dies”, Adam Fergusson writes “*Nevertheless, it was the natural reaction for most Germans, or Austrians, or Hungarians – indeed, as for any victims of inflation – to assume not so much that their money was falling in value as that the goods which it bought were becoming more expensive in absolute terms; not that their currency was depreciating, but – especially in the beginning – that other currencies were unfairly rising, so pushing up the price of every necessity of life. It reflected the point of view of those who believe the sun, the planets and the stars revolve with the moon around the earth...*”

Therefore we could see a future where rather than asking for the price of gold, people will much more often ask for the price in gold.

**Greenspan commends the “golden era”**

**Although many have said that a gold standard would be deflationary and eat into wealth, we advise taking yet another look into the history books or on the following charts.** The period of 1870 to 1914 recorded the highest real growth rates worldwide and was among the most peaceful ones in history.

**GDP per capita since 1870 (shaded area = Gold Standard until 1914)**



Source: Angus Maddison, Erste Group Research

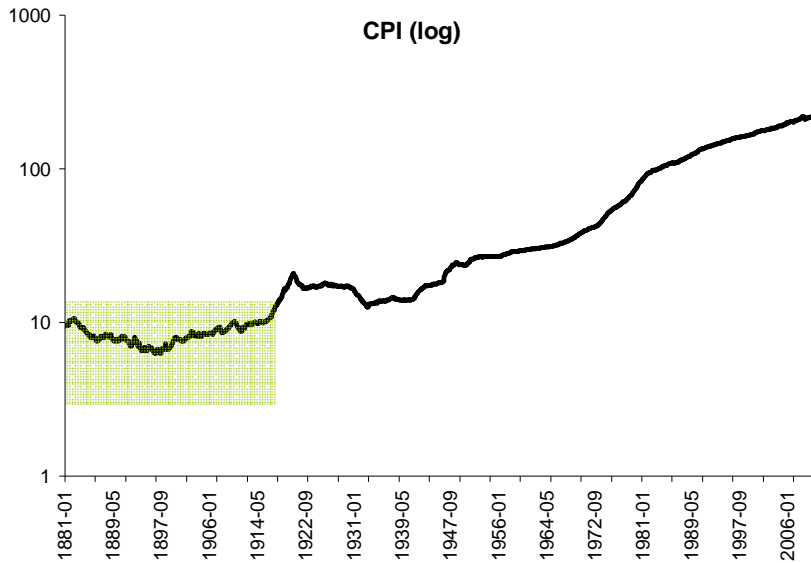
Most of the budgets were balanced, and there was a free flow of capital across borders. The only job of the central banks was to exchange gold for paper or vice versa. Alan Greenspan has recently commended the stability of those days<sup>27</sup>: “*There are numbers of us, myself included, who strongly believe that we did very well in the 1870 to 1914 period with an international gold standard*”. On top of that, in the very same interview he questioned the point of having a central bank at all.

<sup>26</sup> Nikolaus Kopernikus, “Treatise on Debasement”

<sup>27</sup> Please refer to John Embry “Current decline will be the bottom for gold and silver”

# Special Report Gold

**CPI since 1881 (shaded area = Gold Standard until 1914)**



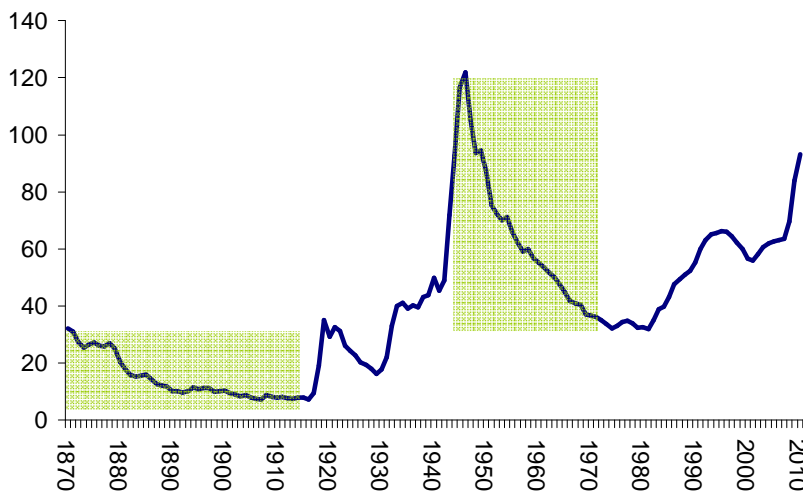
Source: Online Data Robert Shiller, Yale University, Erste Group Research

**Currencies covered by gold seem to contribute significantly to the economic, political, and social stability.** Many eras (the Roman Empire, the Venetian Republic) recorded centuries of price stability. It was only when the content of precious metal in the coins was reduced that rapid decline set in.

**30 periods of hyperinflation since the gold standard was dropped**

**Gold and economic freedom are inseparably linked.** In 1914 the world abandoned the gold standard because the European governments could not afford to fight a war given the restrictions of the gold standard. Since the gold standard was dropped, we have seen almost 30 periods of hyperinflation worldwide. A gold standard also serves as regulative framework for the budget in that it practically enforces a balanced budget. This is probably also the reason why politicians hate it so much. On top of that a gold standard also does not hinge on the different political convictions of the governments. Ludwig von Mises also commented on the political independence: *“The gold currency liberates the creation of purchase power from the influence of politics and from the fluctuating economic philosophies held dear by changing political majorities. This is its advantage.”* 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>28</sup>.

**Gross Public Debt (as a % of GDP) – shaded areas indicates classic Gold Standard and Bretton Woods Agreement**



Source: Carmen Reinhart and Kenneth S. Rogoff, “From Financial Crash to Debt Crisis,” NBER Working Paper 15795, March 2010, Erste Group Research

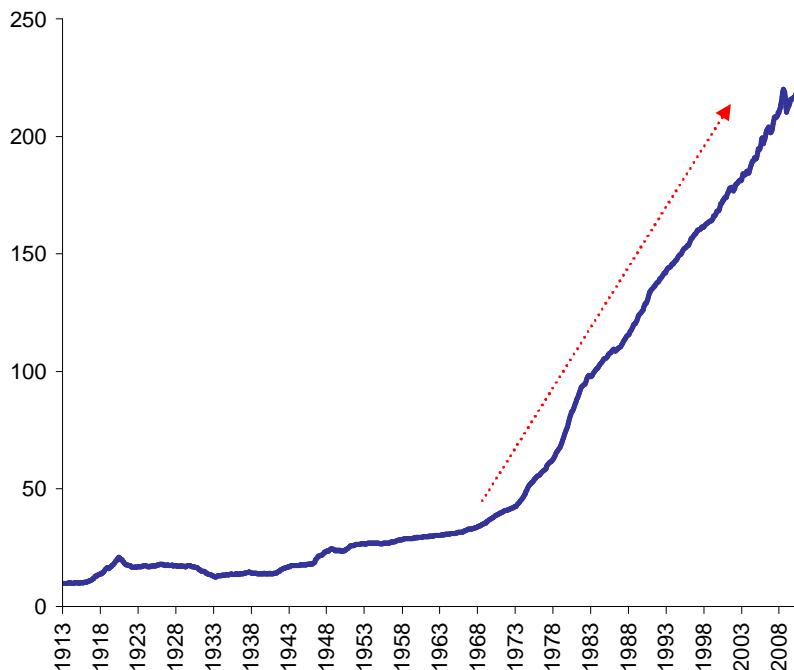
<sup>28</sup> Please refer to Ferdinand Lips, “Why Gold-Backed Currencies Help Prevent Wars”

# Special Report Gold

A study<sup>29</sup> investigating into the increase in money supply in 15 nations from 1820 to 1994 shows that money supply growth and inflation were substantially higher in fiat systems than under a gold or bi-metal standard. According to the study the average inflation in fiat standards was 9.17% as opposed to 1.75% under a gold standard. Bordo and Kydland<sup>30</sup> came up with similar results. The analysis of four different periods (classic gold standard, the period between WWI and WWII, Bretton Woods, post-Bretton Woods) yields a clear result: **the stronger the gold pegging, the lower inflation.**

This is also what the following chart confirms. The momentum of the Consumer Price Index has increased dramatically since the end of Bretton Woods.

**CPI All Urban Consumers from 1913**



Sources: Federal Reserve St. Louis, Erste Group Research

*"It was not the gold standard that failed, but those to whose care it had been entrusted"*  
Heinrich Rittershausen

## **Is a gold standard deflationary per se?**

### **Deflation is a healthy form of market shakeout**

One of the central arguments against the gold standard is still the fear of deflation. Broadly speaking, we regard this fear as unfounded. On the contrary, it tends to come in the form of a healthy shakeout. Although this term actually describes a shrinking money supply, it has (falsely) come to denote falling prices. The fact that falling prices can also mean rising returns and thus higher productivity (e.g. software, aviation, and PC industry since the 1980s) tends to be forgotten. The huge fear of deflation is based on the excessive debt in the system, which of course harms debtors more than creditors. The fact that deflation is not permitted in the economy at the moment only increases the problems and delays the cuts. **Therefore we believe that the superficial and credit-financed solution to the problems will prevail yet again.**

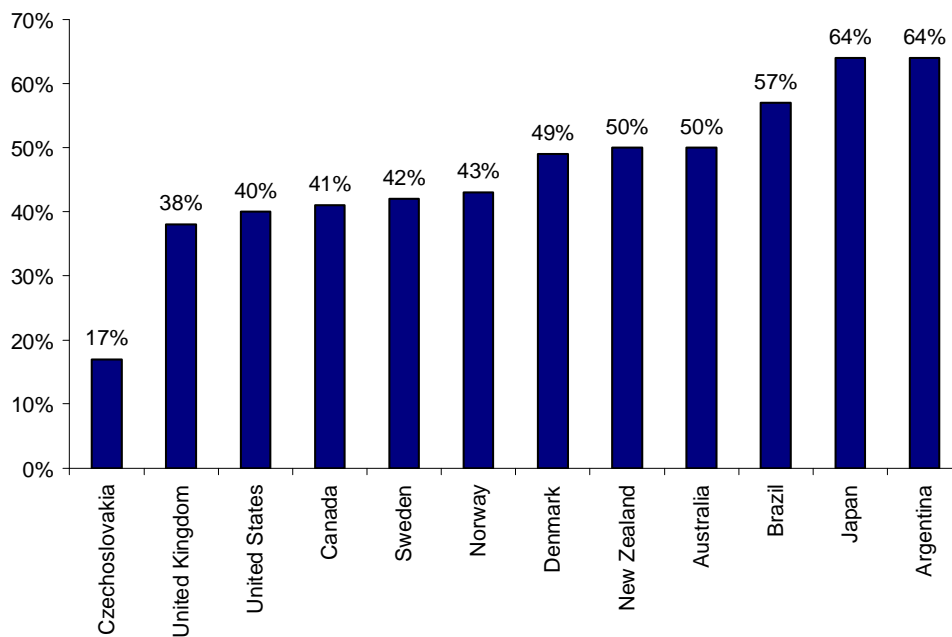
During the Great Depression the majority of nations were adhering to the gold standard. When it was dropped, the latent, strong demand for gold emerged and led to a drastic appreciation of gold. This rarely discussed period represented the first big gold bull market of the past century.

<sup>29</sup> Please refer to "Money, Inflation and Output under Fiat and Commodity Standards", Rolnick A.J und Weber W.E, Journal of Political Economy, December 1997

<sup>30</sup> Please refer to "The Gold Standard as a Rule: An Essay in Exploration", Bordo M.D und Kydland F.E, Explorations in Economic History, 1995

# Special Report Gold

**Gold price increase 1929-1934 (relative to gold parities)**



Source: ETF Securities, "Golden Fetters: The Gold Standard and the Great Depression", Barry Eichengreen

# Special Report Gold

## ***Gold and silver as official means of payment vs. “Gresham’s Law”***

### **First concrete steps in the direction of “sound money”**

In the recent past we have not only heard comments by politicians with regard to the gold standard, but we have actually **seen the first concrete steps towards a remonetisation**. The federal State of Utah has recently recognised gold and silver as official means of payment. It is not the embossed nominal value that determines the value of the coins, but the weight. Similar draft laws are under scrutiny in many other federal States as well. Basically this does not change much, seeing as according to Gresham’s Law no gold will be used for payment; however, it does show a paradigm shift. It emphasizes the faltering trust in the US dollar, the smouldering fear of hyperinflation, and the increasing level of dissatisfaction with the work the government has been doing in Washington. **The symbolic effect of the “Legal Tender Act” is enormous.**

Zimbabwe – not exactly a straight-A student when it comes to a stable monetary policy in its recent past – may introduce a gold standard in the foreseeable future<sup>31</sup>. Central bank governor Gideon Gono wants to revitalise the Zimbabwe dollar by pegging it to gold. The sad example of Belarus also highlights the monetary importance of gold. With rumours of an imminent depreciation of the currency getting stronger, the population bought more than 700kg of gold within just a few months. As a result the central bank prohibited the sale of gold against local currency. And sure enough, in spite of all assertions to the contrary, the Belarussian rouble was depreciated by 54.4% over night<sup>32</sup>.

**Vietnam is another interesting example of the monetary stability of gold.** The affinity to gold in the country is extremely high. Although the German GDP is almost 40 times higher than the Vietnamese, gold demand per capita in Vietnam almost matches that of Germany. Overall gold demand amounts to roughly 3.1% of GDP (N.B. by comparison in China it is less than 0.5%).

### **Enormous gold affinity in Vietnam**

**Vietnam is a prime example of Gresham’s Law.** In simple terms, the law states that “bad money drives out good money from circulation”. Actually, the correct version of it would say that legally overvalued money drives out legally undervalued money. Specifically, this means that the money that in physical terms is worth less will be used as means of payment, while the higher valued money – in this case, gold – will flow abroad or be hoarded as a store of wealth and will thus be withdrawn from circulation<sup>33</sup>. Given that inflation was significantly above 15% last year, the foreign exchange reserves were falling rapidly, the trade balance deficit has been growing relentlessly and the Vietnamese dong has already been depreciated six times since 2008, it comes as no surprise that the Vietnamese people hardly trust their currency anymore and have started accumulating gold.

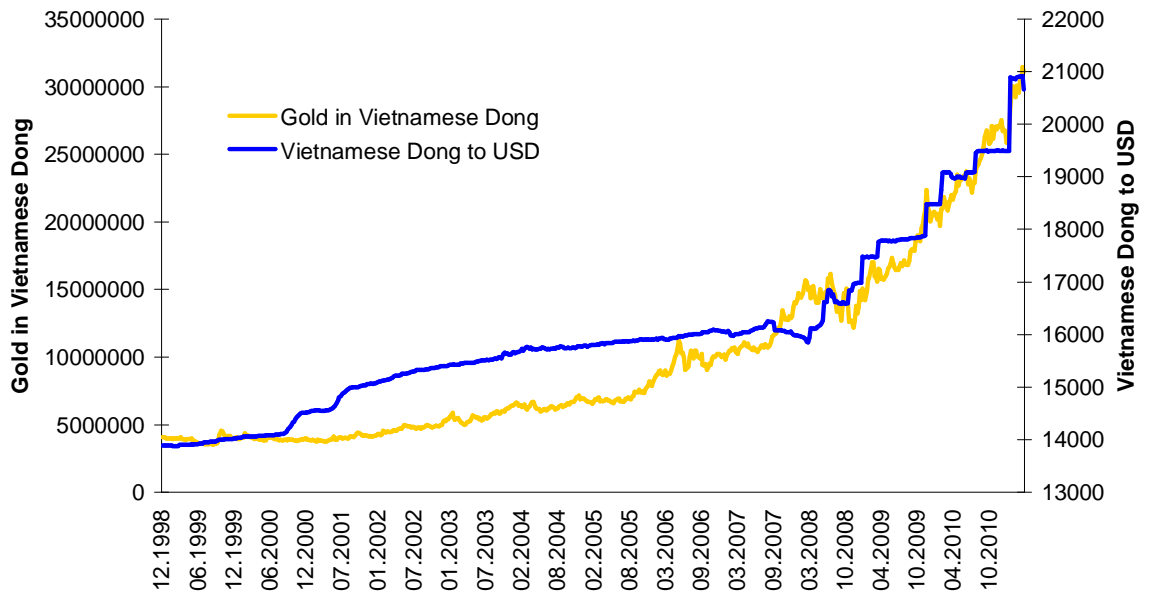
<sup>31</sup>“Now Zimbabwe talks of a gold standard while warning of US dollar devaluation”, Mineweb, Mai 2011

<sup>32</sup> Please refer to. [www.jilnik.com](http://www.jilnik.com) „Kein Gold, keine Dollars, keine Waschmaschinen: Was ist bloß in Weissrusland los? Ein Drama in 10 Akten“ (No gold, no dollars, no washing machines: what on earth is going on in Belarus? A drama in 10 Acts)

<sup>33</sup> Please refer to “The Daily Reckoning, “Gold, Gresham’s Law & the Dong”

# Special Report Gold

Gold in Vietnamese dong (left scale) vs. exchange rate dong/US dollar (right scale)



Source: Bloomberg, Datastream, Erste Group Research

## Gresham's Law works in Malaysia too

In the Malaysian province of Kelantan the gold dinar has been introduced. Civil servants can choose to receive up to 25% of their salary in the precious metal currency. The measure is based on an initiative by the former Prime Minister, Dr. Mahatir. Back in 1993 he suggested replacing the US dollar in trade transactions with other Muslim countries with the Islamic gold dinar (IGD). However, as long as the Malaysian ringgit is still circulating, the gold dinar will never actually be used for payments and will therefore not be circulating. Here, too, Gresham's Law is working.

## Imminent monetisation of the Silver Libertad in Mexico?

**It seems that the Silver Libertad initiated by Hugo Salinas-Price has the biggest chances of gaining a foothold in the monetary system.** The draft law for the monetisation of the silver coin is currently under scrutiny by the Mexican legislative authority. But since the Libertad has no value engraved, it cannot (yet) be used for day-to-day transactions. Should the initiative get approval (which is likely at the moment since all parties support it) the Mexican central bank would quote a price that cannot be depreciated<sup>34</sup>.

<sup>34</sup> Please refer to <http://www.plata.com.mx/mplata/articulos/articles.asp>

# Special Report Gold

## 6. Regression theorem explains why gold equals money

**The need for a stable means of exchange is as old as mankind.** Cigarettes, seashells, salt, goats, dried fish, or paper all fulfilled that role at some point. Their scarceness in relation to annual production made them bad items of value storage; most commodities come with an annual flow that outweighs the stock by a long shot. Therefore in the long run only gold and silver prevailed.

### Mises explains how money was created

**The regression theorem that Ludwig von Mises postulated in “The Theory of Money and Credit” is a pivotal piece when it comes to our understanding of the monetary character of gold.** It says that the expectation with regard the future purchase power of money depends crucially on the knowledge about today’s purchase power of money<sup>35</sup>. Today’s evaluation of purchase power in turn is derived from yesterday’s purchase power. If we continue this regression, we find that at the beginning of the process there has to be a good that was generally needed and had an industrial use. This means that money has emerged from a tangible good. This also includes the demand for jewellery and thus gold. According to Mises only those goods that have a generally accepted utility value can turn into generally accepted, natural money. Gold and silver were already used as jewellery before they assumed their monetary functions. **According to Mises the past experience is the decisive factor for the future trust in monetary stability.**

**Safety with regard to the future money supply is crucial for trust**

**The trust in the stability and the future purchase power is essential for the value measurement of money.** According to the regression theorem people only trust in money as long as it offers a certain degree of safety with regard to the future money supply and thus to the future purchase power. From our point of view, the high stock-to-flow ratio seems to play an important role in this context. **In the following we want to discuss this central and unique, and hitherto quite disregarded, feature of gold.**

### Stock-to-flow ratio distinguishes between gold and commodities

*“A stock of anything has to be started at a moment in time. A stock of 170,000 tonnes does not just suddenly appear. At some point, long ago, the decision was made to begin to hoard gold. No one hoards something that will not hold its value over time. No one would put a dozen eggs or an iron bar in the back shed and expect it to have value fifty years later. The crucial point to understand is that when the original decision was made to begin to acquire and hoard gold, it must have already been regarded as a store of stable value over time, otherwise the decision to store it would not have been made.” Philip Barton, “The Dawn of Gold” (published later this year)*

### Gold’s Stock-to-flow ratio at 65

The most important feature of gold is definitely its extremely high stock-to-flow ratio. The aggregate volume of all the gold ever produced comes to about 170,000 tonnes. This is the stock. Annual production was 2,586 tonnes in 2010 according to the World Gold Council. That is the flow. Dividing the former by the latter, we receive the stock-to-flow ratio of 65 years.

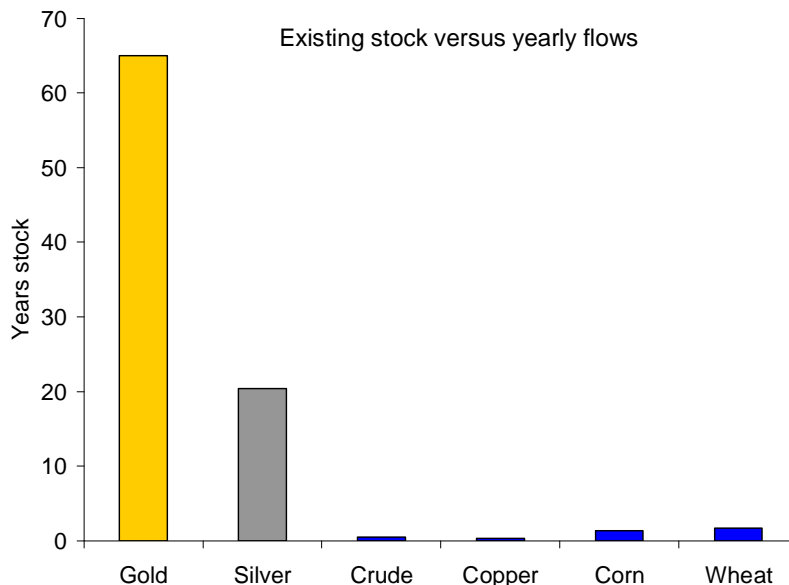
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<sup>35</sup> “Ökonomische Hürden auf dem Weg zu einer warengedeckten Wahrung“ (Economic hurdles on the way to a currency covered by goods), Gregor Hochreiter, January 2007



# Special Report Gold

## Stock-to-flow ratios gold and silver vs. commodities



Sources: *The Gold Standard Institute, Sharelynx.com, Erste Group Research*

## Stock-to-flow as most important reason for the monetary relevance of gold and silver

**Paradoxically, gold is not scarce – the opposite is the case:** it is one of the most widely dispersed goods in the world. Given that its industrial use is limited, the majority of all gold ever produced is still available. The recycling of existing gold accounts for a much larger share of supply than for other commodities. This is also why any significant production expansions or disruptions can be absorbed more easily. We therefore believe that gold is not that precious because it is extremely scarce, but because the opposite is true: **gold is considered that precious because the annual production is so low relative to the stock. This feature has been acquired in the course of centuries and cannot be undone anymore.**

### High stock-to-flow ratio creates safety and trust

**Global gold reserves grow by an annual 1.5% and thus at a much slower rate than all the other money supply aggregates around the globe.** The growth rate is vaguely in line with population growth. The trust in the current and future purchase power of money or any means of payment not only depends on how much is available now, but also on how the quantity will change over time. If mining production were to increase by 50% (which is highly unlikely), this would only translate into an annual increase of 3%. This fact creates a sense of security as far as the availability is concerned and prevents natural inflation. If production were down for a year, this would also have little effect on the overall situation. On the other hand, if the copper production were to be disrupted for an extended period of time, the stocks would be exhausted after about 30 days. For example, if a huge new mine were to come online and supply doubled, this would come with huge repercussions for the copper price, but with hardly any for gold. This stability and safety is a crucial prerequisite for the creation of trust. And it is what differentiates gold and silver as monetary metals clearly from commodities and the other precious metals. Commodities are consumed, whereas gold is hoarded. **This also explains why traditional supply/demand models are only of limited use for the gold market.**

### Further distinctive features in relation to commodities:

- Gold does not go bad
- Gold is easily worked on and easily recycled
- Gold has a high ratio of value per weight and volume unit
- The storage and transportation costs of gold are low in relation to its value
- Gold has clear quality standards that can easily be checked

These seem to be some of the reasons why central banks around the world hoard gold instead of copper or coal.

# Special Report Gold

**“Lasting backwardation in gold is tantamount to the realisation that ‘gold is no longer for sale at any price’ ”<sup>36</sup>**

**We have now explained why gold is no commodity, but rather a monetary good.** Due to the high stock-to-flow ratio gold tends to be traded in contango. This means that the futures price is above the spot price. The last backwardation in gold dates back to 2008, while silver was traded in backwardation in January 2011. In the case of backwardation, the market sends a signal as a result of which demand all of a sudden increases, and it makes no sense anymore from an economic point of view to bet on a later delivery date, given that the costs of storage, financing, and insurance would be higher. Backwardation is a clear sign of supply shortages.

**We entertain doubts about the above-ground stock of 170,000 tonnes**

**We entertain some doubt about the alleged amount of 170,000 tonnes of above-ground stock.** The figure is based on the calculations of a National Geographic article of 1998. Since then, practically all institutes, magazines, and analysts have based their models and assumptions on that figure. The conclusion of the article was that only 10,000 tonnes were produced in the whole 5,850 years prior to the California gold-rush. **That amounts to only 1.7 tonnes a year which seems to leave a large question mark over the estimate<sup>37</sup>.**

On top of that we believe that almost 30% of annual gold production ends up in the private/black market rather than the official market. The volumes of artisan mining should not be underestimated, especially in Latin America, Africa and Asia. **Therefore we entertain doubts about the 170,000 tonnes and we think it makes sense to at least question the figure and to entertain the idea that substantially more gold than claimed might be around. On the other hand, this would only add to the power of the stock-to-flow ratio of gold.**

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<sup>36</sup> “There is no fever like Gold fever”, Prof. Antal E. Fekete

<sup>37</sup> Please refer to “The Dawn of Gold”, Philip Barton

# Special Report Gold

## 7. Gold as portfolio insurance

*"Part of probability is that the improbable can occur"*  
Aristotle

Unique features make gold the optimal portfolio insurance

As already explained in the previous reports, we believe that gold should be part of every portfolio for reasons of diversification and insurance. This means that we would not start panicking in case of corrections. Fire insurance does not usually get cancelled just because the house has not caught fire. The high stock-to-flow ratio, the liquidity of the market, and its unique features as a monetary good set gold apart from all other asset classes and make it an efficient hedge against systematic market risk. This also comes with an effect on correlations with stocks and bonds.

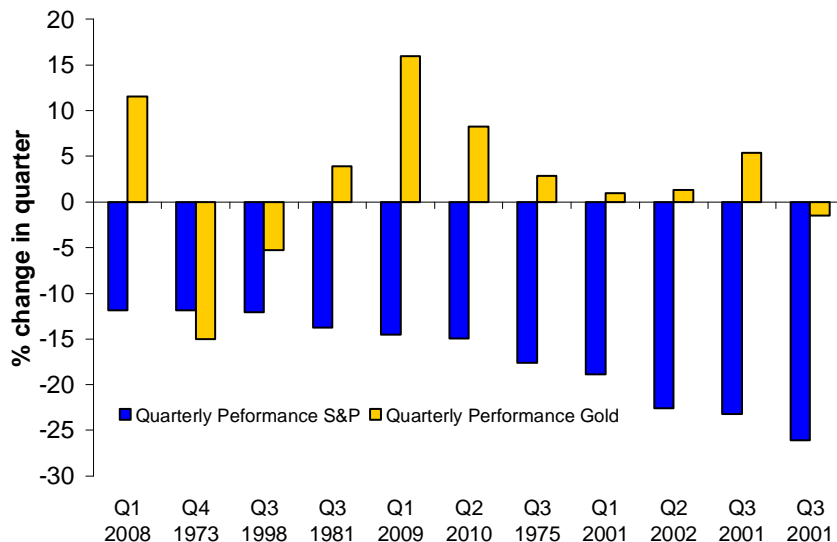
No counterparty risk associated with gold

Numerous studies prove that gold as a portfolio module reduces overall risk and improves performance. Gold smoothes the fluctuations in the portfolio especially in highly volatile periods. On top of that there is no statistically significant correlation between gold and economic data. This seems to be due to the fact that gold is not subject to any form of liquidity risk, its market risk is lower, and it does not contain any credit risk. In contrast to shares or bonds, there are no liabilities attached to gold. **Based on this alone, gold is highly recommendable for reasons of diversification.**

Last year the implicit volatility of gold was 16%, which was right at its long-term average. By comparison, the respective volatilities of the DAX index (19.3%), the S&P 500 index (19.23%), the Brazilian Bovespa (23%), and crude oil (31.7%) were substantially higher.

The following chart also illustrates that gold is an excellent "event hedge": we have looked at the weakest quarters of the S&P 500 since 1970 and compared them to the performance of gold in the same period. With the exception of the fourth quarter of 1973 gold clearly outperformed the US equity market in all "crash quarters".

Performance in the weakest quarters of the S&P 500 index vs. gold

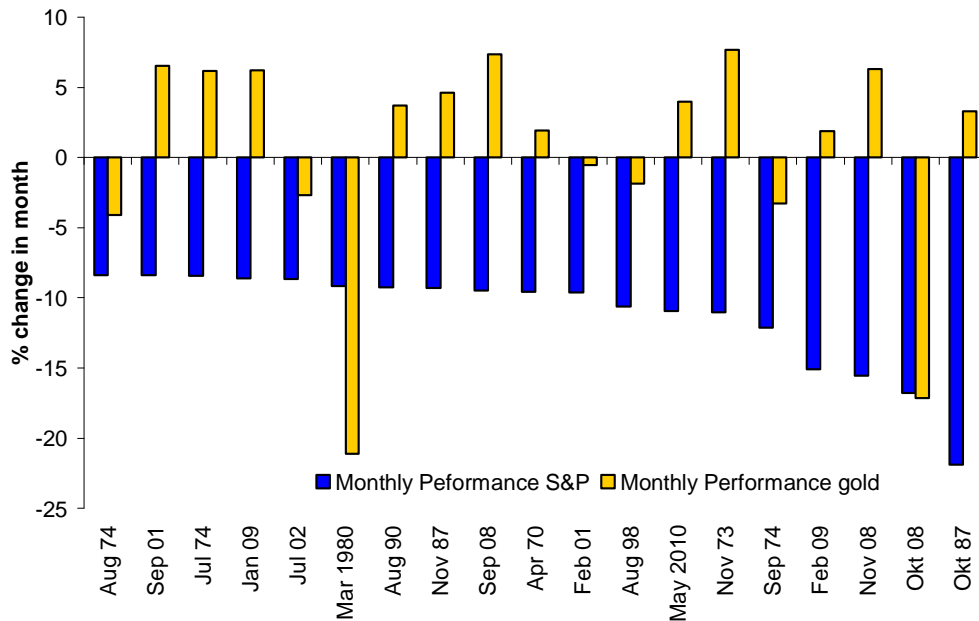


Sources: Bloomberg, Erste Group Research

Almost the same is true for the crash months of the S&P 500 index. With the exception of two months gold clearly outperformed the S&P index in the weakest 19 months.

# Special Report Gold

Performance in the weakest months of the S&P 500 index vs. gold



Sources: Bloomberg, Erste Group Research

**Conditional value at risk can be reduced by adding gold**

**We have thus shown that gold is an efficient hedge against black-swan events and against tail risk.** In 75% of the cases portfolios containing gold outperformed those that did not contain gold. The information ratio<sup>38</sup> and value at risk (VAR)<sup>39</sup> also clearly argue in favour of gold. The maximum weekly loss within the past 20 years amounted to 3.5% (at a confidence interval of 95%). According to a study by Mercer<sup>40</sup>, the so-called conditional value at risk can also be reduced drastically by adding just 5% of gold to the portfolio. This risk parameter (also called expected shortfall or expected tail loss) defines the deviation in case of an extreme event. This does not only take into account the probability of an extreme event occurring, but also the magnitude of the deviation beyond it<sup>41</sup>.

Studies by Bruno and Chincarini<sup>42</sup> suggest allocating 10% of the portfolio to gold for non-US investors. Scherer<sup>43</sup> recommends a 5-10% weighting of gold for sovereign wealth funds. Baur and McDermott<sup>44</sup>, too, confirm that gold is an excellent hedge for equity investors and a safe haven for bond investors.

**1% increase in money supply = 0.9% increase in the gold price**

A study by the World Gold Council<sup>45</sup> shows that a 1% increase in money supply triggers an average 0.9% increase in the price of gold six months later. When the money supply in the Eurozone is expanded, the gold price will also rise by 0.9% within six months. In addition, gold is an excellent indicator of the velocity of money, especially in the USA. **The gold price anticipates the fact that the market steps up the velocity and interprets it as future inflation.**

The following chart plots the five-year correlation coefficient of the weekly performances of gold against commodities as well as equity and commodity indices. It illustrates again the fact that gold works well as portfolio insurance in terms of efficient risk management.

<sup>38</sup> A valuation ratio that shows the surplus yield in relation to the tracking error

<sup>39</sup> A standardised risk measure that shows the maximum loss of a certain risky position at a given probability and within a given time horizon

<sup>40</sup> Please refer to "Gold als Anlageklasse für institutionelle Investoren" (Gold as investment class for institutional investors), Mercer, 2011

<sup>41</sup> Please refer to Wikipedia „Risk measure“

<sup>42</sup> "A Historical Examination of Optimal Real Return Portfolios for Non-US Investors", Review of Financial Economics

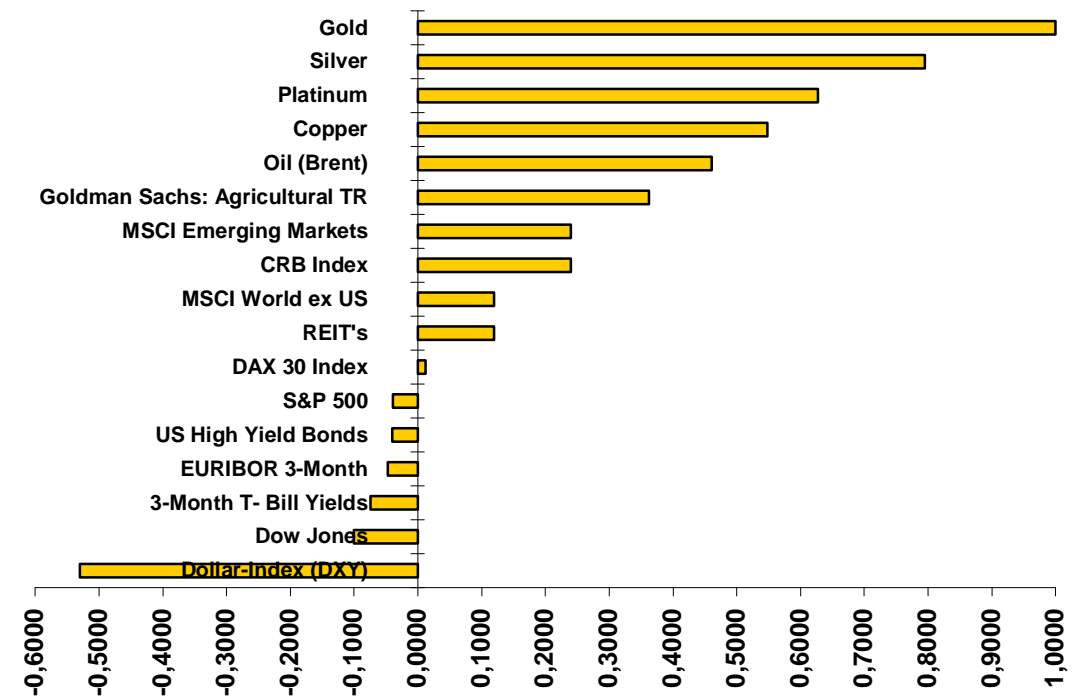
<sup>43</sup> "A note on portfolio choice for sovereign wealth funds", Financial Markets and Portfolio Management

<sup>44</sup> "Is gold a safe haven? International evidence", Journal of Banking and Finance

<sup>45</sup> "Linking Global Money Supply to Gold and Gold to Future Inflation", World Gold Council, February 2010

# Special Report Gold

Correlation Gold vs. other asset classes



Sources: Bloomberg, Erste Group Research

# Special Report Gold

## 8. Possible targets for the gold price

In 2008 we set our long-term price target of USD 2,300 for the first time. **We continue to expect the gold price to rise at least to the inflation-adjusted all-time-high of USD 2,300/ounce (dating from 1980) at the end of the bull market. Some historical comparisons suggest even higher spheres.** This is what we would like to discuss in the following pages.

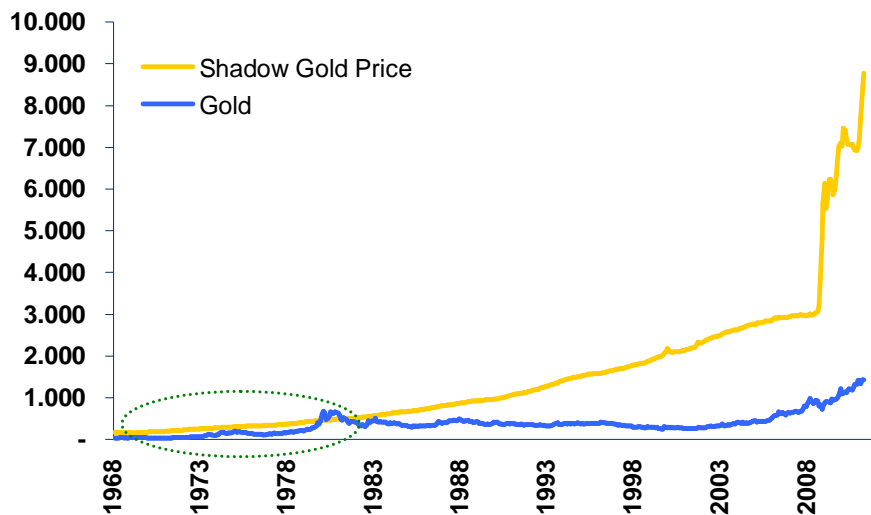
When we compare the pinnacle of the previous gold bull market with the closing prices of 2010, we find that gold had increased only marginally in relation to the S&P index, the money supply, debt, or even the US dollar reserves.

	January/March 1980	December 2010	Difference
<b>Gold</b>	USD 850	USD 1,424	+67%
<b>Aggregate gold</b>	USD 2,800bn	USD 7,600bn	+155%
<b>US Fed funds rate</b>	17.19%	0.19%	-17%
<b>S&amp;P 500</b>	113	1,254	+1,097%
<b>US M2</b>	USD 1,499bn	USD 8,804bn	+487%
<b>US Total debt</b>	USD 3,603bn	USD 35,589bn	+887%
<b>EM forex reserves (from 1995)</b>	USD 458bn	USD 5,88bn	+1,186%

Sources: Absolute Portfolio Management - Andreas Böger, Bloomberg, World Gold Council

**QB Asset Management calculates the so-called "Shadow Gold Price" ("SGP").** It divides the US Monetary Base by U.S. official gold holdings, the same formula actually used during the Bretton Woods regime to fix the exchange value of the dollar at USD 35.00/ounce. **It would be the theoretical price of gold today were the Fed to depreciate the USD to a level that would cover systemic bank liabilities (transform a debt-based into a asset backed currency).** The current Shadow Gold Price would be just under USD 10,000. This figure illustrates the magnitude of monetary inflation already embedded into the system, sitting latent and threatening to increase the general price level.

### Shadow Gold Price



Sources: QB Asset Management, Mike Maloney, Erste Group Research

The following table<sup>46</sup> shows the theoretical Shadow Gold Price in different base-money supply scenarios. If the money supply were to fall by 25%, then the SGP would still be USD 7,456, if the monetary base were to rise by another 50%, then it would be at USD 16,634.

<sup>46</sup> Sources: QB Asset Management, Apropos of Everything (2&3), April 2011

# Special Report Gold

This calculation is by no means a pure mind game but rather the way the exchange rate between paper and money was calculated during the Bretton Woods Agreement. After the Federal Reserve Act of 1914 coverage was set to at least 40%. Therefore we have also based our calculations on a 40% coverage ratio.

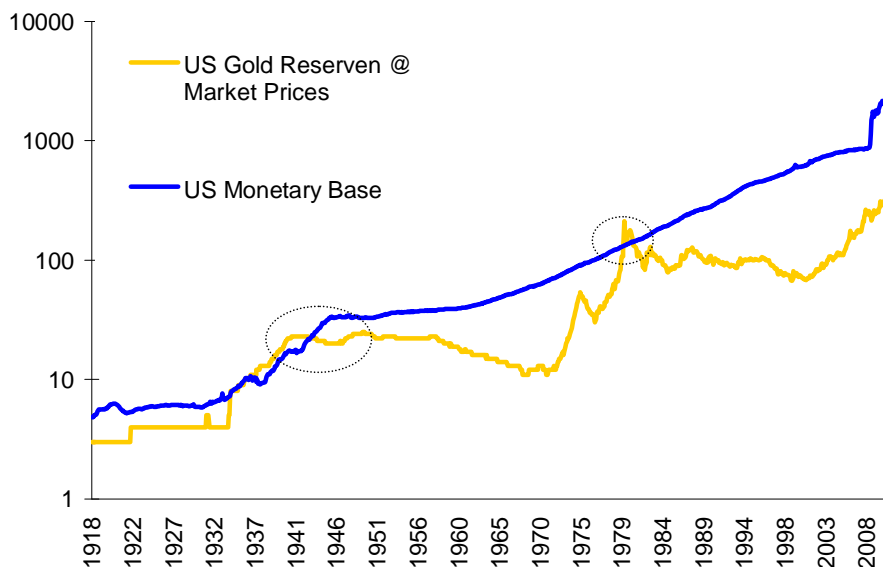
Change in Monetary Base	Monetary Base (billions)	Official US Gold Holdings (moz)	Shadow Gold Price	40% backing
-25%	1,950	261.5	<b>7,456</b>	<b>2,983</b>
-10%	2,340	261.5	<b>8,948</b>	<b>3,579</b>
FLAT	2,600	261.5	<b>9,942</b>	<b>3,977</b>
10%	2860	261.5	<b>10,936</b>	<b>4,374</b>
50%	3900	261.5	<b>14,913</b>	<b>5,965</b>
100%	5200	261.5	<b>19,884</b>	<b>7,953</b>
500%	13000	261.5	<b>49,709</b>	<b>19,884</b>
1000%	26,000	261.5	<b>99,419</b>	<b>39,767</b>

Sources: QB Asset Management, Erste Group Research, Fed St. Louis

**“There is the rumour that nations cannot go bankrupt. This rumour is false.”**  
**Angela Merkel in January 2009**

**What options are there available then to cut the debt ratio on a sustainable basis?** The answer is relatively simple: saving, massive tax hikes, inflation, haircuts, and national bankruptcy. It would be much more comfortable to appreciate the gold price. Even though it seems unlikely at the moment, the following chart (logarithmic scale) shows that the US money supply was already fully covered by US gold reserves over two periods in history.

## Gold reserves vs. monetary base

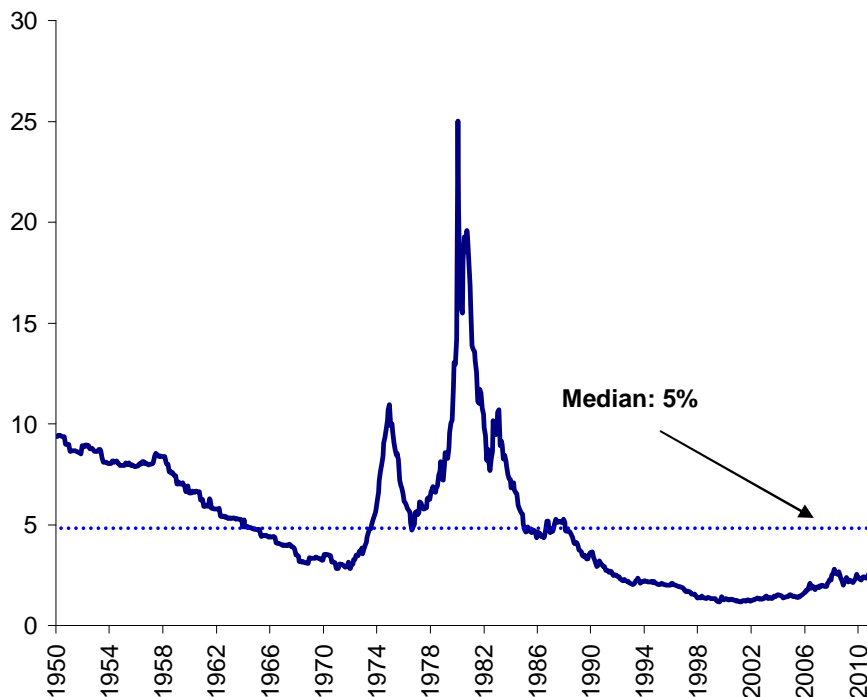


Sources: Mike Maloney, QB Asset Management, Erste Group Research

**At the moment less than 2.6% of US government debt is covered by gold, which is clearly below the long-term median of 5%.** Should the gold price therefore double, the coverage would only rise to the long-term median. But this would also require stable government debt, which is less than likely. The highs of the ratio dating from the 1980s would only be reached at a price of about USD 15,000.

# Special Report Gold

**Ratio government debt USA / value of gold reserves**



Sources: Erste Group Research, Fed St. Louis

If one were to fully cover the current debt with gold, the price would have to increase to USD 57,000/ounce. That said, a full coverage is extremely unlikely; at its highs the ratio was at 55% in 1915 and at slightly less than 25% in 1980.

If the foreign debt of other nations were fully covered by gold, the resulting prices would be as follows:

	<b>Kilos</b>	<b>External Debt</b>	<b>Price per Ounce</b>
Switzerland	1,040,100	1,190,000,000,000	35,586
France	2,435,400	4,698,000,000,000	60,000
Italy	2,451,800	2,223,000,000,000	28,201
Germany	3,406,800	4,713,000,000,000	43,029
Japan	765,100	2,246,000,000,000	91,306
Austria	280,000	755,000,000,000	83,868
UK	310,300	1,744,272,000,000	174,840

Source: Datstream, Erste Group Research, Bloomberg

In comparison with the USA many European nations post significantly higher coverage ratios. Germany (6.6%), Portugal (9.6%), the Netherlands (5.8%), and Austria (5.1%) are in a clearly better position than the USA. At the bottom of the list we find Japan (0.3%) and Ireland (0.1%). If the gold price quintupled to USD 7,600 and the government debt remained stable, a couple of nations would achieve a comfortable degree of coverage (right column). However, countries like Japan, Ireland but also the USA would not even benefit much from a quintuplication.



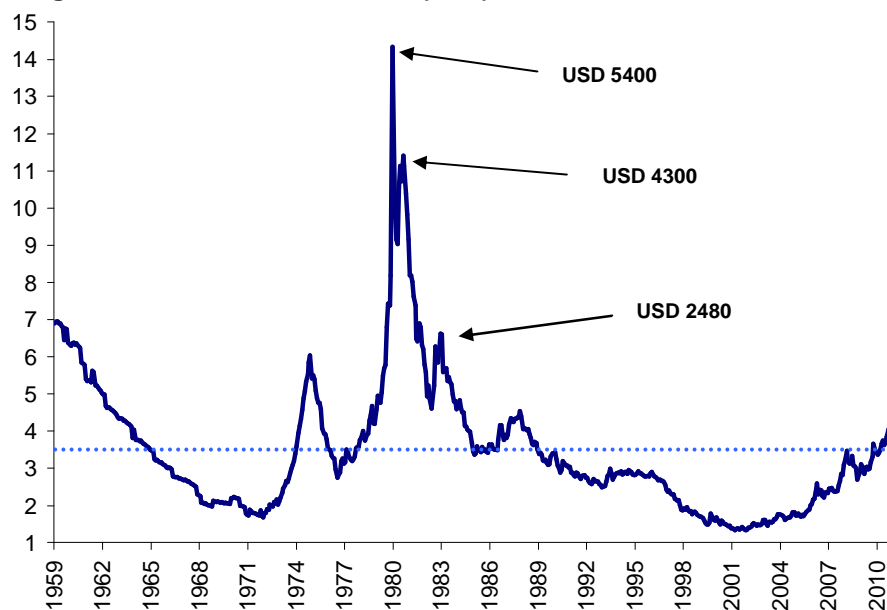
# Special Report Gold

Country	Coverage ratio	Coverage ratio @ USD 7,600 ounce
Belgium	2.40%	11.70%
Germany	6.60%	32.80%
France	5.30%	26.30%
Greece	1.20%	6.20%
Ireland	0.10%	0.70%
Italy	4.90%	24.20%
Netherlands	5.80%	28.70%
Austria	5.10%	25.20%
Portugal	9.60%	47.20%
Spain	1.40%	7.10%
Japan	0.30%	1.70%

Source: Wellenreiter Invest, 1 June 2011

In spite of the ten year bull market, the ratio of US gold reserves (at market prices) in terms of M2 money supply has only just exceeded the long-term average of 3.4%. In order for the ratio to reach the former high of 1980, when more than 14% of M2 was covered by gold reserves, the gold price would have to rise to about USD 5,400. Even to reach the inter-mediate highs of 1974 and 1983 the gold price would still have to increase to almost USD 2,500.

## US gold reserves in terms of M2 (in %)



Sources: Datastream, Erste Group Research

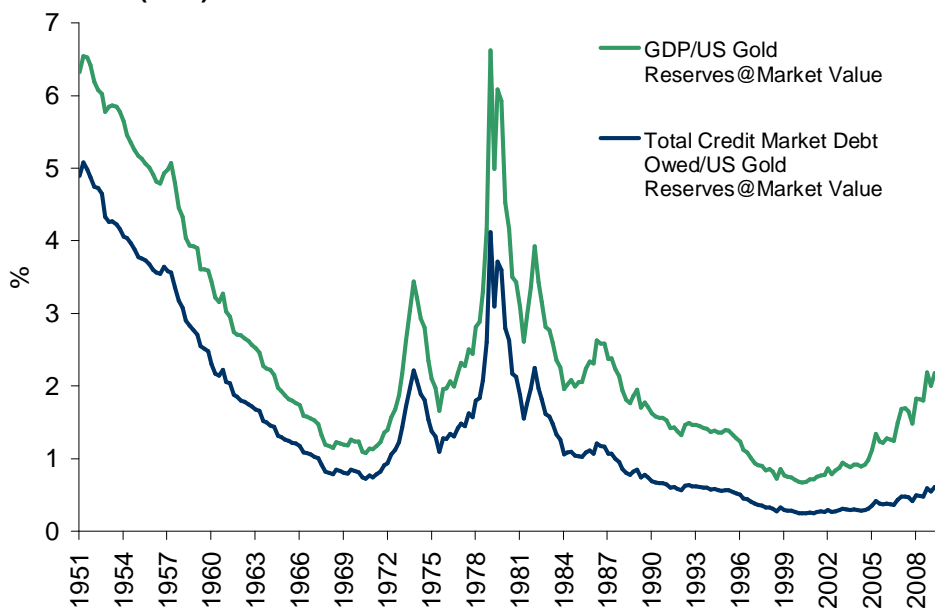
## USD 10,000 as price target?

**Even if we look at other money supply aggregates such as MZM (Money Zero Maturity) or M1 we find that gold still has substantial upward potential.** In order for the 1980s highs to be reached the gold price would have to rally to USD 7,000-10,000. And even the widest concept of money supply, M3, indicates a favourable gold price. While in 1980 M3 amounted to USD 1.8 trillion, the figure has increased to USD 15 trillion in the meantime according to Shadowstats.

The ratio of US gold reserves to economic output (GDP) comes to 2.44%, which is only slightly above the long-term average of 2.4% and above the median of 1.9%. At the height of the last gold bull market the ratio was at 6.61%. The total volume of outstanding bonds in relation to the gold reserves yields a share of only 0.69%. This falls significantly short of the long-term average of 1.5% and of course the 1980 high of 4.1%. **This historical comparison also underpins the fact that gold is certainly not overvalued at the moment.**

# Special Report Gold

US gold reserves (at market prices) in terms of GDP and in terms of total credit market debt owed (in %)



Sources: Federal Reserve St. Louis, Erste Group Research

When we relate the US gold reserves at market prices to the “true money supply” (TMS), we also find further upward potential for the gold price. The TMS was defined by Murray Rothbard and further developed by Frank Shostak to the Austrian Money Supply. TMS2 contains all components that can immediately be exchanged for goods and services; i.e. mainly cash, demand deposits, and savings deposits that can be called on without notice<sup>47</sup>.

TMS2 has increased by 44% since the beginning of 2008 and currently amounts to USD 7,547bn<sup>48</sup>. Since the beginning of 2000 TMS is up 150%, which represents the biggest degree of inflation since the end of WWII. If the low of the ratio of 3.9 were reached, the gold price would have to rise by the factor of 5 to almost USD 7,500.

*“Money is the general medium of exchange, the thing that all other goods and services are traded for, the final payment for such goods and services on the market”*

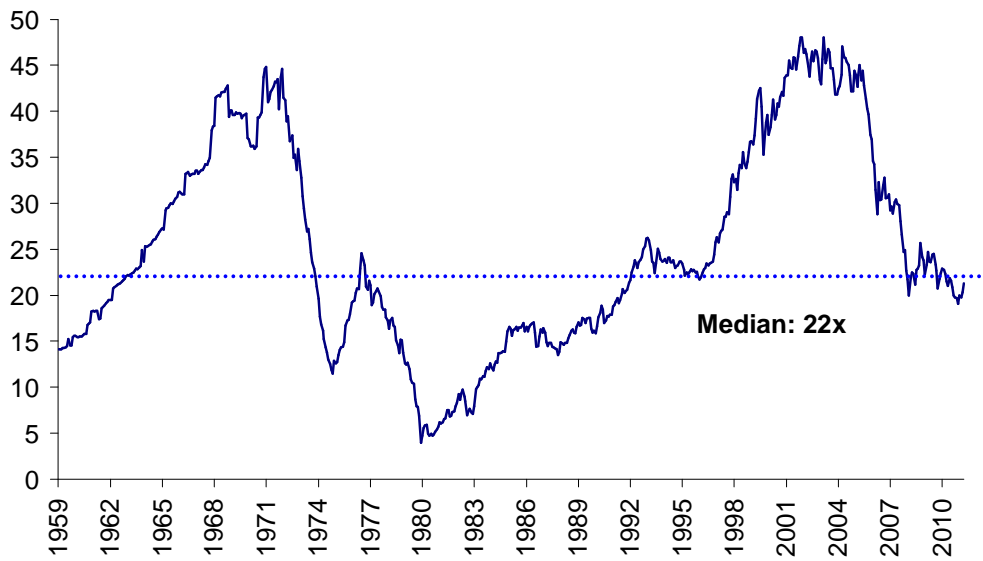
Murray Rothbard, Austrian Definitions of the Supply of Money

<sup>47</sup> To be precise, so-called “memorandum items” should also be mentioned. These are primarily deposits of the Treasury with the Federal Reserve and deposits of foreign institutes. However, they have no significant influence on the TMS.

<sup>48</sup> Please refer to Michael Pollaro bzw. [www.acting-man.com](http://www.acting-man.com) – “Bernanke in Denial”

# Special Report Gold

Ratio TMS / US gold reserves at market prices

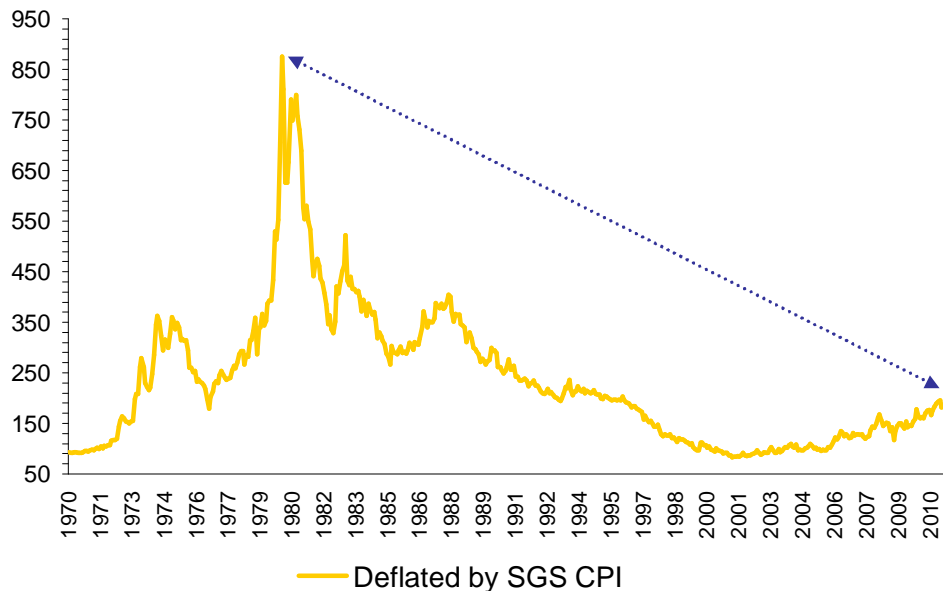


Sources: Fed St. Louis, Erste Group Research, trueslant.com - Michael Pollaro

**“True”  
inflation-  
adjusted all-  
time-high at  
USD  
7,000/ounce**

The most recent all-time-highs are put into perspective by adjusting them for inflation. In this chart, the high of 21 January 1980 (USD 850) is at USD 2,300/ounce. To be fair, the high at USD 850 in 1980 was a short spike. When compared with the average price of USD 675 (January 1980), gold would have to climb to slightly below USD 2,000 on an inflation-adjusted basis. Of course these are the official data from the Bureau of Labor Statistics<sup>15</sup>. **Based on the earlier method of calculation applied by Shadowstats in 1980, gold would have to increase to more than USD 7,000 in order to beat the 1980 high.**

Inflation-adjusted gold price, Shadowstats model

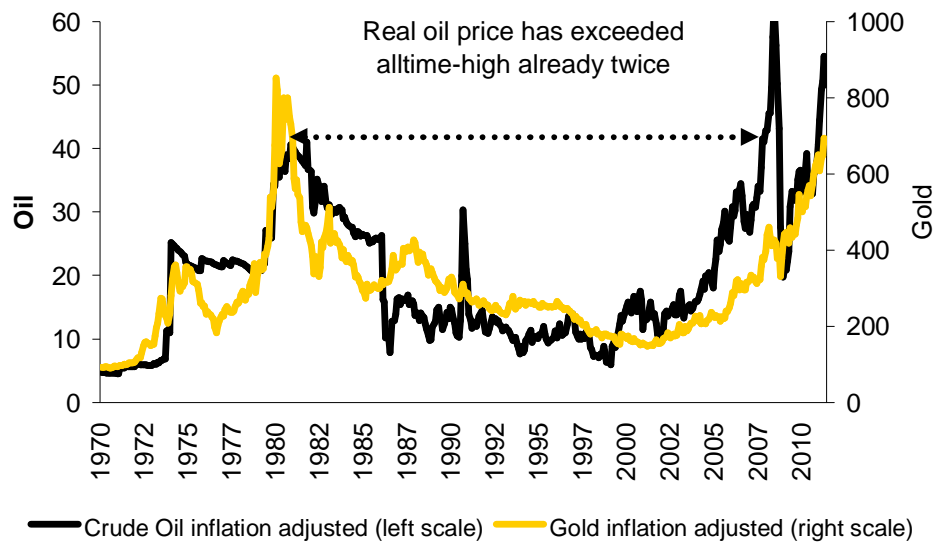


Sources: Chart Works Ross Clark, Shadow Stats, Erste Group Research

Crude oil already showed us in 2008 that it was standard procedure within the framework of a bull market to pass the inflation-adjusted all-time-high. The oil price exceeded said high in the parabolic phase at the end of the cycle by more than 50%. For the gold price, this would mean it would have to rise to USD 3,450 on an inflation-adjusted basis.

# Special Report Gold

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



# Special Report Gold

## 9. Why gold is (still) no bubble<sup>49</sup>

**Price level still attractive – no bubble in sight**

In the previous reports we have discussed the alleged “gold bubble” at length, and our conclusions have always been that the gold price is still attractive. Many market participants and commentators find it difficult to differentiate between a bull market and a bubble. One look back into history shows that gold is definitely no bubble. While the money supply amounted to USD 200bn at the pinnacle of the last gold bull market in 1980, the monetary base<sup>50</sup> has meanwhile increased to USD 2,600bn. This represents an increase by the factor of 13x. If gold were to rise by the same multiple, it would have to rise to USD 11,050 (850 x 13).

### Gold / public debt ratio USA



Sources: Thomson Reuters Datastream, Erste Group Research

**A look into Time Magazine, January 1980 edition**

**A look to the media of the previous bull market also discredits the bubble myth.** In January 1980, Time Magazine described a veritable buying panic in physical gold<sup>51</sup>. The supply side had dried out completely, while demand was continuously increasing. Thousands of people were queuing up for hours outside mint shops in Europe and the USA after gold and silver had frequently made it to the front page of the biggest newspapers. At the crest of the bull market in 1980, the German Spiegel<sup>52</sup> magazine wrote that it was in fact no bull market anymore, but rather hysteria, panic, and a case of gold rush. Newspapers such as Le Monde Diplomatique were talking about “gold fever and the disease of capitalism”, whereas the FT regarded it as “a myth that has been resurrected”. The gold rush benefited mainly from an apocalyptic fear of the crises in Iran, Afghanistan, and the run-away inflation.

**When comparing this to the current media coverage, we can see a clear demarcation line.** Although gold has set new all-time-highs, the coverage by the media was largely negative. The following “theme index gold” depicts a media database and refers to German and English sources. They are thus a representative image of the media coverage. The index shows that the coverage increased, but did not set any highs, nor did it convey any excessive euphoria.

<sup>49</sup> Please refer to Special Report Gold 2010, pp. 21-26

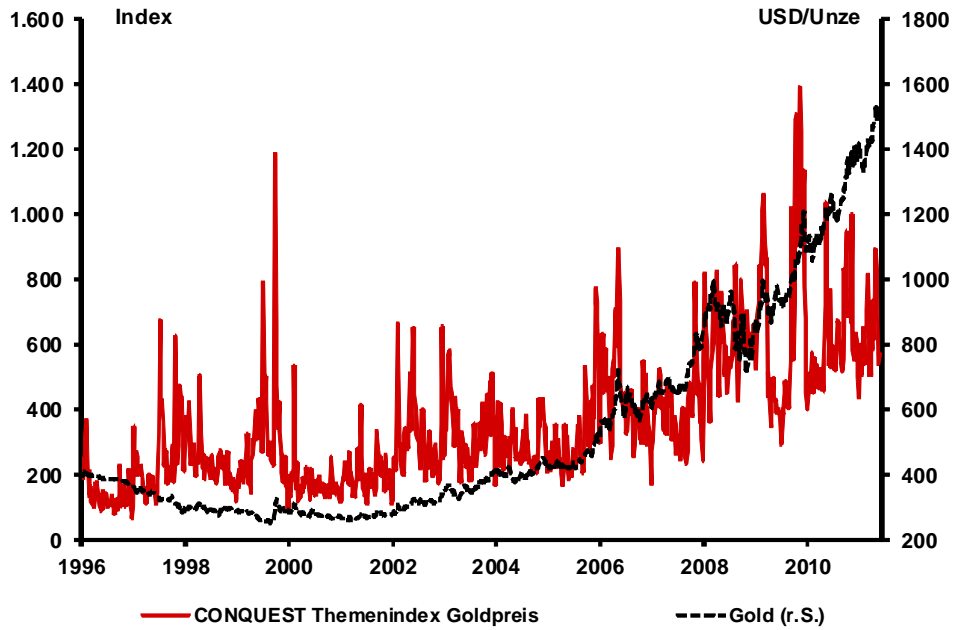
<sup>50</sup> Monetary Base, i.e. currency in circulation plus bank deposits with the Federal Reserve

<sup>51</sup> “Stampede for Precious Metal”, Time Magazine, 28 January 1980

<sup>52</sup> „Gold: Hysterie, Panik, ein Rausch“, Der Spiegel, 21 January 1980

# Special Report Gold

Theme index gold price

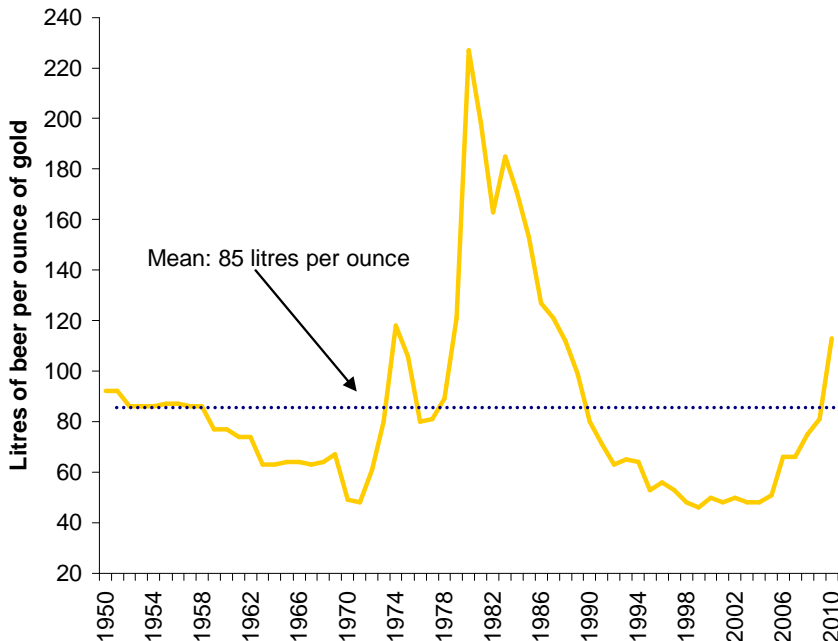


Source: CONQUEST Investment Advisory AG

## Good prospects for beer-drinking gold bugs

Especially examples taken from daily life show that gold is currently not excessively priced at all. While one litre of beer at the Munich Oktoberfest cost an equivalent of EUR 0.82 in 1950, it was EUR 8.60 in 2010. The price has increased by 42% in the past ten years. The annual increase in the price of beer since 1950 has been less than 4%. In 2010, an ounce of gold would have bought you 113 litres of beer. The historical median is 85 litres, this means that the “beer purchase power” of gold is relatively high. The all-time-high was 227 litres per ounce of gold in 1980. We think it is indeed possible that we will see these values again. **Beer drinkers with gold in their portfolio should therefore look out for sparkling times.**

Gold/Oktoberfest beer ratio



Sources: [www.HaaseEwert.de](http://www.HaaseEwert.de), historical archive Spaten-Löwenbräu, London BMA, Erste Group

# Special Report Gold

Everybody is talking about it, but far from everybody has it in his or her portfolio

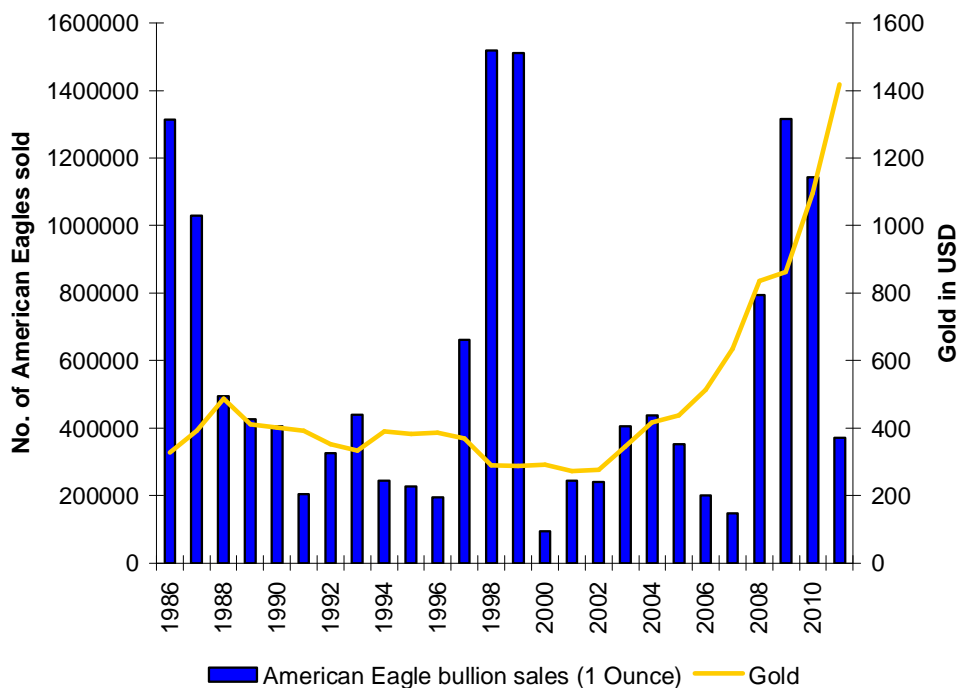
The global equity markets are currently valued at USD 56 trillion according to Bloomberg, while the fixed income segment amounts to USD 91 trillion according to BIS. If we assume that only 20% of the gold reserves are investable (i.e. come in the form of bullions, ETFs, or coins), this would translate into a value of USD 1.4 trillion (at USD 1,500/ounce) and into an allocation of close to 1%. In comparison with bonds, gold holdings are small: bond holdings worldwide amount to almost USD 14,000 per capita, whereas gold reserves per capita are less than USD 1,180.

Germans hold an average of 2.8% of their entire wealth in gold

In a study<sup>53</sup> worth reading, the Steinbeis University in Berlin analysed the gold holdings by retail investors in Germany. And as it turns out (again), the vast majority of people are hardly invested in gold at all. According to the study every German owns 52 grammes of gold jewellery, 58 grammes of gold coins and bullions, and 20 grammes in paper gold, i.e. gold funds, ETFs, mining shares etc. **That means that every German has allocated close to 130 grammes or 2.8% of his or her total wealth in gold.** According to the study, the German citizens therefore own about 7,500 tonnes of gold. An increase of one percentage point would translate into an additional 3,300 tonnes, or substantially more than annual production<sup>54</sup>. In the silver segment, retail investors own close to 153 grammes of investment silver, 127 grammes of jewellery, and 144 grammes of silverware.

The statistics of the US Mint also illustrate the fact that sales are far from the point of euphoria. Last year, fewer 1-ounce American Eagle coins were sold than in 1999, when the US population was buying gold coins in an effort to brace against the potential Y2K chaos.

American Eagle sales since 1986



Sources: US Mint, Erste Group Research

The capital measures in the gold mining sector also show that gold is far away from any manic phase. According to Sprott Asset Management<sup>55</sup> companies in the gold industry have raised equity capital to the tune of USD 80bn on the capital market in the past eleven years. **This amount was raised in only three months on the Nasdaq in 2000.**

<sup>53</sup> "Gold held by retail investors in Germany", Research Center for Financial Services, November 2010

<sup>54</sup> Please refer to "Deutsche sind Europas Goldhamster", (Germans are the gold hamsters of Europe) Handelsblatt, 6 November 2011

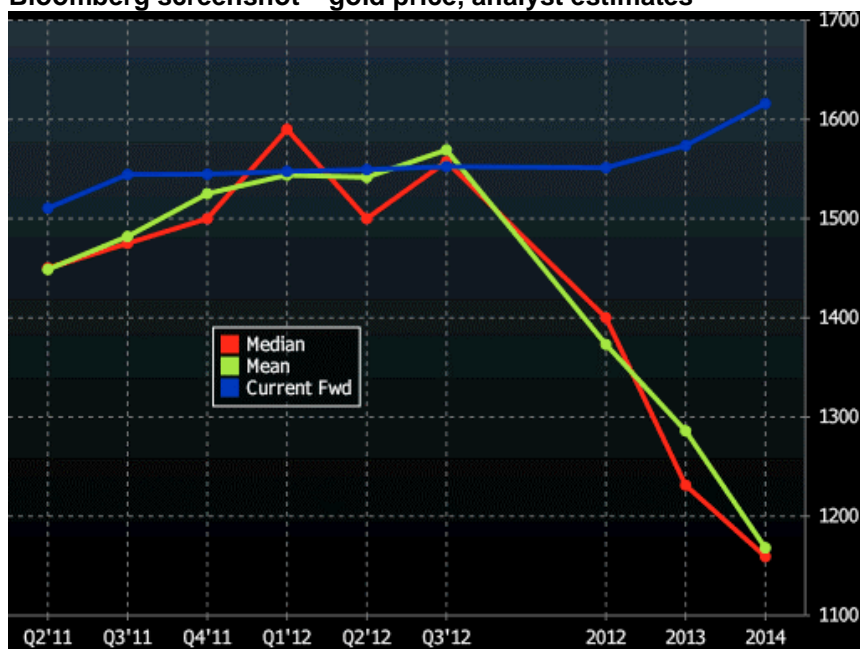
<sup>55</sup> "Debunking the Gold Bubble Myth", Sprott Asset Management, February 2011

# Special Report Gold

**Gold analysts still bearish – reliable counter-indicator**

**The gold-analysts have not shown any euphoric expectations either.** Normally the consensus should set much higher price targets at the end of a trend, but in the case of gold we have not seen any such irrational exuberance. A Reuters survey resulted in a median expectation of USD 1,450 for 2011. The LBMA survey at the beginning of the year came out with an average expectation of USD 1,457 for 2011. The highest price target was USD 1,632, the lowest one USD 1,268. According to a survey by Barclays<sup>56</sup> not a single one of the 100 institutional investors expects gold to close 2011 among the top performers. On the other hand, the precious metal received the second-highest number of votes – behind natural gas – as expected worst performer of 2011. The 22 gold analysts covered by Bloomberg do not come across as very enthusiastic either, as the following screenshot illustrates. The consensus expects a sharp decline in the gold price from 2012 onwards. **The median price targets were USD 1,450 (2011), USD 1,400 (2012), USD 1,231 (2013), and USD 1,159 (2014).** The USD 2,300 we have set as our forecast, constitutes by far the highest long-term price target, but we still feel quite relaxed with this contrarian call.

**Bloomberg screenshot – gold price, analyst estimates**



Source: Bloomberg, 3 June 2010

**Gold price on the way to the final blow-off phase?**

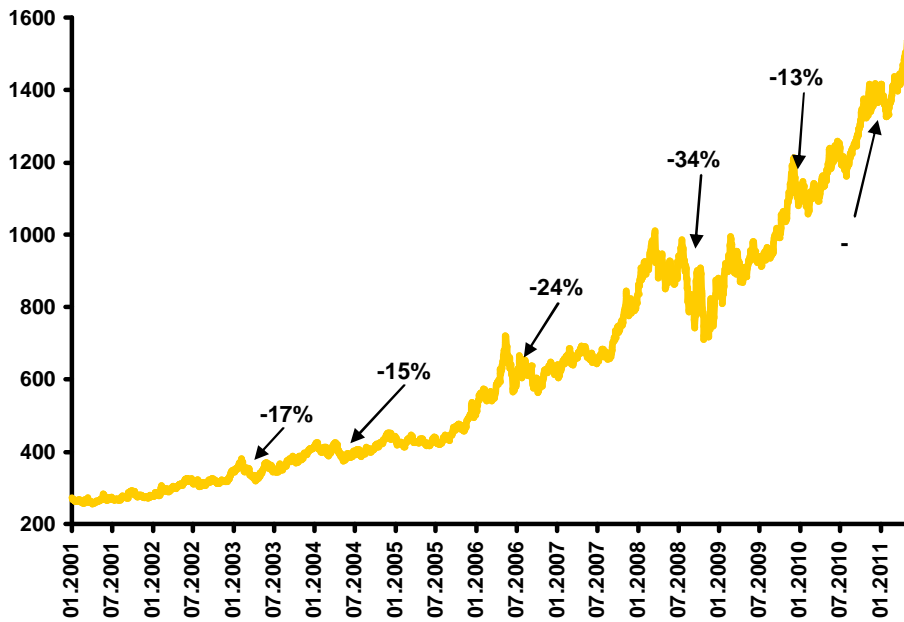
**At the end of every trend phase, a parabolic acceleration tends to occur, a phase of euphoria that is also called “blow-off top”.** We expect our price target of USD 2,300 to be reached within the framework of said phenomenon. The current motto seems to be to “buy the dips”. Especially in India and China, purchase patterns are decidedly more anti-cyclical than in the West. Consolidations, as part of the bull market, become shorter every time, correcting less than the previous consolidation (in terms of percentage). **We have seen exactly this development since 2009. As soon as no major corrections occur anymore, the market will probably switch to the final phase of acceleration.**

<sup>56</sup> “Survey says lower confidence in more gold gains”, FT.com, March 2011



# Special Report Gold

**Corrections since 2001**

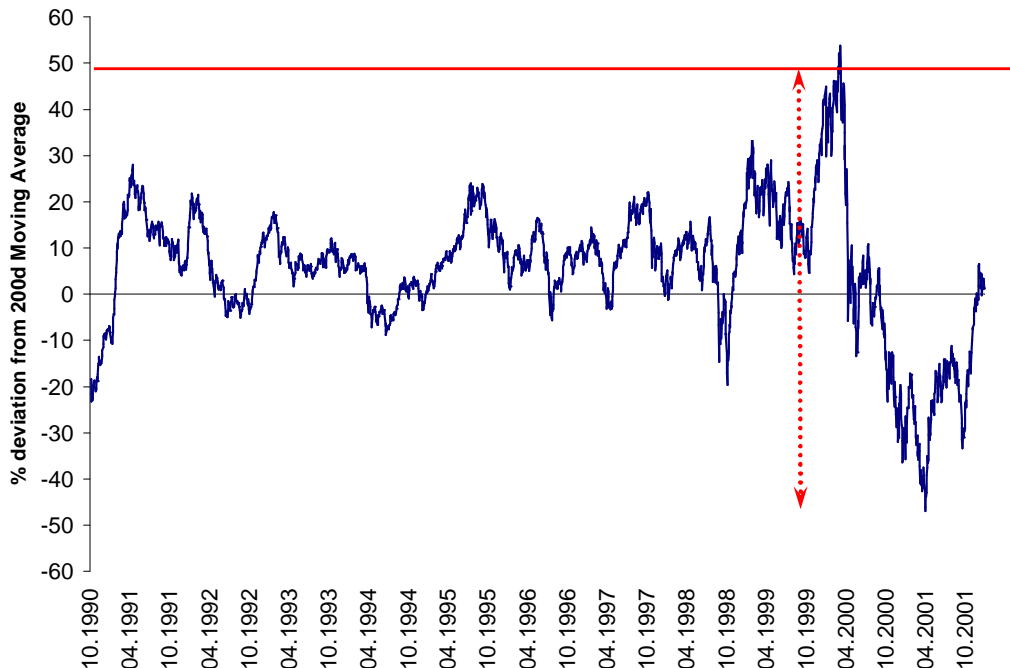


Source: Datastream, Erste Group Research

**Nasdaq was trading 50% above the MA**

Normally the final trend acceleration will take the price far above the moving average. The following chart shows that the Nasdaq Composite was trading more than 50% above the 200-day moving average in spring 2000. A year later it had fallen almost 50% below the 200-day line. This enormous volatility is typical of the last phase of a trend.

**Nasdaq Composite: % deviation from the 200d moving average**



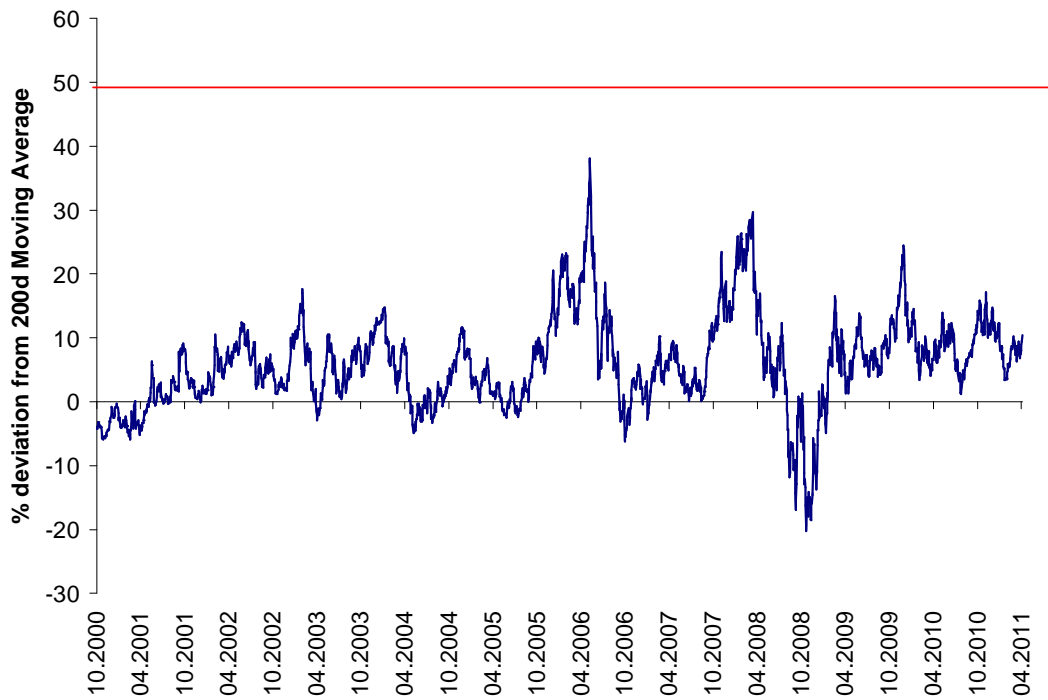
Sources: Datastream, Erste Group Research

**Gold price only 10% above moving average**

However, if by comparison we look at the deviation of the gold price from the 200-day line, we can tell that we are looking at a stable bull market that does not show any major upward spikes yet. Currently the gold price is traded less than 10% above the moving average, which means that we are far from anything like buying panic.

# Special Report Gold

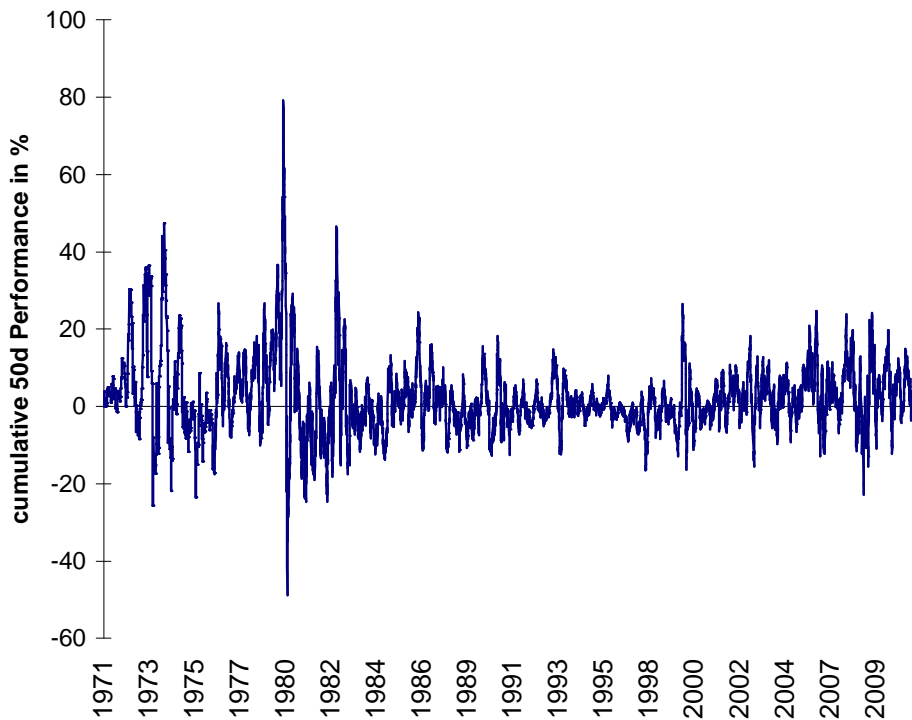
**Gold: % deviation from the 200d moving average**



Source: Datastream, Erste Group Research

The 50-day cumulative performance also illustrates the fact that we have yet to see any form of euphoria for gold. Whereas the highs in 1974 were set at a 47% price gain within 50 days and at an 80% gain within 50 days in 1980, the cumulative performance is currently at a mere 7%.

**Cumulative 50-day performance in %**



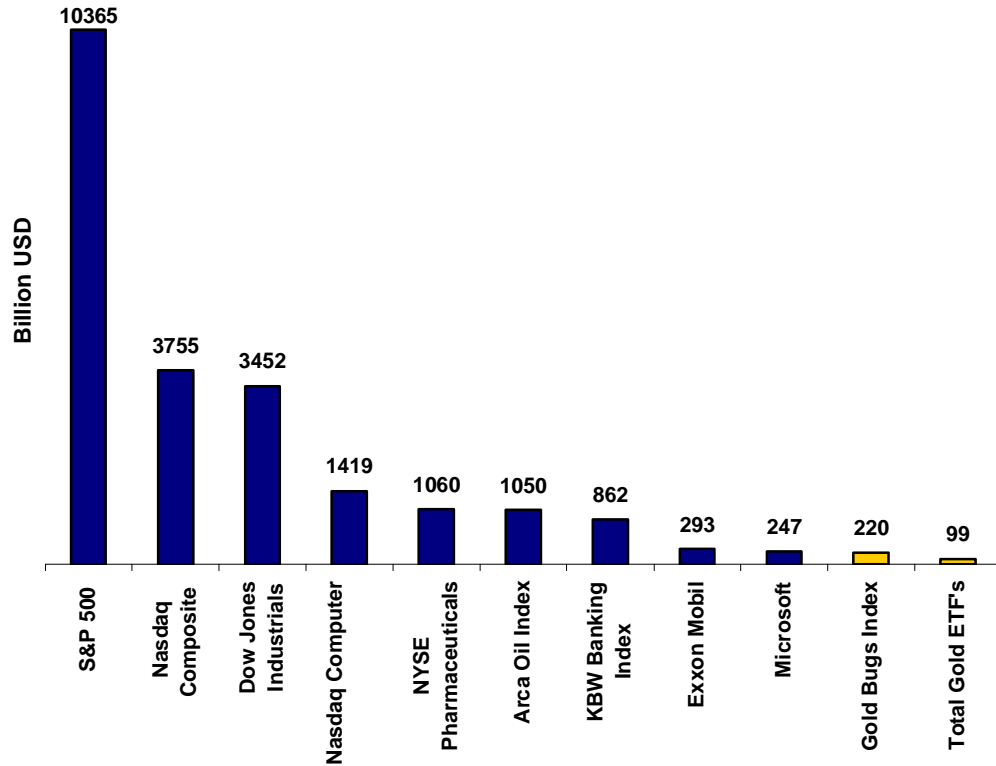
Sources: Datastream, Erste Group Research

# Special Report Gold

**Gold and silver shares account for only 2% of total S&P market capitalisation**

**The capitalisation on the equity market confirms this picture.** The entire Gold Bugs index is currently valued at slightly less than USD 220bn. The index contains the 16 largest unhedged gold and silver producers. It is therefore surely representative of the industry. In comparison with the S&P 500 index, the market capitalisation of the most important gold and silver producers is minute, accounting for a mere 2% of total market capitalisation. The aggregate valuation of all global gold ETFs paints a similar picture. They are currently<sup>57</sup> valued at USD 99bn.

**Market capitalisations**



Sources: Bloomberg (as of 2 June 2011), Erste Group Research

<sup>57</sup> as of per 8 June 2011

# Special Report Gold

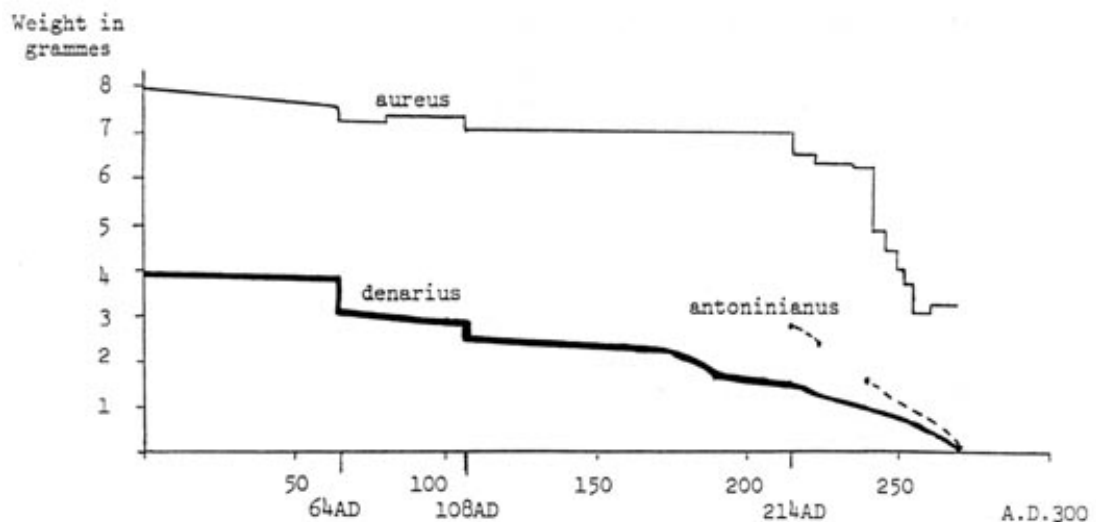
## 10. History repeats

***“The farther backward you can look, the farther forward you are likely to see”***  
Winston Churchill

**A look into history reveals a number of interesting analogies with regard to the status quo.** According to Prof. Peden<sup>58</sup> no analysis of the monetary policy is complete without the analysis of the general state policies. Monetary, financial, military, and economic questions are closely interwoven. The monetary policy thus also serves the subjective requirements of the political elite.

*“Among the countless evils that bring about the demise of entire states, these four are probably the prior ones: internal discord, high mortality, infertility of the soil, and the deterioration of the money. The first three are so apparent that hardly anybody would contest them. The fourth evil, however, which stems from the money, is only noticed by a few, and only by those, who think deeply, for the states fall victim to demise not at the first attempt, but gradually, and almost invisibly.”* **Nikolaus Kopernikus**

**The perfidious goal of inflation was achieved in ancient times by reducing the content of precious metal or the weight of the coin.** The weight of the “Aureus” fell from 10.5 grammes (about 20 B.C.) to 0.77 grammes (260 A.D.). The silver content of the denarius coin was gradually reduced as well in order to finance bread and circuses, the bloated bureaucracy, and the rising military expenses. In the 1<sup>st</sup> century B.C. the silver content was close to 95%, and by 286 A.D. the denarius only consisted of a mere 0.02% of silver.



Source: [www.accla.org](http://www.accla.org)

### Roman welfare and stimulus packages

**Rome was thriving in times of low taxes<sup>59</sup>.** However, in the course of time the emperors started securing the good will of the people by extending gifts. Excessive administration, overregulation, and rising taxes were gradually undermining the public budget. Peak inflation was reached in the 3<sup>rd</sup> century, when Rome was turning more and more into a welfare state. When about one million people populated Rome, free wheat and later bread was given out to 300,000 citizens. Emperor Augustus had late Roman stimulus packages passed, and thermal spas, streets, aqueducts, and temples were built.

**Diocletian (284-305 A.D.) was particularly ingenious in putting inflation to his use<sup>60</sup>.** He stepped up the money supply by a massive degree, reduced the content of precious metal in

<sup>58</sup> “Inflation and The Fall of the Roman Empire”, Mises.org, September 2009

<sup>59</sup> Please refer to Bruce Bartlett, “How excessive government killed ancient Rome“

# Special Report Gold

## The first documented case of hyperinflation

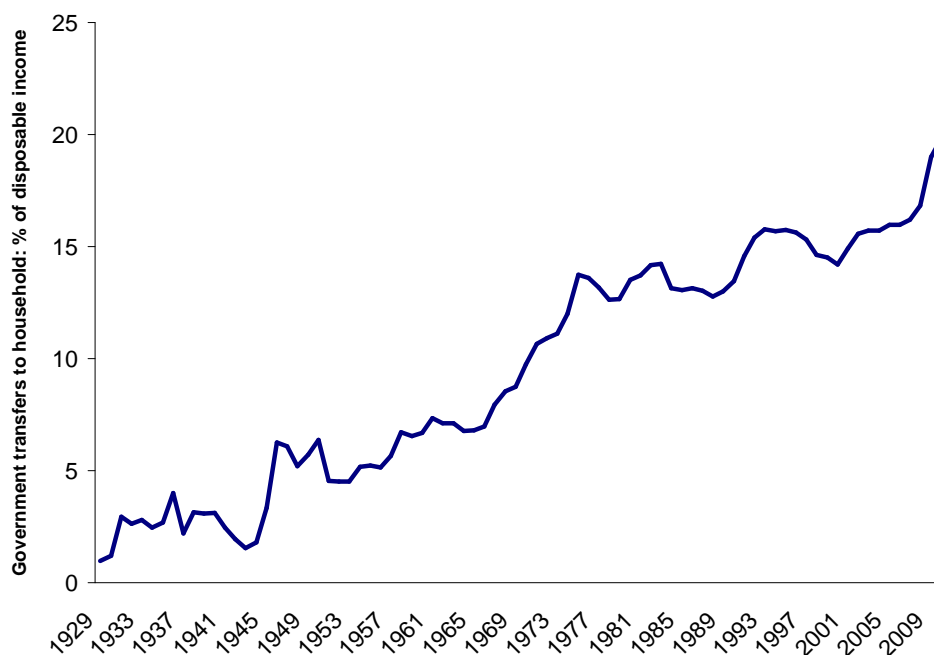
the coins, and issued bronze and purer copper coins. Taxes were raised to finance the military. In 301 A.D. Diocletian passed his infamous Edict on Prices, fixing the prices of goods and services. Whoever violated said edict was sentenced to death. Diocletian's notion that the hoarding of goods and speculators were responsible for inflation of course turned out to be incorrect. **The Draconian punishment had little success, because the root of inflation was not being dealt with.** This resulted in the first documented case of hyperinflation. While a pound of gold was traded at 50,000 denarii in 301 A.D., the price had increased 50 years later to 2.12bn denarii, which represented an increase by the factor of 42,000. Within a century, inflation – as measured by the price of Egyptian wheat – increased to 15,000%<sup>61</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 even to collapse.**

*The state of the monetary system of a people is a symptom of all its states"*  
Joseph Alois Schumpeter

## Numerous analogies to the present

**The analogies to the present are alarming. The imperial overexpansion and disproportionately excessive level of debt of the United States has caused the currency to deteriorate, much like in the Roman Empire.** Nowadays, too, the dependence on public transfers seems to be gradually on the rise; the following chart shows a perfect upward trend. It illustrates the share of public transfers in total disposable income. The share that the Americans are earning through gainful employment has been on a continuous decline, whereas the dependence on government transfers has been constantly increasing.

### Government transfers in terms of total income since 1929



Sources: Bureau of Economic Analysis, Erste Group Research

## Societies react to crises by stepping up their complexity – the marginal return on capital gradually falls

The law of diminishing marginal return holds in general. If the expansion of the money supply created welfare, there would be no poverty or unemployment. This is also what Prof. John Casti confirms, referring to the archaeologist Joseph Tainter<sup>62</sup>: **societies react to crises by stepping up their complexity and thus try to solve their problems. Every investment drawing on resources – usually energy or money – achieves a lower rate of return than the investment before that.** Therefore the additional (marginal) investment uses the resources without any adequate increase in value, until the marginal return on capital of the social complexity turns negative. But given that society only knows how to solve problems by becoming more complex, it soon starts crumbling under its own weight. According to Casti a

<sup>61</sup> Please refer to Bruce Bartlett, "How excessive government killed ancient Rome"

<sup>62</sup> Please refer to "Die Muster sozialer Unruhen" (Patterns of social unrest), Der Standard, April 2011

# Special Report Gold

society loses its complexity very quickly once it collapses. He likens the demise of Ancient Rome to the United States of tomorrow.

*“A great Empire, like a great Cake, is most easily diminished at the Edges “*  
**Benjamin Franklin**

**For centuries, the Byzantine solidus was the blue print of a functioning monetary system**

**Byzantium was probably one of the most impressive examples of the upsides of a stable monetary system.** The Byzantine Empire was thriving on the back of a gold standard for many centuries. The solidus, introduced by Emperor Constantine, was the leading currency in the Mediterranean region<sup>63</sup> from the 4<sup>th</sup> to the 11<sup>th</sup> century. It boosted free trade and economic prosperity. The deterioration of the coin was not acceptable in this strict gold solidus standard<sup>64</sup>. As a result the gold content was practically not decreased over 800 years. Only at the end of the 11<sup>th</sup> century was the system changed, when among other things the war against the Turks had to be financed: the differentiation between an external and a domestic currency was introduced. The gold content of the domestic currency was reduced by two thirds, but payments were made at the original amount. **The experiment of the double currency was a failure, and the solidus was eventually replaced by the Venetian and Genoese gold coins<sup>65</sup>.**

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<sup>63</sup> Please refer to “The Economic History of Byzantium”, Angeliki E. Laiou

<sup>64</sup> “Der Mythos vom Geld – die Geschichte der Macht”, Der Untergang Roms aus monetärer Sicht, (“The Myth of Money – the History of Power”, The Demise of Rome From a Monetary Point of View), Stephen Zarlenga

<sup>65</sup> Handwörterbuch der Wirtschaftswissenschaft, Geldtheorie und Geldpolitik (Dictionary of economic science, monetary theory, and monetary policy), p. 364

# Special Report Gold

## 11. Adieu “Exorbitant Privilege”<sup>66</sup>

*“We’ve told all of our clients that if you only had one idea, one investment, it would be to buy an investment in a non-dollar currency. That should be on top of the list.” Bill Gross*

**The unspectacular farewell of the greenback as global reserve currency**

**The critical situation described above and the future of the US public finances have started to cast more than just a shadow of doubt on the currency hegemony of the US dollar.** Although the US GDP in terms of global economic output has fallen to only 25%, the US dollar still accounts for more than 60% of global foreign exchange reserves. In the meantime even the United Nations is considering whether to dislodge the US dollar as global reserve currency. As a result of the zero interest policy, the greenback has lost an important function: it is not an instrument of stable value storage anymore. The study by the UN calls for a replacement of the US dollar by special drawing rights (SDRs). We regard this as unlikely, given that this model would meet with little acceptance. **SDRs are derivatives on derivatives, which is why we do not think that they could garner a lot of trust.**

**Numerous critics of the current currency system**

**The former MD of the IMF, Dominique Strauss-Kahn, also confirmed the fact that the US dollar would lose its central relevance.** He demanded a new global currency that should diminish the dominance of the US dollar and avoid future crises<sup>67</sup>. The IMF of course also refers to special drawing rights, but also mentions the Bancor<sup>68</sup>. Even Timothy Geithner had an open ear two years ago for the Chinese proposals to develop a new global reserve currency<sup>69</sup>. The mere fact that the US Department of Treasury takes a positive stance on this issue is front-page material. Geithner may have retracted his statement later on, but the seed of doubt had been sown. The Chinese President Hu Jintao regards the current currency system as a “product of the past”<sup>70</sup> as well. **Even Ben Bernanke has cited structural mistakes, that lead to persistent imbalances**<sup>71</sup>. He primarily criticized China’s currency policy.

**Self - confidence in emerging markets is on the rise**

The latest meeting of the Brics (Bric & South Africa) confirmed the rising self-confidence of the emerging countries. They criticised the extreme volatility of agricultural commodities and energy, pointing out that the expansive policy of the Fed was among the culprits in this context. Credit lines would be mutually granted in order to be able to avoid the US dollar. On top of that the Brics demanded a broader range of reserve currencies and thus a lower degree of dependence on the US monetary policy. Delicately, the meeting was held precisely before the G7 meeting in Washington.

**The axis of Beijing-Moscow should gain further clout.** The two countries intend to only use their own currencies for bilateral trade transactions<sup>72</sup>. At the end of 2010 the renminbi was listed at the Moscow Interbank Currency Exchange (MICEX). This is the first listing outside of China or Hong Kong and confirms that the speed of internationalisation is increasing on a daily basis. China is already the most important trade partner of Japan and Australia. Here, too, the settlement of bilateral transactions in local currency would seem likely. The Shanghai Cooperation Organization<sup>73</sup> (SCO) will be gradually assuming a bigger role in this context. The goal is to promote cooperation in politics, trade, and economic affairs. **As an interesting side note, the region accounts for a significant share of global gold production.**

<sup>66</sup> A phrase used by the former French Minister of Finance, Giscard d’Estaing, in the 1960s, describing the American privilege and the power of the global currency

<sup>67</sup> “IMF boss calls for global currency”, Guardian.co.uk, Februar 2011

<sup>68</sup> “Reserve Accumulation and International Monetary Stability”, IMF, April 2010

<sup>69</sup> “US backing for world currency stuns markets”, The Telegraph, March 2009

<sup>70</sup> „China’s Hu Jintao: Currency system is „product of past“, BBC, January 2011

<sup>71</sup> “Rebalancing the Global Recovery”, Ben Bernanke, November 2010

<sup>72</sup> “China, Russia quit dollar”, China Daily, November 2010

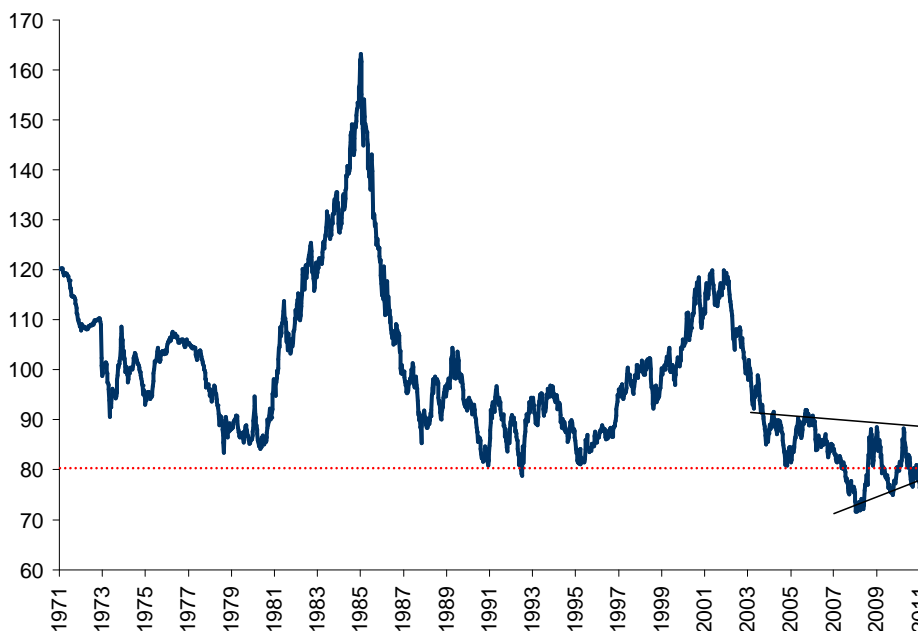
<sup>73</sup> The organisation currently consist of the member states China, Russia, Kazakhstan, Kyrgyzstan, Tadjikistan, Uzbekistan, and states holding observer status, i.e. Mongolia, India, Pakistan, and Iran. Partners in dialogue are also Belarus, Afghanistan, Turkmenistan, and ASEAN

# Special Report Gold

**Rising supply  
+ falling  
demand =  
falling price**

**The US dollar suffers from sharply rising supply and falling demand.** The price, i.e. the amount of currency required to buy a good or a service has to increase as a result of money creation. This makes sense, given that the seller of the goods or services wants to receive the adequate value in exchange for said items. If the money supply increases, the prices also rise in order to reflect constant values, whereas savings lose purchase power. This means that the price depends on the supply/demand structure of the currency and on the supply/demand structure of the good<sup>74</sup>.

## US dollar index since 1983



Source: Datastream, Erste Group Research

## US Treasuries: from the risk-free fixed income paper to the risky no-income paper

**Downgrade  
would have  
been  
unthinkable a  
few years ago**

**The ongoing paradigm shift is becoming more and more obvious. The fact that S&P has downgraded the outlook of the credit rating of the USA from stable to negative would have been unthinkable only a few years ago.** It was the first downgrade of the outlook by S&P since the Pearl Harbor attack 70 years ago. The rating agency has referred to the “substantial risk” that the US politicians will not agree on how to handle the long-term debt. Should no agreement be reached, the financial profile of the USA would, in S&P’s opinion, look significantly weaker than that of other AAA nations<sup>75</sup>. The probability of losing the AAA within the next two years is 1:3. Moody’s has also threatened to downgrade the rating of the USA should the debt ceiling not be raised. Otherwise, the rating agency pointed out, a relapse into recession was possible. The German rating agency Feri has recently downgraded the US-rating from AAA to AA, citing the high government debt and the insufficient measures taken to consolidate the budget as reasons for this step. The USA first and foremost reacted to the crisis by expanding debt. Feri said that a sustainable budget policy and such high deficits were irreconcilable.

**The Chinese  
admonish the  
American  
ignorance vis-  
à-vis its  
creditors**

The Chinese rating agency **Dagong Global Credit** has recently downgraded the rating of the USA to AA. According to Dagong the Quantitative Easing scheme has sustainably eroded the legitimacy of the US dollar as global reserve currency. The rating agency said that in its opinion the USA was not particularly keen on paying off its government debt, and that it saw a certain degree of ignorance vis-à-vis its creditors<sup>76</sup>. The rating of the UK has also been downgraded from AA- to A+, i.e. to the fifth-best grade. The outlook was negative because of

<sup>74</sup> Please refer to “Apropos of Everything pt. 1”, March 2011, QB Asset Management

<sup>75</sup> “S&P Cuts Nation’s long-term Credit Outlook”, Bloomberg, April 2011

<sup>76</sup> “China rating agency blames U.S. for “credit war”, Reuters, January 2011



# Special Report Gold

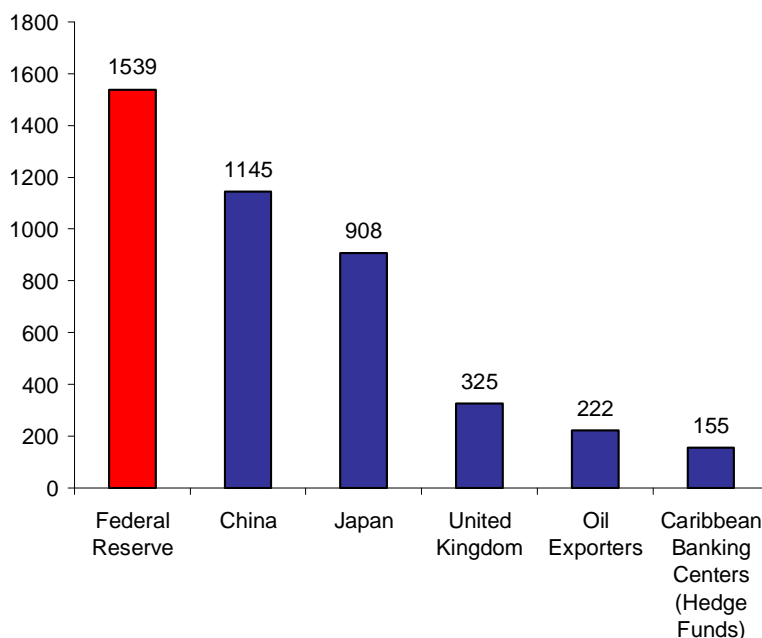
the weak economic growth, the high debt dynamics, and the risks associated with the financial sector.

According to the independent rating agency Weiss, the rating of US debt was even close to junk status<sup>77</sup>. The USA are ranked 33<sup>rd</sup> among 47 nations, behind Russia, China, Malaysia, and Saudi Arabia. According to Weiss, the AAA rating awarded by the big agencies was unfair towards investors, who were not compensated sufficiently for the risks they assumed.

**Federal Reserve already the largest bond holder**

**The growing caution concerning US Treasuries has long set in.** PIMCO's Total Return Fund, the largest fixed income fund in the world, has sold all of its US Treasuries and taken up a short positioning. Malaysia recently announced it would replace US Treasuries with Chinese bonds<sup>78</sup>. This could be the beginning of a domino effect and lead other Asian countries to follow suit. The foreign exchange swaps with numerous foreign central banks, the RMB settlement scheme, the trading platform for RMB financial products, and the development of the RMB-denominated bond market listed in Hong Kong show the increasing momentum of the changing times. **More than six decades of global dominance by the greenback seem to be coming to a slow but sure end.**

## Biggest holders of US Treasuries (in USD bn)



Source: Zerohedge.com

**If it seems absurd and illusory today to think that the US dollar could lose its status as leading global currency, a look into the history books might help.** Portugal (1450-1530), Spain (1530-1640), the Netherlands (1640-1720), France (1720-1815), and Great Britain (1815-1920)<sup>79</sup> were coining leading global currencies for centuries and have in the meantime lost more or less all of their former monetary splendour. Interestingly, these cycles tend to last about 90 to 100 years, which would also suggest the imminent changing of the guards for the US dollar.

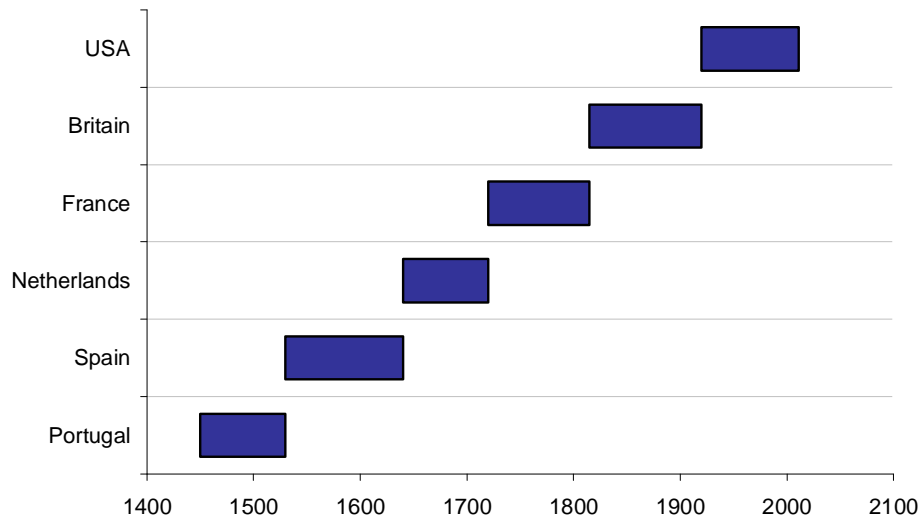
<sup>77</sup> "Weiss Ratings says US Credit rating already near junk", Wall Street Journal, April 2011

<sup>78</sup> "Malaysian bond boost for Renminbi", FT, September 2010

<sup>79</sup> "The Potential of the Renminbi as an International Currency", China Economic Issues, November 2007

# Special Report Gold

Global reserve currencies since 1450



Sources: JP Morgan - Eye on the Market, Hong Kong Monetary Authority, Erste Group Research

# Special Report Gold

## 12. China on its way to the leading global currency?

### Gold now with “Beijing put”

**The open criticism of the US policy is getting more vociferous by the day.** For example, a former central bank advisor pointed out that in the medium to long term US Treasuries were “not safe”<sup>80</sup>. In order to further diversify China has now stepped up its bond purchases from the European stabilisation fund EFSF. China will also launch a new investment fund, which will invest a part of the almost USD 3bn worth of foreign exchange reserves in energy and precious metals. PBoC advisor Xia<sup>81</sup> recommended holding only USD 1bn worth of foreign exchange reserves, while the rest should be employed for strategic investments<sup>82</sup>. He also suggested a gradual increase in gold reserves and recommended following a “buy the dip” strategy over an extended period of time. He proceeded to advise the PBoC to add silver to the official reserves<sup>83</sup> while advising the US government to sell some of its gold reserves. An official of the Chinese Chamber of Commerce said<sup>84</sup> China should step up its gold reserves to as much as 8,000 tonnes. **We therefore expect China to gradually accumulate gold, and we also believe that the country holds substantially larger reserves than the official record of 1,054 tonnes suggests.**

### Chinese gold sector will be gradually liberalised

Plans are to further liberalise the gold market. The Hong Kong Mercantile Exchange wants to gradually set itself up as alternative to the Comex. Since 18 May the exchange has had a 1kg future on offer with the physical delivery taking place in Hong Kong. At the moment only five banks have permission to import and export gold. This is going to change now, with numerous banks being granted access to the Shanghai Gold Exchange. **This could facilitate the purchase of gold for millions of Chinese bank customers.**

### The relevance of the Chinese middle class for the gold market is not fully appreciated

In the new five-year plan the targeted share of consumption is 55% (up from currently 40%). The transition from an export-oriented economy to internal growth will entail extensive implications for the global economy. This should further stimulate gold consumption. While the gold affinity in China is substantial, annual consumption per capita is still only 0.4 grammes. Given the savings ratio of almost 35% and the rising wealth, gold consumption has to increase by default. **We believe that the growing relevance of the Chinese middle class for the gold market is not fully appreciated.**

### China overtakes the USA in 2016

The IMF<sup>85</sup> has recently also confirmed the fact that the USA will have to gradually cede its leading status to China. The fund expects China to overtake the USA in 2016 in terms of purchase power parities, and it envisages growth from USD 11.2 trillion in 2011 to USD 19 trillion in 2016, whereas the USA should grow from USD 15.2 trillion to USD 18.8 trillion **Roughly ten years ago the US purchase power parities still exceeded the Chinese ones by a factor of 3x.**

### *Yuan as leading currency?*

**The fact that China wants to achieve full convertibility for the yuan in the long run is becoming clearer by the day.** This would be a big step towards a new global leading currency. China is preparing for the post-USD era at full speed. The yuan should outrank the US dollar in terms of global relevance within a few years. Yi Gang, the co-chairman of PBoC has recently made reference to a liberalisation within the next five years. Li Xiaojing, Managing Director of Bank of China in New York, has already mentioned the preparation work for the day that the Chinese currency will be fully convertible. He regards this as one of the highest priorities<sup>86</sup>. The plans are more than just ambitious, but China has a track record of achieving ambitious goals.

<sup>80</sup> “Treasuries Lack safety, Liquidity for China, Yu Yongding says”, Bloomberg, August 2010

<sup>81</sup> “China should buy more Gold, Silver for Reserves”, Bloomberg, January 2011

<sup>82</sup> “China may add fuel to commodity rally”, [www.creditwritedowns.com](http://www.creditwritedowns.com)

<sup>83</sup> Zerohedge.com – “China Central Bank Advisor urges increase in official Gold and Silver reserves”, January 2011

<sup>84</sup> Reuters, “China should significantly boost gold in reserves”, October 2010

<sup>85</sup> “IMF bombshell: Age of America nears end”, Marketwatch.com

<sup>86</sup> Wall Street Journal, “Experts’ View on a Free-Floating Yuan: Slowly but Surely”, January 2011

# Special Report Gold

## China preparing for post-USD era

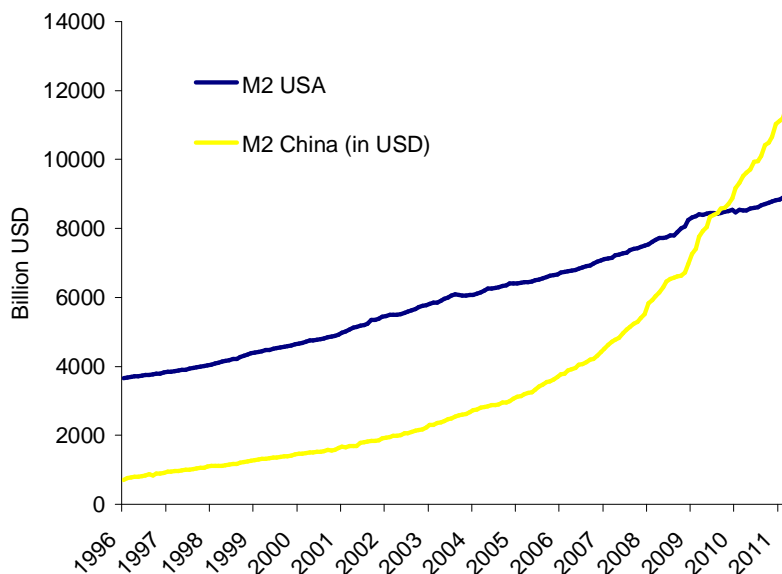
At the moment only 0.4% of all foreign exchange transactions are settled in Chinese currency. The US dollar has recently accounted for 43% of total transaction, the euro for close to 20%, and the Japanese yen for 10%. **This means that the yuan is clearly underrepresented in view of the already central relevance of China for the world's economy.**

**Currently numerous smaller agreements are being signed that reveal the overall long-term strategy.** We assume that this is how China wants to gradually boost demand without achieving outright convertibility right away. Within the framework of the new five-year plan, China wants to settle almost 50% of foreign trade in yuan by 2016. It wants to invoice in yuan in the bilateral trade transactions with African or Latin American countries that are rich in resources. Iran for example is said to supply oil for yuan. In addition, the PBoC has allowed almost 70,000 companies to invoice its foreign business worth almost USD 70bn in yuan.

## China now holding larger M2 than USA

**China is currently inflating its money supply by a larger degree than most other nations.** M2 increased by more than 17% in the first quarter in comparison with the referential period of 2010. In the past decade M2 has increased by an average of 18.8% (while the GDP increased by 10.9%). China currently runs the highest M2/GDP ratio in the world. In 1996 M2 amounted to USD 700bn, meanwhile it has increased to more than USD 11 trillion. If we assume that the money supply will continue to rise by 15% per year, the increase in absolute terms would be USD 1.7 trillion annually. If one wanted to cover only 10% of the annual increase in money supply (i.e. USD 170bn) with gold, it would require almost 3,600 tonnes at current prices.

### M2 money supply USA vs. M2 China (in USD)



Sources: Datastream, Erste Group Research

## If China wants to maintain its 1.5% ratio of gold in terms of total reserves, it will have to buy 200 tonnes per year

If China wanted to cover 40% of its M1 money supply with gold, it would have to buy more than 35,000 tonnes of gold. If the USA appreciated its gold reserves to USD 6,000/ounce, it would cover 40% of M1 without a problem. At USD 6,000/ounce, China would still have to buy 9,000 tonnes in order to be able to cover 40% of its own money supply<sup>87</sup>. The consensus expects China to aggregate at least USD 2.6 trillion worth of foreign exchange reserves in the next years. **If China wanted to maintain its 1.5% ratio of gold in terms of total reserves, it would have to buy at least 200 tonnes per year.**

*“Anyone who thinks that exponential growth can go on indefinitely in a finite world is either mad or an economist.”*

Kenneth Ewart Boulding

We are therefore sceptical with regard to the – generally accepted – belief in the Chinese economic miracle. The Chinese economy has grown by almost 10% p.a. in the past decades.

<sup>87</sup> Dundee Gold Monitor, Dr. Martin Murenbeeld, 22 April 2011

# Special Report Gold

The consensus (according to Bloomberg) expects real growth of 7.7% p.a. in the next 20 years, which from our point of view seems by far too optimistic. A mere extrapolation of the past is dangerous, as a look back into history shows. **The boundless optimism sometimes reminds us of Japan in the late 1980s.**

## **Chinese leaders facing predicament**

The Chinese leaders are faced with a predicament. On the one hand almost 25 million new jobs have to be created every year, and on the other hand the negative real interest rates are fuelling numerous asset bubbles. **While we do not expect the Chinese economy to collapse, a solid shakeout seems overdue.** For an economy that has grown by double-digit rates for years, GDP growth of only 5% feels like a severe recession. The sooner China allows the cut to be made, the less painful it will be.

## **Decline in China as biggest negative factor**

**History has often shown that a planned “soft landing” tends to end in an abrupt crash.** Following the teachings of Ludwig von Mises, we conclude that a laissez-faire policy would be the only right approach. The massive market interventions delay the shakeout in China and will only make things worse when it does eventually strike. **We believe that such a collapse, which has to be expected, represents one of the biggest negative factors for the gold price.**

# Special Report Gold

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

### Subjectivism explains human actions

Carl Menger, the founder of the Austrian School of Economics, tried to find satisfying explanations for observable phenomena of human (inter)action. Menger assumed the subjective perspective (subjectivism) of the acting person in order to construct the economy in its entirety emanating from the human subject. For Carl Menger, *human action* is the source of insight. **Friedrich Hayek is of the opinion that probably every meaningful insight into economic theory has just taken subjectivism a step further<sup>88</sup>.**

### Gold has turned out to be the most marketable good over the millennia

**The Austrians owe the realisation that money is a good to subjectivism.** For investors, this may well be the most important lesson the Austrian School has taught them. In the previous Gold Report we already discussed at length how the most marketable good gradually turned into money in order for indirect barter trade to work. Ludwig von Mises pointed out that over the millennia gold had turned out to be the most suitable good to ensure the functioning of indirect barter trade. This also explains why central banks around the world still hold gold instead of copper or nickel. Gold is therefore unlike any other commodity. Investors who have realised this also understand why gold is gaining in importance on the free market in spite of attempts to the contrary.

#### *Price expresses the barter value of goods among each other*

### Citizens of “Utopia” pay in gold

If the free market forces are left to take their course and subjects engaging in commerce may use money freely, prices will send an undistorted signal to the markets. If money itself is a good, in a natural market order the price will always express the barter value of goods. For example, let us look at a small self-sufficient village called Utopia. Over the centuries, the citizens of the village have agreed to use gold as most marketable good to facilitate indirect barter transactions. This means that gold is the citizens’ money. Table 1 shows that in year 1, 1 ounce of gold can be swapped for 1kg of grain or 2kg of potatoes. Without the detour, 1kg of grain would also buy you 2kg of potatoes directly. One cow is available for 100 ounces of gold.

#### Barter table year 1

1 kg of grain	1 ounce of gold
2 kg of potatoes	1 ounce of gold
1 cow	100 ounces of gold
1 cow	100 kg of grain
1 cow	200 kg of potatoes

Let’s assume that due to successful crop rotation, the citizens of the village manage to double their crop at a constant input of time and energy within four years. At constant gold reserves (N.B. the citizens have chosen gold because it cannot be multiplied at will) this would lead to a decrease of the barter value of grain and potatoes relative to gold, as illustrated by the following table:

#### Barter table year 5

1 kg of grain	1/2 ounce of gold
2 kg of potatoes	1/2 ounce of gold
1 cow	100 ounces of gold
1 cow	200 kg of grain
1 cow	400 kg of potatoes

### Increase in productivity causes prices to drop in Utopia

This development would signal the citizens of Utopia that there is an abundance of food and that they can be more generous in using them; and/or that resources, which have so far been tied up in agriculture, can now be re-allocated. The relative decline in the exchange rate of food would increase the profitability of areas whose direct main input is food, e.g. livestock breeding. It is therefore safe to assume that the stockbreeders will expand their stocks. On the other hand the relative decline in the exchange rate of food would lead to a situation where the

<sup>88</sup> Huerta de Soto, Jesús: Die Österreichische Schule der Nationalökonomie – Markt und unternehmerische Kreativität (The Austrian School of Economics – Market and Entrepreneurial Creativity), 12<sup>th</sup> edition, Vienna, p. 53

# Special Report Gold

citizens would invest less time and energy in agriculture. As a result the food supply would gradually shrink in the following years.

The increased demand for food on the one hand (e.g. from livestock breeding) and the slightly reduced supply on the other hand would cause the exchange rate of food to pick up again. At the same time, the exchange rate of cattle in terms of other goods would probably fall as a result of the increased stock. After five years, the exchange rates in Utopia may have come out as follows:

## Barter table year 10

1 kg of grain	3/4 ounces of gold
2 kg of potatoes	3/4 ounces of gold
1 cow	75 ounces of gold
1 cow	100 kg of grain
1 cow	200 kg of potatoes

## *Natural monetary order facilitates undistorted conclusions*

Thanks to the signal effect of prices the citizens of Utopia can draw undistorted conclusions with regard to the availability of real goods in their village at any time. This ensures that the consumption of resources (in our case food) only increases if and when there has been a positive change on the supply side. Of course, changes in consumer preferences could also trigger a shift in the exchange rates. Said shift, however, would of course not cause the exchange rate of gold to rise relative to all goods across the board.

The advantage of the natural monetary order in Utopia is also the fact that those citizens who have saved some gold have a bigger claim to goods. **After all, this is ultimately why people waive consumption today: an expected higher claim to goods in the future.** In year 1 a citizen could have for example exchanged 150 ounces of gold for 1 cow and 50kg of grain. Ten years on the exchange rate of 150 ounces of gold has increased from to 2 cows or 1 cow and 100kg of grain.

## *Bread for today and hunger for tomorrow*

Keynes introduces the “Fantastico” in Utopia

**Let us now assume that John Maynard Keynes (having just been run out of another village) comes to Utopia.** He promises the citizens higher economic growth (which the citizens know little about, but it sounds great) if they renounce the barbarian relic that is gold and exchange all their ounces of gold for the “Fantastico”, the currency issued by himself, at the ratio of 1:1. Keynes thus acts as “Keeper of the Fantastico”.

We now assume that the citizens have been circulating 1 million ounces of gold, which they now exchange for Fantásticos. In order to demonstrate them the blessings of the new currency, Keynes immediately sets up a horse farm and has a stately home, worthy of a Lord, built for himself. In order to implement these projects Keynes hires labourers and pays them generously in Fantásticos. In his first year Keynes creates 100,000 additional Fantásticos in order to be able to cover his costs for wages and building material. The farmers, who do not have access to Fantásticos at will and can therefore not keep up with the wages promised by Keynes, lack the help provided by the labourers. The labourers can hardly believe their luck. They blow all their surplus Fantásticos at the local pub, as a result of which the landlord hires additional staff, offering them better terms and higher pay compared to farm work. As a result of the shortage in farm workers (N.B. many of them now work for Keynes and his direct or indirect beneficiaries at substantially better terms), the crop of the village records a drastic decline in the following year. The combination of increased money supply (+10%) and lower crop will necessarily lead to higher food prices in that year.

**Keynes, Keeper of the Currency, managed to change the economy of the village according to his consumer preferences and to thus plunge it into chaos. In order not to starve, the citizens will most likely turn Keynes’ horses into sausages and collect berries in the woods. What progress! Friedrich Hayek fittingly called this policy “bread for today and hunger for tomorrow”.**

*Excursus by Gerald Walek, CFA*

# Special Report Gold

## 14. Inflation ≠ rising prices

*“Statistics is a bastard: one hand in the fire, the other hand in the freezer – on average the temperature is just right”<sup>89</sup>*

We have criticised the official inflation rates many a time. Since 2003, many European countries have applied the hedonic calculation method<sup>90</sup>. A small example: in the case of books, the number of pages, the kind of cover, and the size of the book all enter the calculation as criteria. In the “pre-hedonic” methodology the prices of books would have increased by 5.5%. But from the hedonistic point of view, the prices fell by 3%<sup>91</sup>. On top of that, the price increases of wedding rings enter the model at the same magnitude as those of sausage or cheese<sup>92</sup>. **This may be good news for bigamists, but John Doe will probably consume sausage and cheese more often.**

*“No bet in the centuries of the monetary history has been safer than the one that a gold coin, inaccessible to the inflationary policies of the governments, will maintain its purchase power better than a banknote.”*

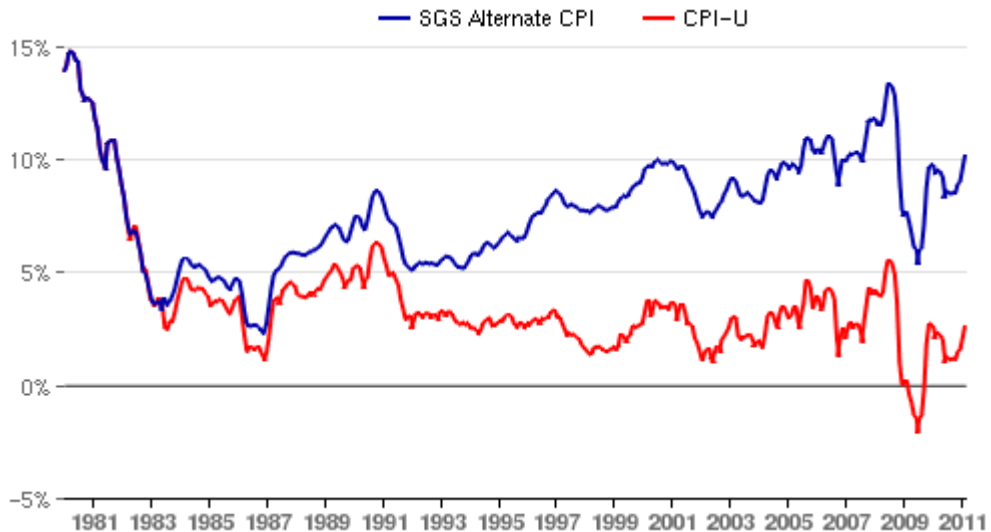
Wilhelm Röpke

**Since the beginning of the 1980s the Bureau of Labor Statistics has “adjusted” the methodology of its inflation model 24 times.** Along with the hedonic approach, the geometric weighting, and the adjustment for intervention, the surrogate approach is dubious as well. For example, if steak becomes more expensive, statisticians assume that instead people will eat hamburgers. The following chart shows the divergence of the new, official rate of inflation and the former method that was still in use in the 1980s. This also explains why the real income of the households has been stagnating for years.

*“When the government causes the money to deteriorate in order to cheat all creditors, this procedure is politely called inflation”*

George Bernard Shaw

### CPI vs. Shadowstats CPI



Generally, the validity of a price index is questionable. Such diverse goods and services as a haircut, ½ cinema ticket, 1/40,000 part of a car, 3 potato sacks, etc. are all added together. The addition of these disparate goods makes little sense. In addition, the quality dimension (1 bag

<sup>89</sup> Please refer to “Inflation: Eine Welt, in der Kindergärten billiger sind als Zigaretten“ (Inflation: a world where kindergartens are cheaper than cigarettes), Die Presse, March 2011

<sup>90</sup> This method takes quality improvements into consideration, which reduced the price increase

<sup>91</sup> Please refer to “Die Erfindung des Perpetuum mobile“ (The invention of the perpetuum mobile), Die Presse, February 2011

<sup>92</sup> Please refer to “Die Inflation ist wieder da – wie praktisch“ (Inflation is back – how convenient), Die Presse, March 2011



# Special Report Gold

potato has not one, but several prices). Therefore Ludwig von Mises once said that every housewife knows more about the purchasing power than you by the official statistics could ever know:

*"The pretentious solemnity which statisticians and statistical bureaus display in computing indexes of purchasing power and cost of living is out of place. These index numbers are at best rather crude and inaccurate illustrations of changes which have occurred. In periods of slow alterations in the relation between the supply of and the demand for money they do not convey any information at all. In periods of inflation and consequently of sharp price changes they provide a rough image of events which every individual experiences in his daily life.*

*A judicious housewife knows much more about price changes as far as they affect her own household than the statistical averages can tell. She has little use for computations disregarding changes both in quality and in the amount of goods which she is able or permitted to buy at the prices entering into the computation. If she "measures" the changes for her personal appreciation by taking the prices of only two or three commodities as a yardstick, she is no less "scientific" and no more arbitrary than the sophisticated mathematicians in choosing their methods for the manipulation of the data of the market.*

*In practical life nobody lets himself be fooled by index numbers. Nobody agrees with the fiction that they are to be considered as measurements. Where quantities are measured, all further doubts and disagreements concerning their dimensions cease. These questions are settled. Nobody ventures to argue with the meteorologists about their measurements of temperature, humidity, atmospheric pressure, and other meteorological data. But on the other hand nobody acquiesces in an index number if he does not expect a personal advantage from its acknowledgment by public opinion. The establishment of index numbers does not settle disputes; it merely shifts them into a field in which the clash of antagonistic opinions and interests is irreconcilable." Ludwig von Mises, Human Action, XII, Chapter 4*

**Many reasons why governments would want to show (too) low CPI increase**

The reason for showing lower inflation is elementary. Numerous expenditures hinging on national insurance, government transfers, the salaries of civil servants, food stamps etc. depend on valorisation. This way, real GDP growth is also revised up, since nominal economic growth is divided by the price index. Even if we are generally told that "an inflation rate of 2% is healthy", this still translates into a loss in purchase power of 50% within 35 years.

**Blurred terminology comes with grave consequences**

As far as the terminology is concerned, it is very important to clearly distinguish between inflation and an increase in prices<sup>93</sup>. **According to Gregor Hochreiter, inflation is the root cause of the devaluation of money, whereas prices increases are just the result of inflation.** Nowadays these two terms are used interchangeably, and Hochreiter claims that this blurred terminology comes with grave consequences. Thus the linguistic desensitisation prevents us from recognising the cause-effect relationship and as a result from solving the problem. Instead, scapegoats are sought and found, and unsuitable measures such as regulated prices and nationalisations are demanded to fight the wave of increasing prices, all the while in the background inflation continues unabated, as is currently the case.

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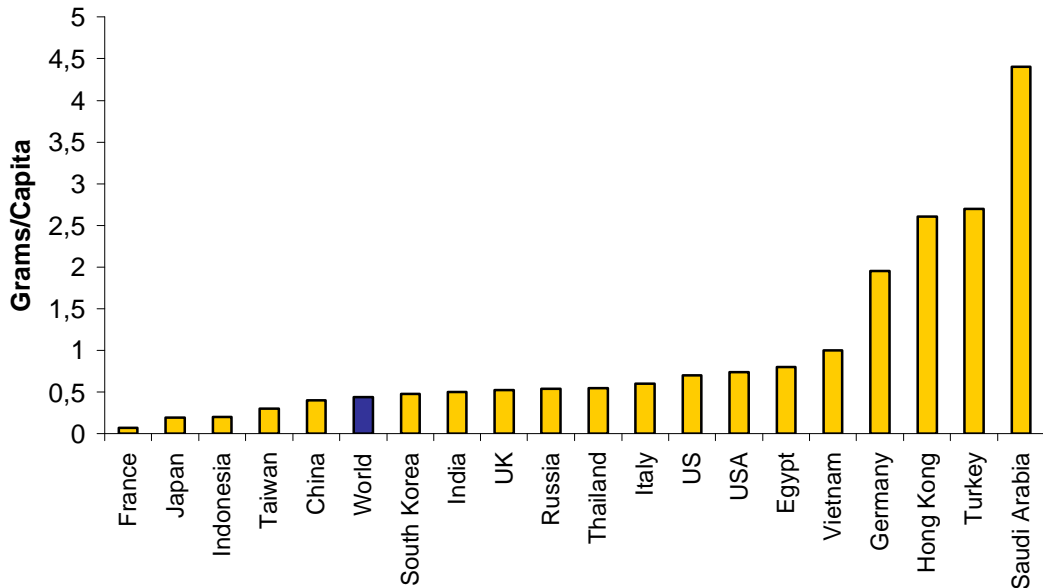
<sup>93</sup> "Geld und Inflation aus der Sicht der Wiener Schule", eine Analyse des Instituts für Wertewirtschaft ((Money and Inflation – The Perspective of the Vienna School), Gregor Hochreiter, July 2008

# Special Report Gold

## 15. Demand

**The renaissance of gold as an investment continues.** In 2000 investment demand accounted for only 4.8% of total demand, while by 2010 that share had increased to almost 40%. From our point of view this indicates a clearly bullish trend reversal and heralds a new phase of the bull market. We believe that from now on investors will dominate the demand side.

### Gold demand (exclusive of investment demand) per capita



Sources: Hinde Capital, WGC, World Bank, Erste Group Research

### Gold demand in 2010: +10%. India and China still the most important markets

According to the World Gold Council, total demand increased last year by almost 10% to 3,812 tonnes or USD 43.7bn. Investment demand recorded a particularly sharp increase, rising by 35% on the previous year's figure. Physical gold accounted for the majority. ETFs made up 338 tonnes and were thus down more than 40%. It seems we are witnessing a shift from paper gold investments to the real thing. The IMF<sup>94</sup> has recently confirmed that some ETFs are not to be trusted. It likened the sector, which has amassed a volume of almost USD 1,200bn, to the sub-prime sector.

### Upward trend continues in the first quarter of 2011

Jewellery demand increased by 17% or 300 tonnes relative to 2009, driven especially by China (400 tonnes) and India (746 tonnes). Generally however, we think that the Indian jewellery demand actually represents investment. In India, gold is traditionally part of the dowry for the brides (the so-called stridhan). While gold is held in the form of jewellery, its character actually leans towards the monetary side. The gold ensures that the women are protected should the marriage fail. It provides a social net.

**In the first quarter 2011, demand increased by 11% to 981.3 tonnes or 40% in value terms according to the World Gold Council<sup>95</sup>.** Investment demand was up by 26% to 310 tonnes. Coins and bullions were in particularly keen demand, which, in view of the 25% price increase vis-à-vis the previous year, is a clear sign of strength. Jewellery demand rose by 7%. Central bank demand amounted to 129 tonnes in the first quarter

**China and India remained the most important factors on the demand side. The two countries accounted for more than 60% of demand.** The Chinese investment demand doubled in the first three months of 2011 (relative to Q1 2010) to a total of 90.9 tonnes. It

<sup>94</sup> The Guardian, "IMF raises alarm over exchange traded commodities funds"

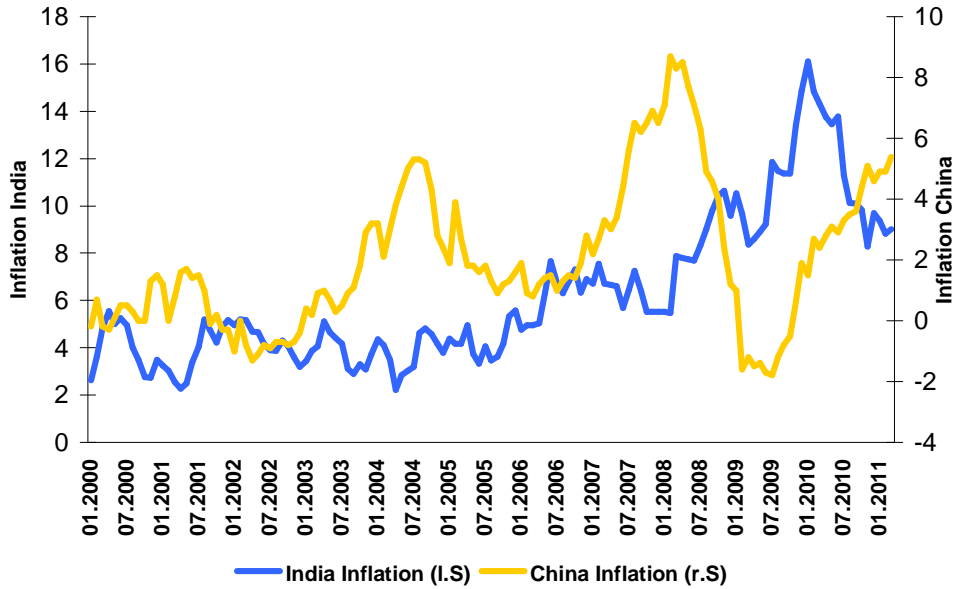
<sup>95</sup> Gold Demand Trends, World Gold Council, May 2011

# Special Report Gold

## The love trade is still intact

seems as if many Chinese were deserting the overheated property market and looking for protection from inflation by investing in gold. If we relate gold demand to GDP, we can see that India buys substantially more than China (2.5% of GDP vs. 0.4% of GDP). For the full year of 2011 China could for the first time pass India as the largest gold consumer.

### CPI India (left scale) vs. China (right scale)



Sources: Datastream, Erste Group Research

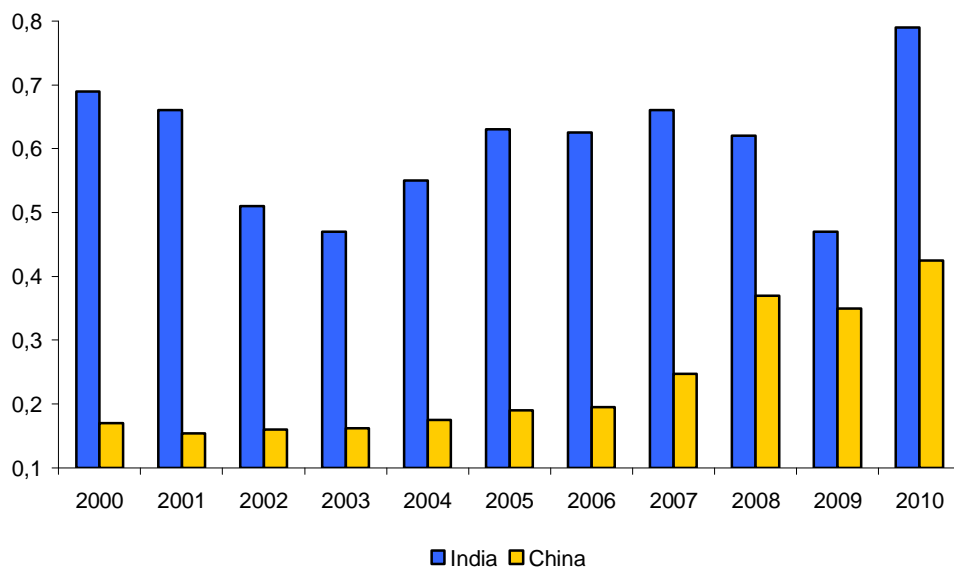
## Chinese gold demand set to double again?

**We expect Chinese investment demand to increase further.** The interest in gold savings deposits for example is enormous. Industrial and Commercial Bank of China introduced this form of savings product in December 2010, and since then 1.5 million accounts have already been opened. Last year the World Gold Council expected the Chinese gold demand to double by 2020. Now the organisation believes that it could double sooner than that.

## Indian middle class is driving prices as well

**The fast growing Indian middle class also represents a crucial factor.** Currently close to 120 million households have an annual income of more than USD 10,000. This number should rise to 200 million by 2015. The World Gold Council estimates that the Indian gold demand could soar to almost 1,200 tonnes per year by 2020.

### Gold demand per capita India vs. China



Sources: Dundee Wealth, IMF, Bloomberg, Erste Group Research

# Special Report Gold

**Growing prosperity in Asia will support gold demand in the long run**

**More than 50% of the world's population live in Asia. This is why we believe that the higher gold affinity in combination with the increase in disposable income will definitely have a positive effect on gold demand.** According to a study by Boston Consulting Group<sup>96</sup> the Asian-Pacific region records by far the highest growth rates in prosperity. In 2010 alone we saw an increase of 17.1%. By 2015 BCG expects annual growth in assets under management of 18% in China and of 14% in India. According to the World Wealth Report 2010<sup>97</sup> the number of high net worth individuals increased by 17% to 10 million in 2009. Total net worth amounted to USD 39,000bn. For the first time, the net worth in the Asian-Pacific region (USD 9.7bn) exceeded the net worth in Europe (USD 9.3bn). Due to the higher gold affinity in the region, we think that this will translate into rising gold demand within the next few generations.

***Renaissance of investment demand – institutionals as “elephant in the room”***

**We still believe that institutional investors will dominate the next stage of the gold bull market.** Especially insurance companies and pension funds should step up their gold allocation, seeing as the correlation to equities and especially to bonds is low or even negative.

**“Smart money” still with strong gold affinity**

**Gold seems to be gradually losing the nimbus of “investment for doomsayers and backwoodsmen”.** Not only vintage gold bugs, but also numerous hedge fund icons such as John Paulson, David Einhorn, Paul Tudor Jones, or Ray Dalio have nowadays developed a soft spot for gold. Even though many interpreted the sales of George Soros as the end of the bull market, a closer look reveals that he just disposed 99% of his positions in the Spyder gold ETF. And at the same time, Soros increased his positions in Barrick Gold and Great Basin, and opened new positions in Goldcorp and Eldorado Gold.

**„I wanna get physical...“**

**There is a multitude of examples that illustrate the trend towards “allocated gold” and away from paper gold.** The foundation of the University of Texas for example has taken physical delivery of USD 1bn worth of gold, which represents almost 5% of assets under management. The abandonment of paper gold is an important signal. On the one hand it seems to indicate a long-term horizon rather than speculative motives, and on the other hand the trust in paper gold seems to be subsiding. Should all US university funds follow this example and allocate almost 5% of their assets under management (as of end-2010: USD 600bn), this would translate into almost 600 tonnes of gold demand at current prices<sup>98</sup>.

**Institutionals are practically not allocated in gold**

**At the moment global pension funds manage about USD 30 trillion worth of assets<sup>99</sup>.** To put this into context: this is about twice the economic output of the USA. According to Shayne McGuire<sup>100</sup>, the commodity allocation currently amounts to slightly less than 3%. If those funds for example were to hold the S&P GSCI or the Dow Jones-UBS Commodities index, they would allocate only 5%<sup>101</sup> within these commodity indices to gold. This means that gold accounts for a marginal 0.15% of total allocation in pension funds. An increase to 0.3% would translate into an additional demand of USD 45bn. The allocation in insurance companies (USD 18.7 trillion of assets under management), hedge funds (USD 2 trillion), and sovereign wealth funds (USD 3.8 trillion) is of a comparably low magnitude. We do not expect a significant change of heart towards gold in this case – not the least for regulatory reasons. **However, even a marginal increase in the weighting of gold by the institutional investors would support the gold price significantly.**

**Unfavourable regulatory framework for institutional investors in Germany**

Until 2004 German institutional investors subject to the German Insurance Supervision Act were not allowed to invest in commodities<sup>102</sup>. Then, until 2010, a maximum of 5% of assets under management could be invested, but it was credited against the hedge fund quota. In May 2010 an independent commodity quota was introduced at 5%. However, products where physical delivery is possible have still not made it into the investment universe. As part of the Solvency II regulatory requirements that are currently under scrutiny, the plans are to fix the

<sup>96</sup> Global Wealth Report, Boston Consulting Group, Mai 2011

<sup>97</sup> World Wealth Report 2010, Cap Gemini, Merrill Lynch Wealth Management

<sup>98</sup> Please refer to “Institutioneller Goldrausch” (Institutional gold rush), Peter Schiff, June 2011

<sup>99</sup> Jeff Clark, Casey Research, March 2011

<sup>100</sup> “Hard Money, Taking Gold to a higher investment level” Shayne McGuire

<sup>101</sup> Please refer to “Gold: a commodity like no other”, World Gold Council, April 2011

<sup>102</sup> “Gold als Anlageklasse für institutionelle Investoren” (Gold as investment class for institutional investors), Mercer

# Special Report Gold

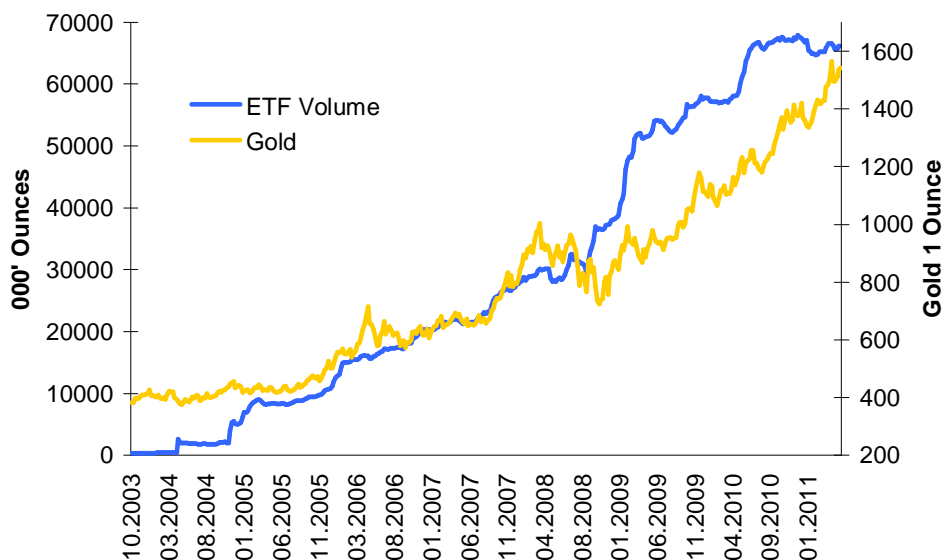
equity coverage of commodity investments at 49%. Given that the volatility of gold is by far lower than that of equities, this ratio seems too high. **Should the current directive be approved, this would definitely come as a disadvantage to the institutional allocation in gold, which is rather anaemic already.**

## “Executive order“ in the Netherlands

**The Dutch central bank has forced a pension fund to sell the majority of its gold holdings.** The allocation of the fund in gold accounted for 13% of assets under management (i.e. 1.2 tonnes). According to the Dutch regulatory body the average allocation in commodities may not exceed 2.7%, and gold is only a small part of that. The fund invoked the monetary character of gold, but the court was unable to follow the distinction between money and commodity. **The verdict comes across as bizarre and hypocritical, given that the Dutch central bank itself holds almost 60% of its reserves in gold.**

According to Bloomberg, the outflows from ETFs in the first quarter equalled 60 tonnes. The majority of the outflow occurred in January, when the gold price underwent a substantial correction. US and British investors were the main sellers, whereas Asian investors continued to expand their positions.

### Total ETF volume in ounces vs. gold price



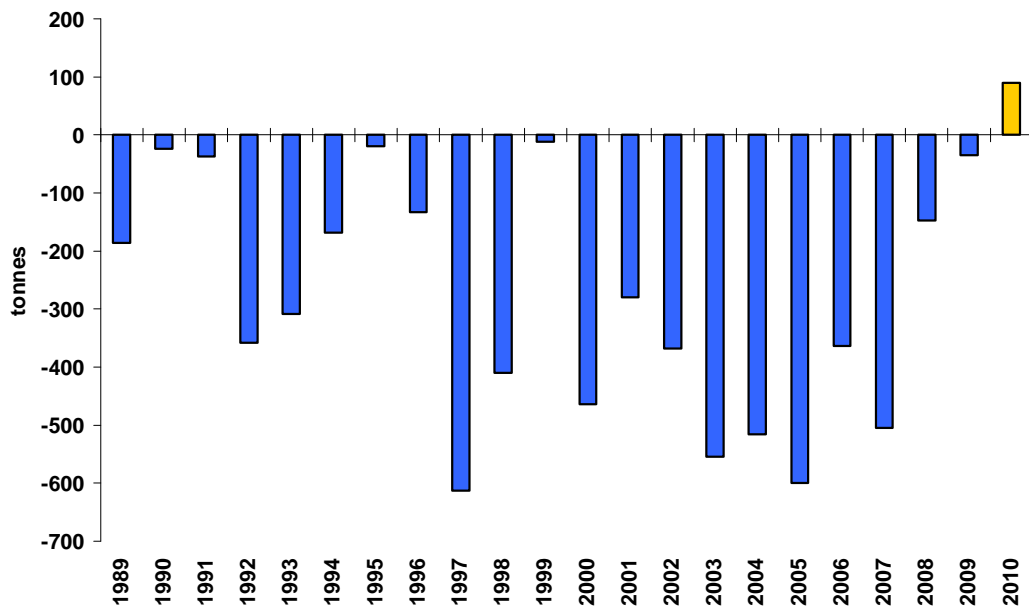
Sources: Bloomberg, Erste Group Research

### Central banks on the buyers' side for the first time in two decades

**The central bank sector joined the list of net buyers in 2010 for the first time in two decades, acquiring a total of 90 tonnes of gold last year.** While the nations within the framework of the Central Bank Gold Agreement (CBGA) have concluded their sales programmes, the central banks of emerging countries are still buying. The trend should continue, and in fact even pick up, in 2011. In the first quarter alone the central banks bought 129 tonnes. The Mexican central bank bought 93.3 tonnes of gold in February and March and thus increased its holdings by the factor of 20. This accounts for about 3.6% of total foreign exchange reserves. Thailand bought 9 tonnes. The Russian central bank continued to step up its holdings, planning to buy 100 tonnes per year in the future. In 2010 gold reserves increased by 23.9% or 154 tonnes to a total of 790 tonnes. Vladimir Putin confirmed once again that gold in terms of total reserves should increase to 10%. However, since 2000 the share of gold in total reserves has fallen from 27% to currently less than 7%.

# Special Report Gold

Changes in inventory of the officially disclosed gold reserves of central banks and international organisations



Sources: *Wirtschaftswoche*, IMF, WGC

Interestingly, over the past years mainly the central banks of the large oil-exporting countries such as Russia, Saudi Arabia, Kazakhstan, and also Venezuela have been on the buying side. This confirms the fact that these countries want to diversify out of the US dollar. The largest oil-exporting countries currently hold USD 1,500bn worth of currency reserves. China and India hold an additional USD 4,000bn. **This means that there is still potential for shopping sprees by the central banks.**

## Hardly any sales within the framework of CBGA3

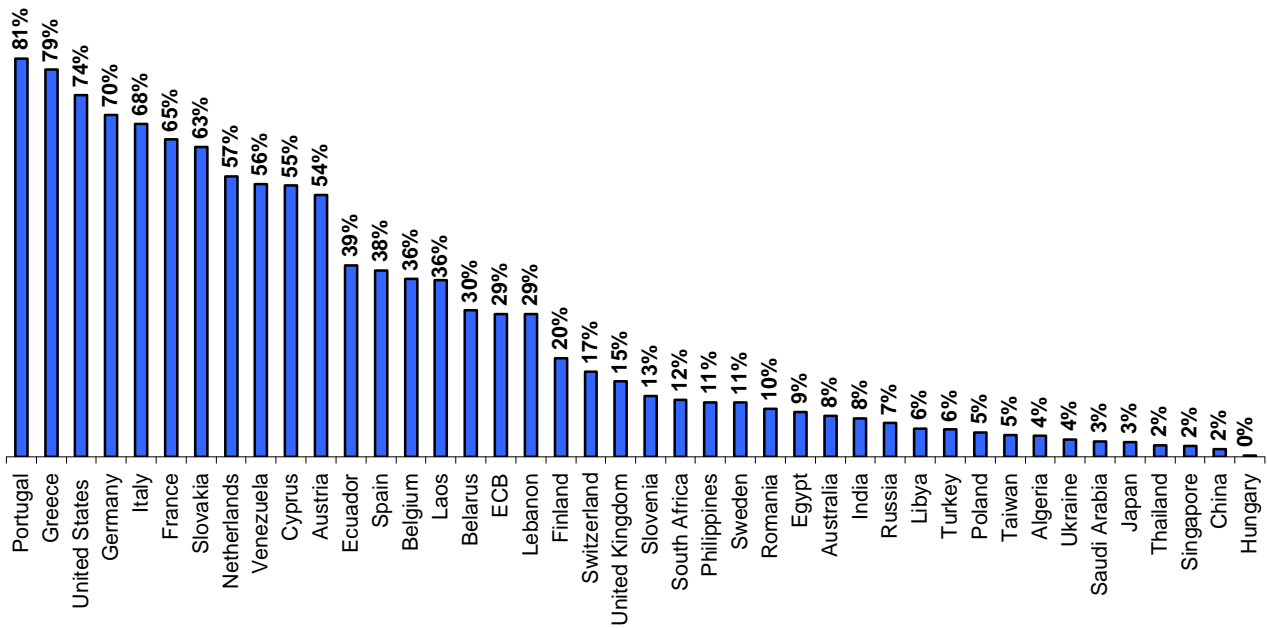
In the last CBGA year (which ended in September) only 6.2 tonnes of gold were sold. That was the smallest volume since the ratification of the agreement in 1999. At their height in 2004/2005 sales very nearly reached 500 tonnes. The straightforward settlement of the IMF sales of 403 tonnes also shows that the market can nowadays absorb such volumes without a problem.

**While gold accounted for almost 70% of central bank reserves worldwide in the 1940s and 1950s, this ratio has in the meantime fallen to only 10%.** This was mainly due to the massive increase in foreign exchange reserves. According to Bud Conrad<sup>103</sup> the money supply increased from 1948 to 2008 by the factor 485. Today the distribution is strongly segmented. Ten central banks hold slightly more than 80% of all gold reserves, whereas according to the IMF 51 countries own no gold reserves at all. 36 countries hold an allocation of only 0.01%-5%. Among these are countries with gigantic foreign exchange positions such as China, Korea, Japan, Brazil, and Singapore.

<sup>103</sup> "Profiting from the Worlds Economic Crisis", Bud Conrad, p. 332

# Special Report Gold

## Gold in terms of total central bank reserves (in %)



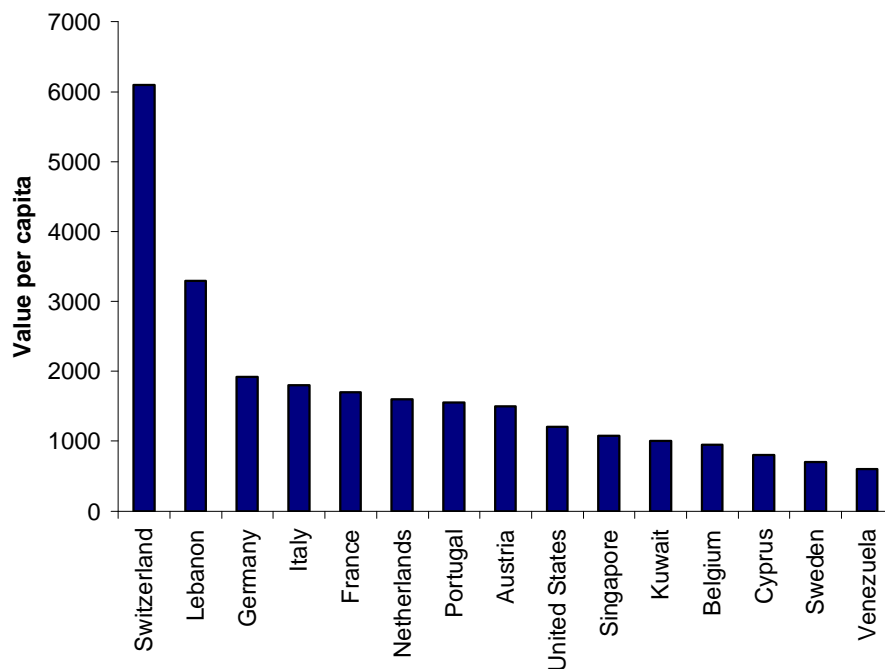
Sources: Bloomberg, Datastream, World Gold Council, Erste Group Research

**Belgian central bank Vice Governor Françoise Masai was quoted recently as saying that about 41% of the central bank’s 216 tonnes of gold was out on loan<sup>104</sup>. According to Masai the return on its loans of physical gold amounted to only 0.3%. According to GATA, the volume of leased central bank gold amounts to anything between 12,000 and 15,000 tonnes.** This is equal to half of the total holdings or six times the annual production. Central banks lend the gold to bullion banks that in turn lease it out to hedge funds or mining companies and put the proceeds in investments with better yields. To this extent, the term "naked short selling" may be more applicable to these business practices. In the event of a sharp rise in prices, short covering may occur and lead to exploding price increases. **This clearly confirms our theory, that there are massive discrepancies between the contracts based on gold price quotations at the COMEX and the price of physical gold.**

<sup>104</sup> Please refer to "Greed and Fear", CLSA, Chris Wood and "41% of Belgian Central bank Gold has been lent out", Zerohedge.com, June 2011

# Special Report Gold

Central bank gold reserves per capita (USD 1,500)



Source: *The Economist*, *Erste Group Research*, *World Gold Council*, *World Bank*

In a survey among central bankers and sovereign wealth fund managers<sup>105</sup>, 22% expect gold to turn into the most important reserve asset of the central banks within the next 25 years. Especially Asian and Arab central banks are clearly well disposed towards gold. Given that central banks used to be net sellers for more than two decades, the outcome of this survey confirms the paradigm shift.

## De-hedging

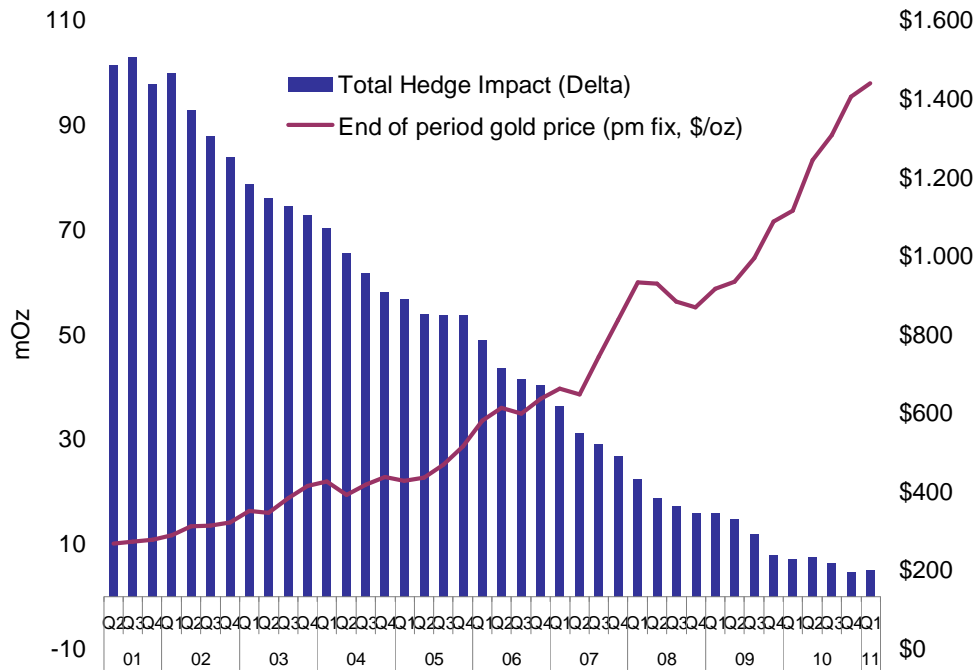
At the end of the first quarter 2011 the volume of hedged positions amounted to slightly less than 5mn ounces. In fact, over the quarter, new hedging positions for 300,000 ounces were opened. We do not think that this heralds a massive trend reversal towards hedging, but as discussed last year, hedging might become interesting again for the gold industry in the long term in order to ensure a high degree of predictability in large-scale project budgets.

<sup>105</sup> FT.com "Central Banks see growing reserve asset role for Gold", 23 June 2010



# Special Report Gold

De-hedging since 2011 in mOz



Sources: VM Group, Haliburton, ABN Ambro, Erste Group Research

# Special Report Gold

## 16. Supply

Although the gold price has increased by more than 450% since 2000, the production of 2000 was only exceeded last year.

Supply	2000	2010
Mining production	2,620	2,672
Recycling/scrap	629	1,657
Sales by central banks	479	(-76)
Total	<b>3,713</b>	<b>4,253</b>
Average gold price	284	1,226

Sources: Bloomberg, Erste Group Research estimates

**Gold production is gradually migrating to the emerging countries.** While China, Peru, Russia, and Indonesia accounted for 19% of global production ten years ago, their share has meanwhile risen to 36%. The massive decline in production of the biggest producing nations has been mainly offset by smaller, sometimes politically unstable countries with bad infrastructure. There are currently more than 90 countries worldwide with at least one mine producing gold. Since China and Russia are net importers, the largest (China) and fourth-largest producer (Russia) seem to be hoarding their gold production at home, with only small amounts leaving the country.

Country	2009 (Moz)	2010e (Moz)	2011e (Moz)
China	10	10.9	11.7
Australia	7.1	8.2	8.7
USA	7.1	7.3	7.5
Russia	6.6	6.5	6.6
South Africa	6.5	6.2	6.2
Peru	5.9	5.2	5.4
Indonesia	3.9	3.1	3.3
Canada	3.1	2.8	3
Ghana	2.6	2.6	2.8
Uzbekistan	2.6	2.6	2.6

Sources: Mining Journal, April 2011, CM Group, Erste Group Research

### Increasing resource nationalism

Since the (golden) fruits within easy reach have all been picked, many companies have to move to ever more inhospitable and geopolitically unstable regions. Tasks that have little to do with the core business (e.g. the construction of infrastructure and the building of communities) have turned into crucial elements on the companies' to-do lists. The growing resource nationalism puts additional pressure on them; the trend towards nationalisation and higher taxation of the mining industry has recently clearly picked up.

**The chronic budget deficits around the globe trigger a certain degree of greed. A vast array of new taxes and licence fees have recently been introduced or proposed.** There are numerous examples: Namibia has stepped up its grip on the industry by a good couple of notches. Gold, uranium, lead, and coal have been declared "strategic minerals", with the national mining company poised to receive 100% of rights. Something similar has been going on in Bolivia, where royalties were increased. In Zimbabwe many commodity producers will have to sell majority stakes to local investors in the coming months. And new duties have been introduced in Chile, Zambia, Tanzania, Burkina Faso, and South Africa as well.

In Peru, the second-largest copper and silver producer and the sixth-largest gold producer in the world, the victory of Ollanta Humala in the presidential elections in June has created uncertainty. The future will show whether Humala will choose the Chavez/Morales/Correa route or go down the more moderate left path of Lula da Silva.

# Special Report Gold

**This means that for the investor the selection of the right jurisdiction has become one of the most important criteria for gold share investments.** In the following you find a list of the top and bottom ten jurisdictions from a mine operator's point of view<sup>106</sup>.

## Top 10 mining regions

1. Quebec
2. Chile
3. Nevada
4. Ontario
5. Yukon
6. Western Australia
7. Saskatchewan
8. Alberta
9. Newfoundland/Labrador
10. Mexico

## Bottom 10 mining regions

1. Venezuela
2. Zimbabwe
3. California
4. Democratic Republic of Congo
5. Russia
6. Colorado
7. Bolivia
8. Montana
9. Ecuador
10. Honduras

### Production costs per ounce have been rising continuously

**Because of the sharply increased gold price, deposits have come online that would have been unprofitable only a few years ago.** According to Holiday<sup>107</sup> 12% of all producing mines are porphyry deposits<sup>108</sup>. These are deposits with low ore content, high volumes, and relatively simple production. The capital needs for such mines are enormous. It seems that porphyry deposits are the future of the industry. Of all resources recently proven and bigger than 7.5mn ounces, copper-gold deposits have accounted for 50%. The constant decrease in the degree of mineralisation underpins the growing importance of these deposits. While the average gold content per tonne in 1950 was more than 8 grammes, it is now about 0.8 grammes per tonne.

### Cash costs increase by 10-15% per year

**The input costs continued to soar last year. It seems that 10-15% marks the minimum annual cost increase nowadays.** The sharp increase in input costs (mainly energy, steel, and labour) and the falling gold content result in gradually rising cash costs. In 2010 cash costs amounted to USD 558/ounce according to the ABN Gold Mine Report. Provided that energy prices remain more or less constant, the cash costs will probably rise by more than 20% in 2011. Diesel has picked up by 25% in the year to date, and steel by almost 20%. And the prices of tires, cyanide, explosives and various chemical products have increased substantially since the beginning of the year.

The all-in costs have probably risen beyond USD 1,100. They include the cash costs as well as the costs of exploration, capital, administration, royalties, indirect costs for shutting down mines etc.

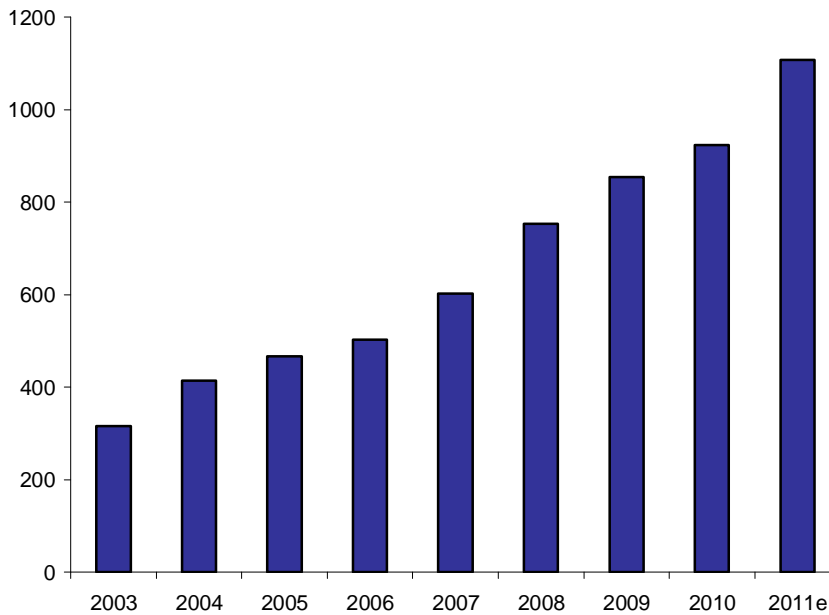
<sup>106</sup> "The 15 best and worst mining jurisdictions in the world", The Underground Investor, April 2011

<sup>107</sup> "Discovery and gold in porphyry deposits: an overview", Holliday J.R., 2009

<sup>108</sup> [http://en.wikipedia.org/wiki/Iron\\_oxide\\_copper\\_gold\\_ore\\_deposits](http://en.wikipedia.org/wiki/Iron_oxide_copper_gold_ore_deposits)

# Special Report Gold

**Total production costs per ounce in USD**



Sources: Earth Resource Investment Group – Dr. Joachim Berlenbach, Company Reports, Erste Group Research

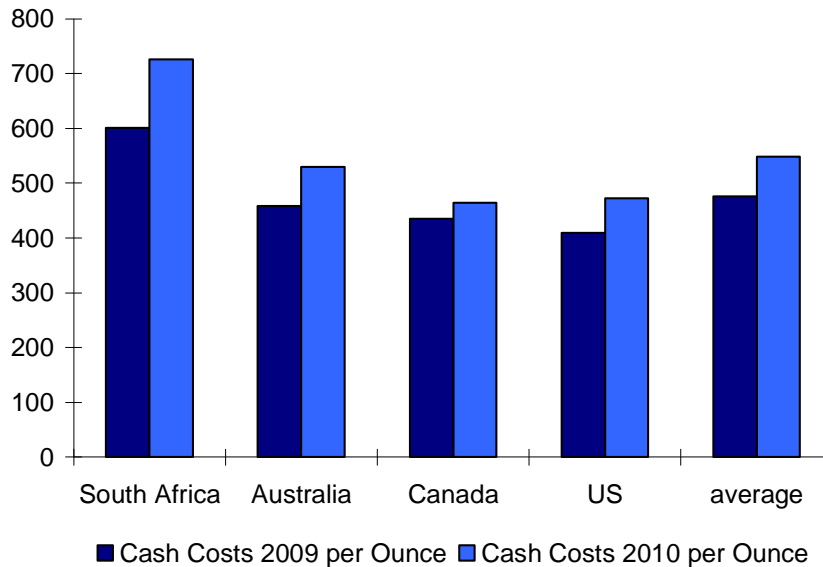
**Labour shortage also problematic**

**The skilled labour shortage seems to be another burdening factor in the long run.**

According to a Deloitte study<sup>109</sup> said shortages should gradually worsen. In Canada, some 20,000 highly skilled workers will retire by 2020. Forecasts expect a deficit of almost 200,000 skilled workers in the mining industry in Australia by 2012. In South Africa the average age of the skilled labour force is 50 to 55 years. This should exert further pressure on costs.

Regionally, the gold production is most expensive in South Africa, whereas on average Latin America is the cheapest region to produce gold.

**Cash costs by region 2009 vs. 2010**



Sources: LBMA Alchemist No 61, Bloomberg, Company Reports, Erste Group Research

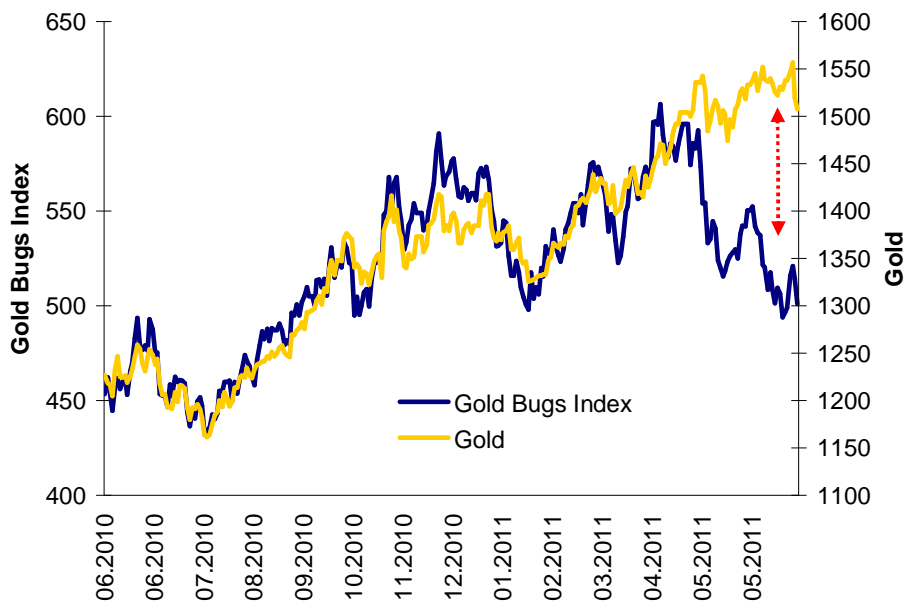
<sup>109</sup> "Tracking the trends 2011 – The top 10 issues mining companies will face in the coming year", Deloitte 2011

# Special Report Gold

## 17. Gold mining shares

**Mining shares have developed a clearly negative divergence relative to the gold price in recent months.** Since the last Gold Report, the Gold Bugs index has gained 10%, while the gold price has increased by 22%<sup>110</sup>. On the one hand that was due to the increase in input costs (mainly energy), on the other hand the growing risk aversion towards the end of the QE2 programme probably also played a role in the rising degree of profit-taking in mining shares.

### HUI Gold Bugs index vs. gold since the last Gold Report



Sources: Erste Group Research, Datastream

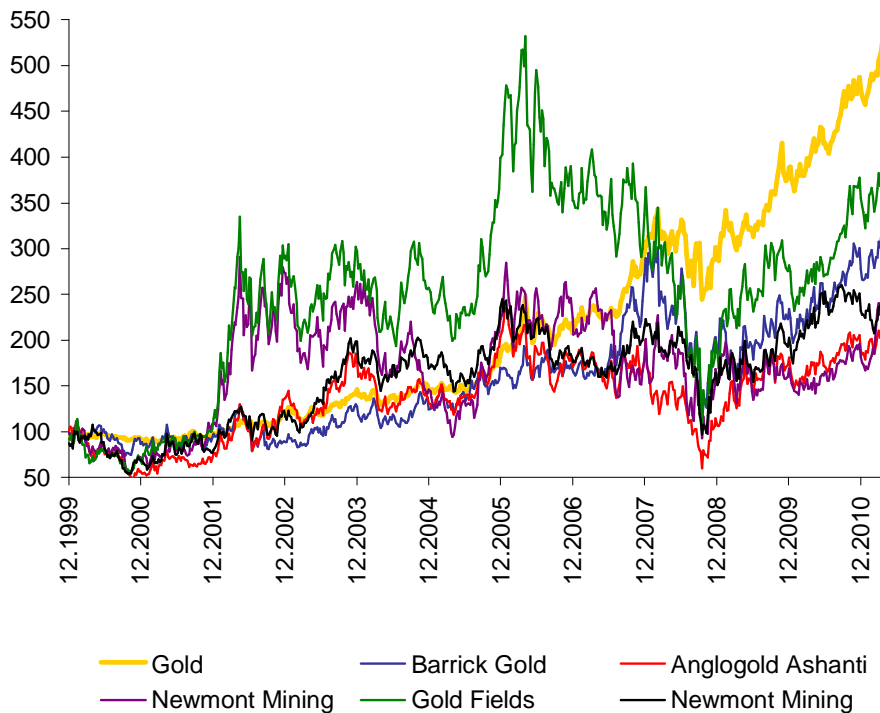
**Input costs, dilution, and ETF's as primary reasons for the under-performance**

**The following chart illustrates the underperformance of the major producers vis-à-vis the gold price since the beginning of the bull market.** There are many reasons for this development. Organic growth is almost impossible for the Majors, given that greenfield exploration has been sadly relegated to the sidelines in the past and the cost of capital have increased significantly. Terminating the hedging programmes was very expensive. The disappointing performance of the major shares relative to gold, results also from the drastic increase in input costs during that period. Earnings and cash flows were sometimes only marginally up in spite of the increase in the gold price. On top of that gold shares have been struggling with the competition of ETFs, where the investor is not exposed to any operational risk.

<sup>110</sup> as of 28 June

# Special Report Gold

Performance Gold vs. major producers in USD



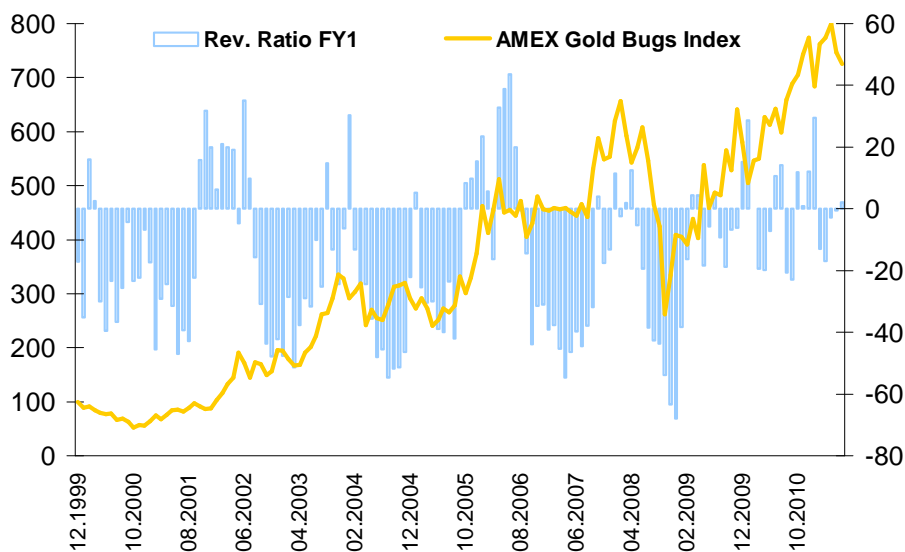
Sources: Datastream, Erste Group Research

## Majors let down shareholders

The majors have attached very little importance to return on assets, return on equity, and dividend payments in the past. Growth is mainly generated by (too expensive) acquisitions, and the shareholders' interests do not rank high on the list of priorities. The majority of the takeovers were financed by capital increases, which considerably diluted gold reserves per share.

Most recently a positive trend has established again for earnings revisions. This means that more analysts have revised their estimates upwards than downwards. Sales revisions have also recorded a slightly positive momentum, as has the development of the margins. In general the revisions indicate that the analysts are certainly not excessively euphoric with regard to the earnings development. We like to interpret this as a comforting counter-indicator.

Earnings revisions Gold Bugs index



Sources: Erste Group Research, Datastream

# Special Report Gold

Since the last Gold Report (June 2010 to June 2011) 69 takeovers have been consummated<sup>111</sup>. The average deal size amounted to USD 881mn, and the average premium was 40.98%. 86.7% of takeover bids were friendly. Interestingly, an increasing number of deals were settled in cash.

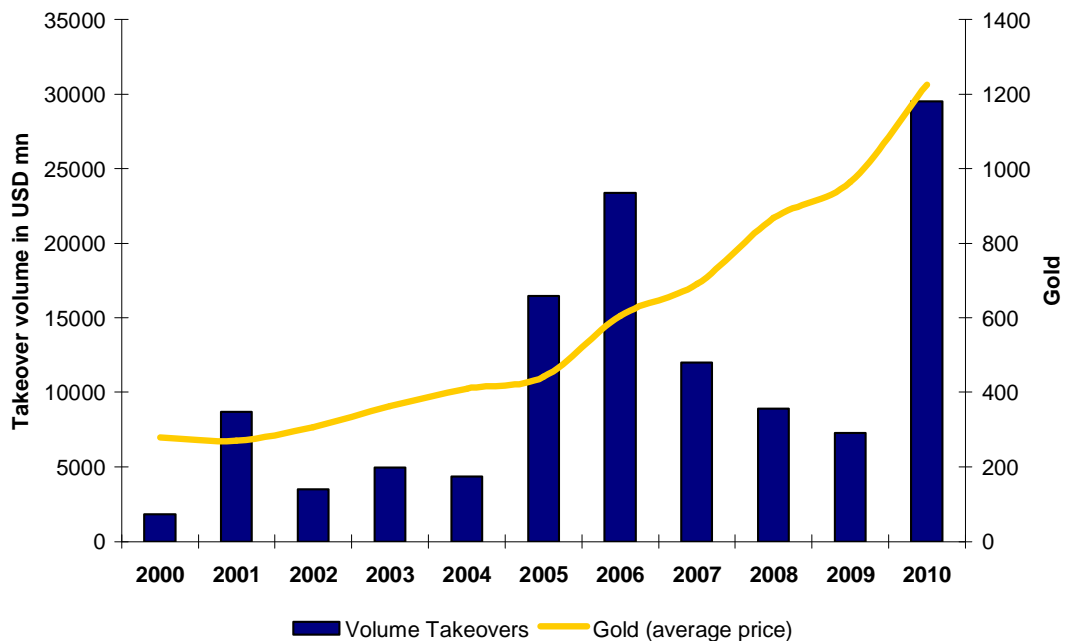
## Top 10 takeovers since the last Gold Report (June 2010)

Target	Buyer	Total Value (Mio. USD)	Payment
Lihir Gold	Newcrest Mining	8963	Cash und Aktien
Equinox Minerals	Barrick Gold	7685	Cash
Red Back Mining	Kinross Gold	6671	Aktien
Andean Resources	Goldcorp	3161	Cash oder Aktien
Fronteer Gold	Newmont Mining	2019	Cash
Ventana Gold	EBX Group	1062	Cash
Avoca Resources	Alacer Gold	876	Aktien
Century Mining	White Tiger Gold	763	Aktien
Skyland Mining	China Gold	742	Aktien
Gold Wheaton	Franco-Nevada	732	Cash oder Aktien

Sources: Bloomberg MA Function, Erste Group Research

Takeover activity set a new aggregate all-time-high in 2010, with the total volume of deals reaching almost USD 30bn. For the first time ever, the majority of targets consisted of companies that contained only resources. It seems that the shares of companies that already have reserves on their books are too expensive. The majority of projects were acquired in politically (relatively) stable regions.

## Takeover volume since 2000



Sources: Metals Economics Group, Bloomberg, Erste Group Research

**Barrick Gold announced the takeover of the copper producer Equinox Minerals in Zambia for a total of CAD 7.3bn.** This acquisition was settled in cash only. The takeover leaves a lot of room for interpretation. On the one hand it could mean that Barrick sees more upside potential in copper than in gold; on the other hand it could indicate that Barrick cannot find many attractive takeover candidates at fair prices and at the relevant size in the gold sector. In addition it could be Barrick's way of admitting that the large gold deposits are mostly

<sup>111</sup> The analysis only includes takeovers with volumes above USD 100mn Mio.

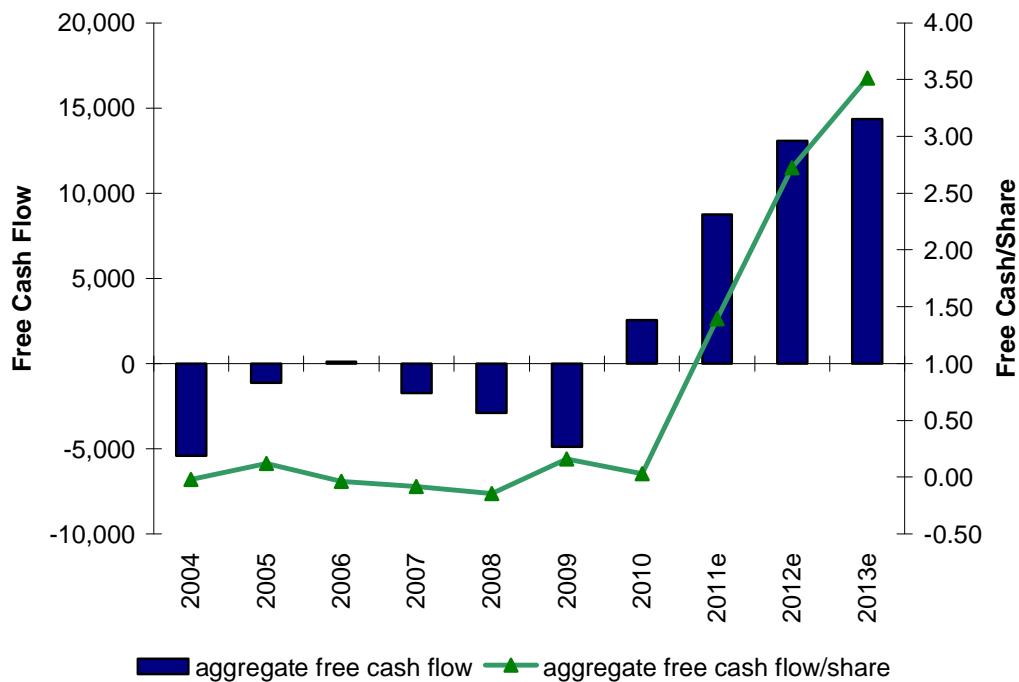
# Special Report Gold

gone, and that the company is now trying to grow by diversifying into other metals. The re-entry into Africa comes as an even greater surprise given that Barrick spun off African Barrick Gold last year.

## Sector consolidation will continue

**We expect takeover activity to accelerate further.** The aggregate free cash flow of the 16 companies in the Gold Bugs index will amount to USD 8.5bn this year and will increase to USD 14bn by 2013. Barrick Gold alone will, assuming a stable gold price, generate more than USD 15bn worth of free cash flow in the next three years. Cash & near-cash holdings as of end-2010 amounted to USD 14bn. **This indicates the enormous potential for consolidation, given that the top 10 producers alone have to replace more than 40mn ounces worth of production in 2011.**

**Gold Bugs index: aggregate free cash flow (left scale) and free cash flow/share (right scale)**



Sources: JCF Factset, Erste Group Research

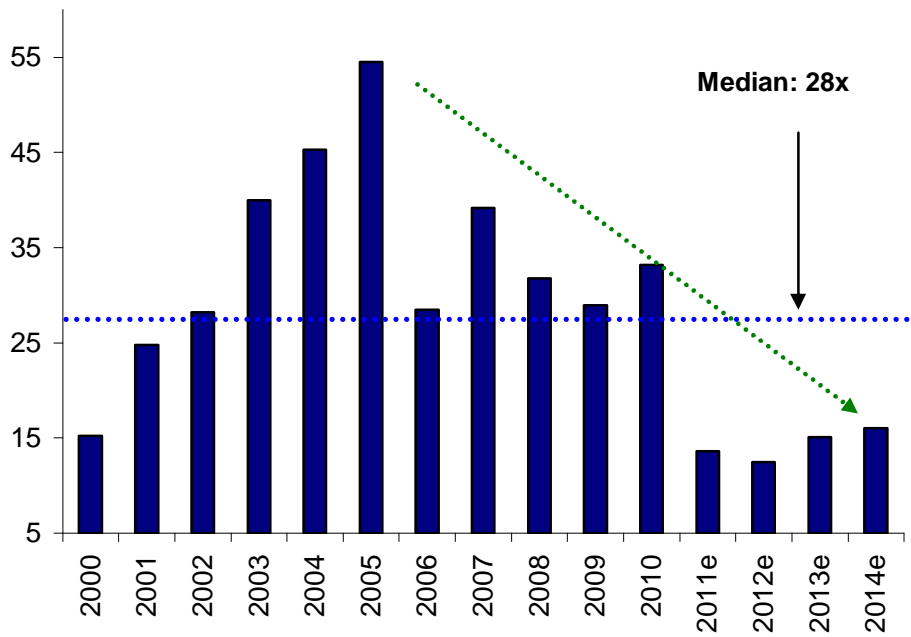
## Gold mining shares with historically low valuations

**The fundamental valuation of gold mining shares is currently historically attractive.** The companies in the Gold Bugs index currently command an estimated 2011 PE of 14x, which is expected to fall to 12x in 2012. This is extremely low both in terms of its own history (average PE 2000-2010: 33x) and in relation to many other sectors. It also confirms that the market is currently not exactly pricing in the most euphoric of expectations.



# Special Report Gold

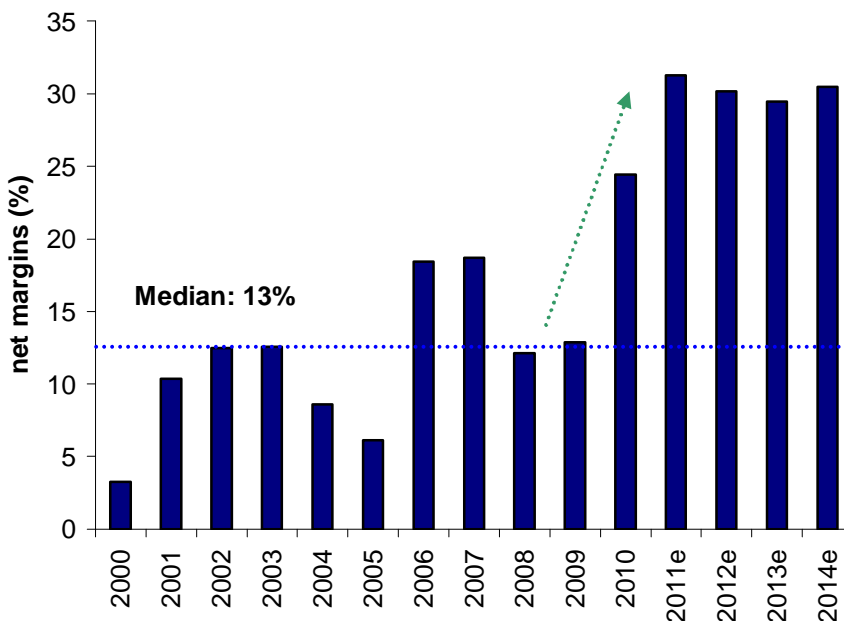
Historical and estimated PE of the Gold Bugs index



Sources: JCF Factset, Erste Group Research

The median net margin of the Gold Bugs index companies is 31% (2011e). This compares positively to the median of the past ten years of just 13%.

Gold Bugs index: net margins 2000-2014e



Sources: JCF Factset, Erste Group Research

**Disappointing dividend policy – are companies gradually starting to reassess their position?**

Return on Equity is expected to rise from 8.11% in 2010 to 13.28% in 2012. However, the dividend yield is still on the disappointing side. Currently at 0.8%, it is only estimated to rise to 0.98% by 2013. The current payout ratio is about 19%. If it rose to 40%, dividend yields of 2.5% could be reached without a problem. **We regard the absent willingness to distribute higher dividends as one of the most striking negative features of the mining sector.** No wonder the mining sector is the fund managers' stepchild: utilities pay out 80%, the energy sector distributes 67%, and financials pay out 52% of their earnings as dividends. Only the technology sector has worse payout ratios than gold mining stocks.. But it seems that

# Special Report Gold

companies are reassessing their position. Barrick, Goldcorp, Newcrest, and Newmont have recently stepped up their dividend payments.

We believe that the combination of negative real interest rates and the slowdown of the economy will definitely come with a positive impact on margins and share prices in the gold mining sector. We have created a gold mining share basket<sup>47</sup> (ISIN: AT0000A0DY51 and AT0000A0K2X0), which contains companies that should benefit most from the attractive valuations and the envisaged wave of takeovers. At the moment the basket contains the companies listed underneath; a review of companies and weightings is due for the end of July<sup>112</sup>.

## Gold mining share basket

ISIN-Code	Company
CA0115271086	ALAMOS GOLD
CA11777Q2099	B2GOLD
CA1520061021	CENTERRA GOLD
CA2506691088	DETOUR GOLD
CA2849021035	ELDORADO GOLD
CA38119T1049	GOLDEN STAR
CA6752221037	OCEANA GOLD
CA6882781009	OSISKO MINING
CA74051D1042	PREMIER GOLD
CA7852461093	SABINA
CA8169221089	SEMAFO

Sources: Erste Group Research

Since its issue in July 2009 the basket has almost doubled and has thus outperformed practically every benchmark.

## Erste gold mining share basket since July 2009 (logarithmic scale)



Source: Erste Group

<sup>112</sup> Announcements and information available on [www.produkte.erstegroup.com](http://www.produkte.erstegroup.com)

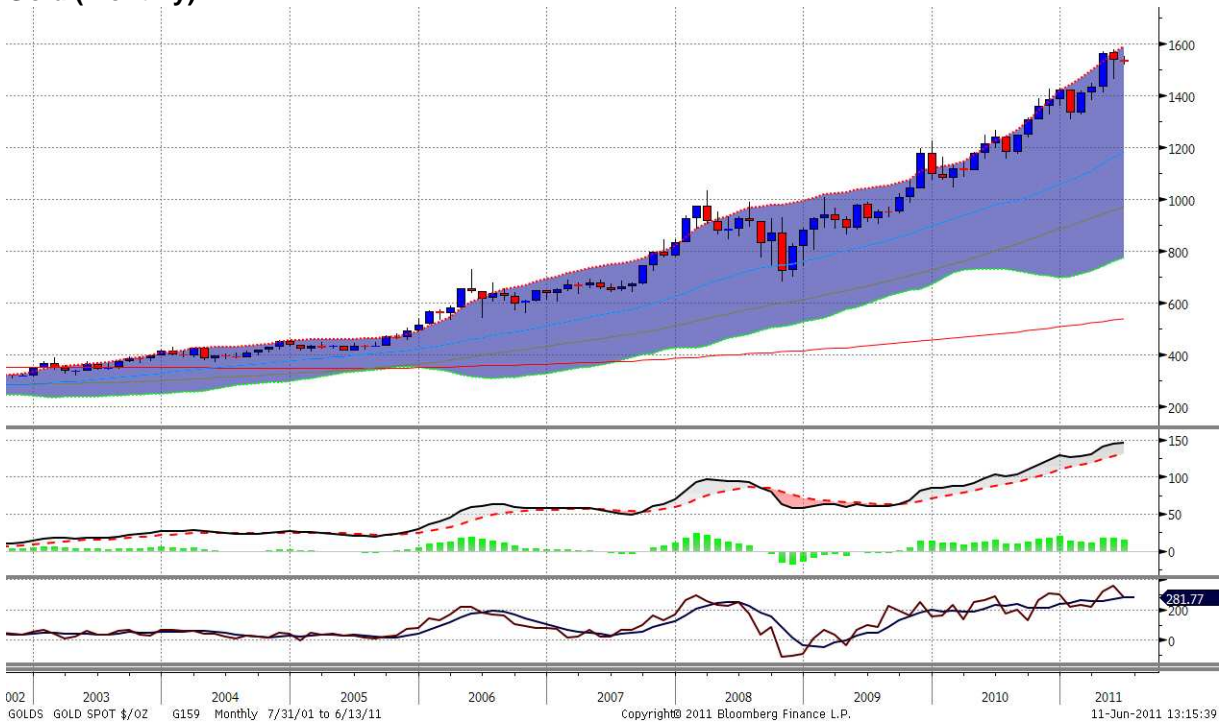
# Special Report Gold

## 18. Technical analysis of the gold price

**The upward trend looks stronger and healthier than ever.** The long-term chart indicates an intact bull market. The price remains at the upper barrier of the Bollinger Bands, which illustrates the strong upward momentum of the trend. The MACD indicates convergence, with the momentum going through a minor bout of weakness. The (not fully formed) “Hanging Man” could also indicate short-term weakness. **However, we would consider this a buying opportunity within an intact upward trend.**

In the monthly chart the gold price is clearly above the short/medium-term as well as long-term moving averages. This means that the upward trend is intact across all time lines. Having set numerous all-times-highs, the gold price is now in uncharted territory. **The most important Fibonacci projections and Fibonacci extensions suggest a medium-term technical price target of about USD 2,000.**

Gold (monthly)



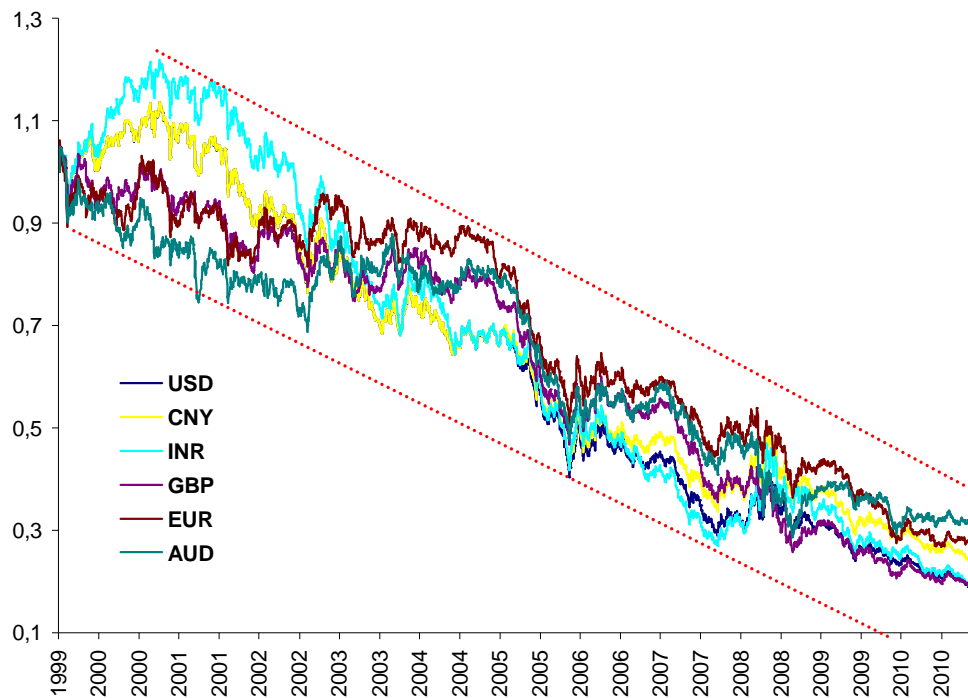
Source: Bloomberg

**“Currencies don’t float, they just sink at different rates“ Clyde Harrison**

**In addition the trend against almost all paper currencies around the globe is also intact.** The following chart shows the downward trend of the US dollar, the Chinese yuan, the Indian rupee, the British pound, the euro, and the Australian dollar relative to gold. Only when the first divergences are setting in will it be time to re-assess the bull scenario. However, we are still a long way away from that situation.

# Special Report Gold

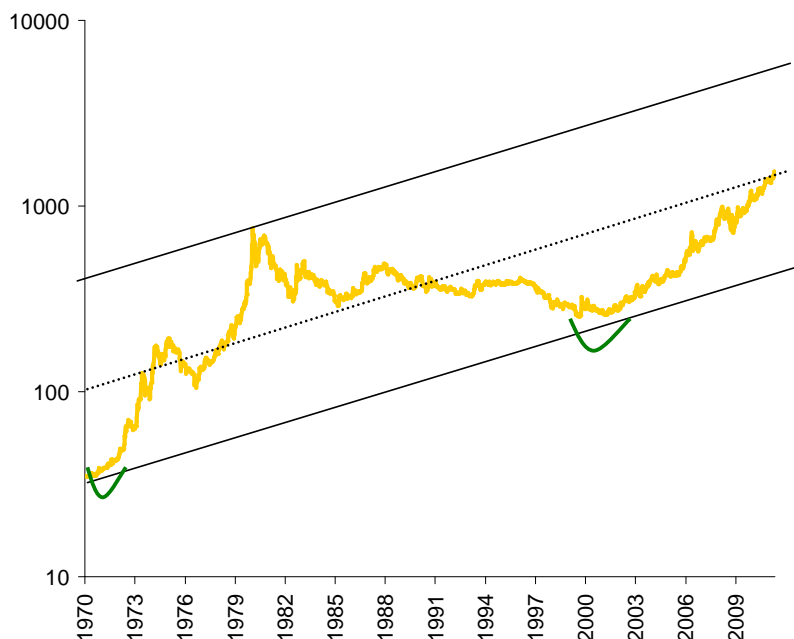
Various currencies vs. gold since 1999



Sources: Datastream, Erste Group Research

The logarithmic scale also shows that the price development is not excessive but in fact is only around halfway of the long-term average bandwidth.

Gold since 1970 (logarithmic scale)



Sources: Datastream, Erste Group Research

**Sentiment as positive counter-indicator**

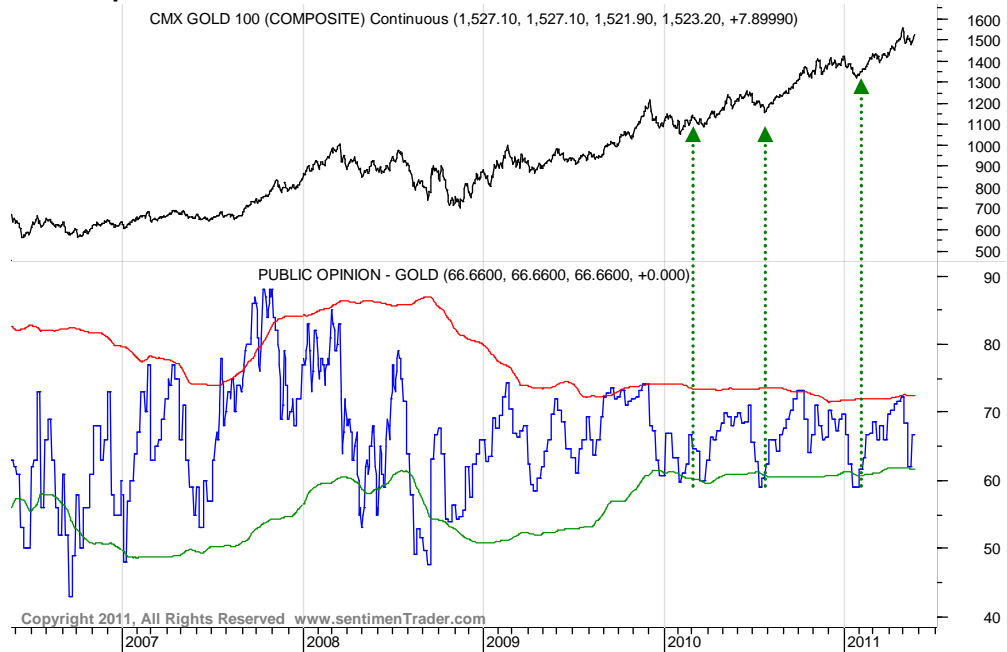
**We take the fact that the sentiment turns bearish very quickly during corrections (e.g. in January) as positive sign.** The sentiment indicators such as Market Vane, Hulbert Survey, or Rydex Precious Metals Cash Flow show that the gold price is still nowhere near any excessive

# Special Report Gold

euphoria. According to Hulbert Financial Digest the weighting of the gold newsletters is currently only 20%<sup>113</sup>, i.e. 13 percentage points above the level it was at around the price low in mid-May. This means that the sentiment has not turned particularly brighter although the gold price has increased by USD 65 and is currently close to its all-time-high. **At the previous all-time-high the sentiment index was 54 percentage points higher.**

**The Public Opinion indicator confirms the cautious sentiment.** Extreme values (1.5 standard deviations above the one-year moving average) tend to represent reliable counter-indicators, i.e. the bulls become too optimistic when prices are rising, and vice versa. This is why prior to big trend reversals we tend to see extreme spikes either way. Numerous closed-end funds such as the Central Gold Trust, are currently traded only at a small premium or even partially at a discount to the NAV. This fact, too, signals that there is hardly any euphoria priced in.

## Public Opinion index



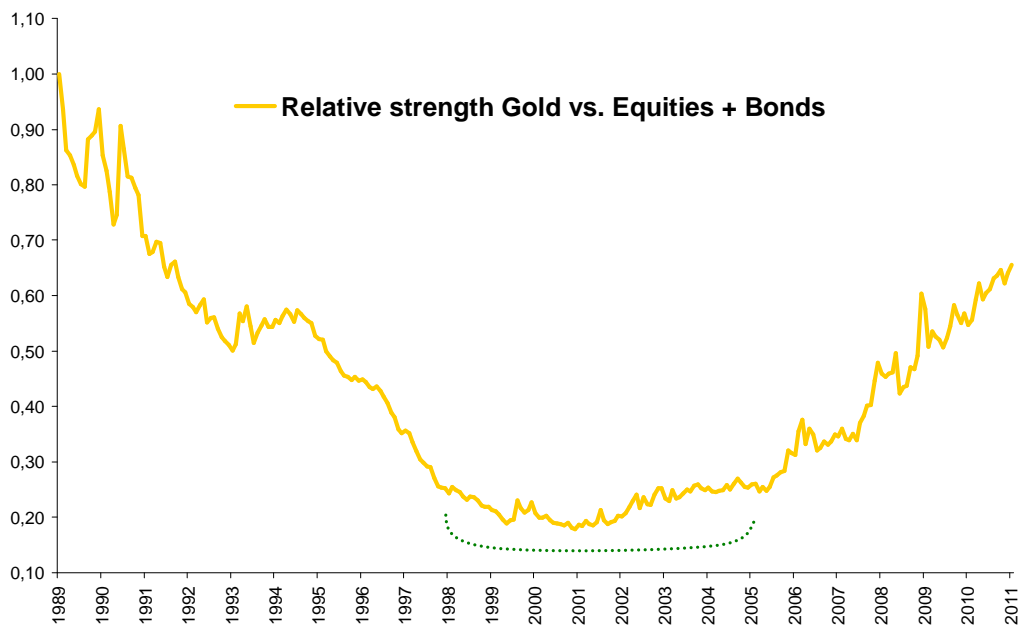
Source: [www.sentimenTrader.com](http://www.sentimenTrader.com)

The following Chart shows the relative strength of gold vs. the summed up relative strengths of equities (S&P Total Return index + Datastream Total Return index). It illustrates the phase when the relative strength was bottoming out between 1998 and 2005 as well as the subsequent upward trend, which so far has not shown any signs of overheating.

<sup>113</sup> Data as of 7 June, please refer to "Gold traders strangely subdued", Marketwatch.com

# Special Report Gold

## Relative strength vs. equities and bonds



Sources: Erste Group Research, Datastream

An essential reason for the recent sideways phase of the gold price is the profound seasonality, which to a large extent is caused by the so-called wedding season as well as the Diwali festival in India. Given that most weddings in India take place in autumn and spring the jewellery industry stocks up in the third and fourth quarter. In addition jewellers also tend to replenish their gold stocks in the third and fourth quarter for Christmas.

This is why the fourth and the first quarter of the year show the best performance, whereas the gold price corrects significantly in the second quarter and tends to move sideways in the third quarter. This seasonality has been observed in 75-80% of the cases.

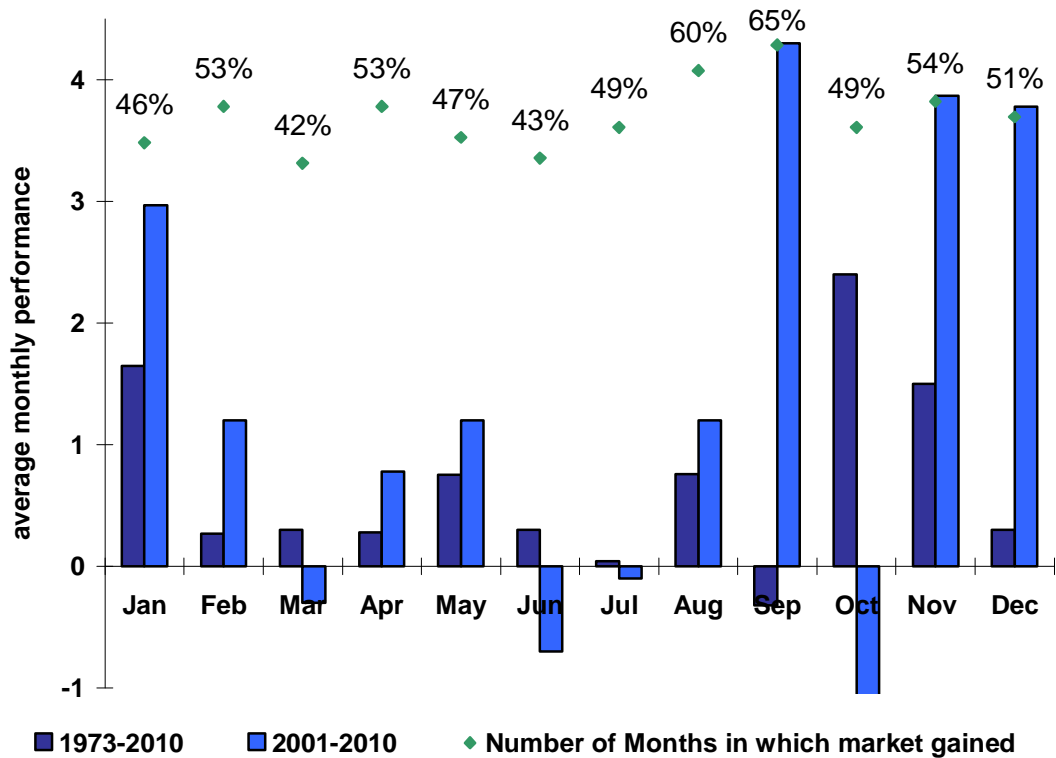
	Year-low	Year-high
2001	2 April	17 September
2002	4 January	27 December
2003	7 April	31 December
2004	10 May	2 December
2005	8 February	12 December
2006	5 January	12 May
2007	10 January	8 November
2008	24 October	17 March
2009	15 January	2 December
2010	5 February	6 December

Sources: Bloomberg, Erste Group Research

Due to the strong seasonality we expect the gold price to move sideways until the end of July, which should be followed by a seasonally positive phase. In the past, the gold price has increased 65% of the times in September.

# Special Report Gold

Seasonality of the gold price and number of months with a positive gold price performance

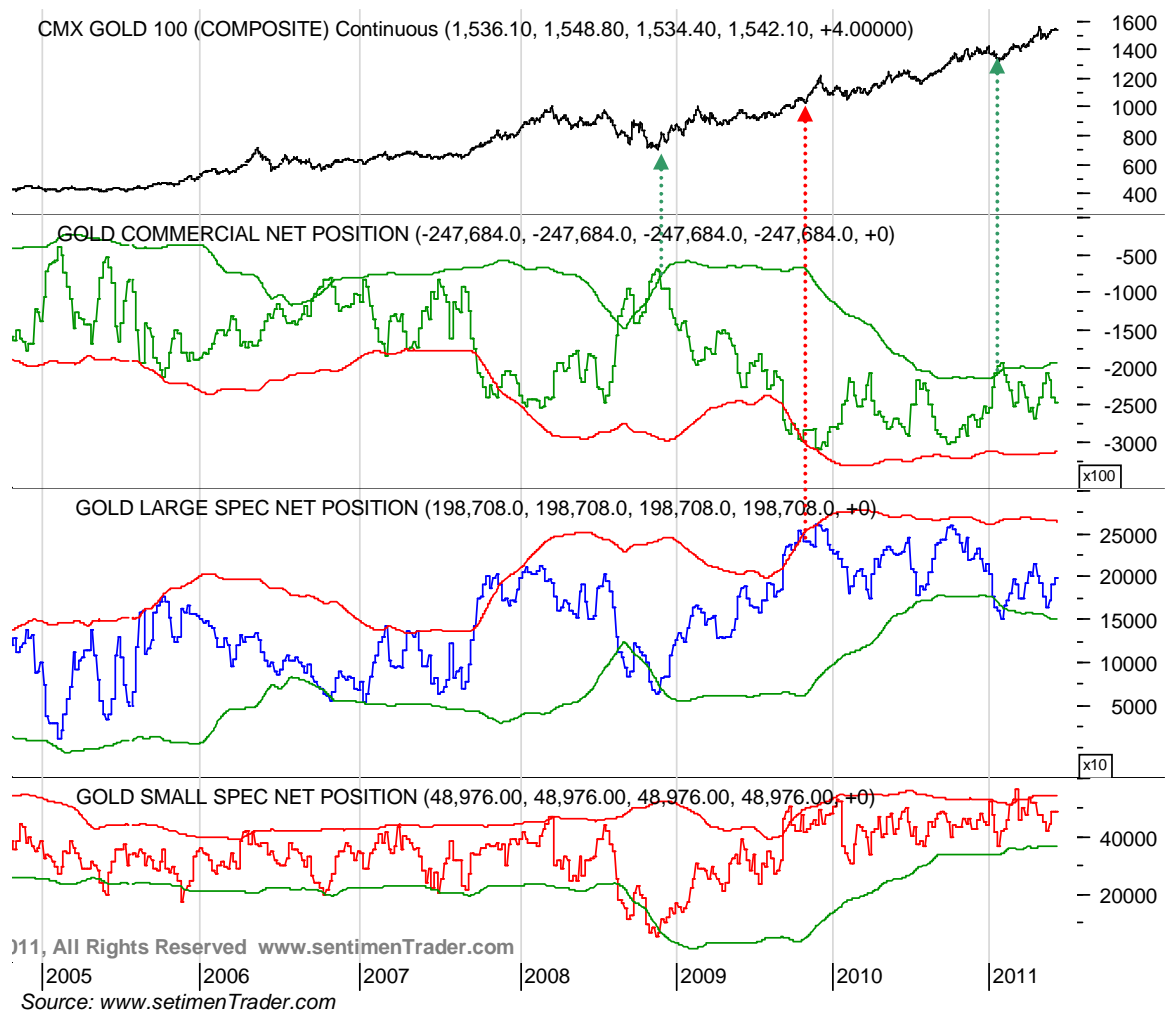


Sources: Erste Group Research, Macquarie Research

The Commitment of Traders Report (CoT) currently paints a largely positive picture. Neither commercials nor large speculators have taken extreme positions. While the optimism of the speculators has somewhat picked up, the levels are still far away from dangerous optimism. The large speculators have recently expanded their positions by 6,934 contracts to 198,708, while the smaller speculators have extended their long position to 48,000 contracts. The sharpest increases tend to be juxtaposed by strongly rising long positions of the managed money. Although gold is traded only slightly below the all-time-high, the positioning of the speculators does not at all indicate any form of excessive euphoria. The drastic decline in short exposure also indicates the gradual increase in optimism. **This seems to be a reliable signal for further significant upside potential.**

# Special Report Gold

## CoT Report (as of 11 June 2011)



### Ratio analysis

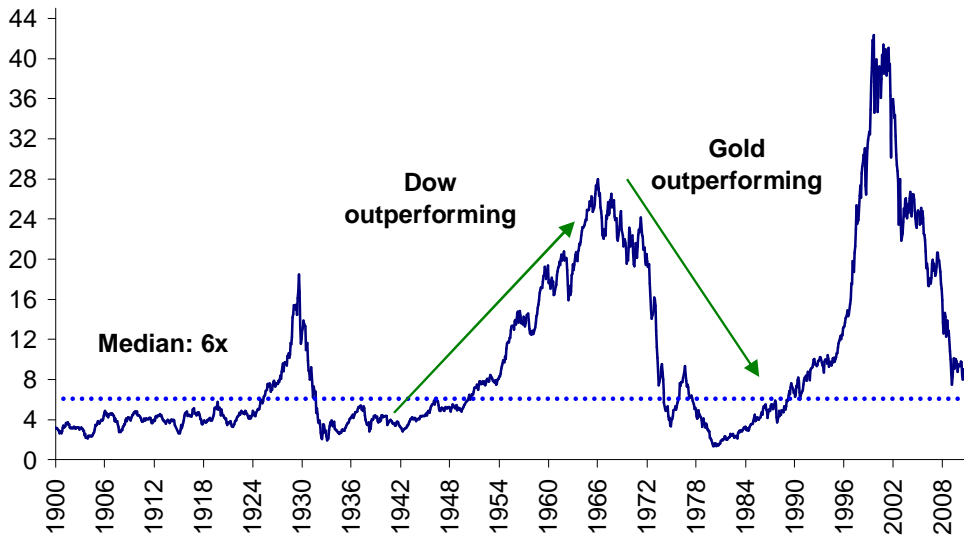
By analysing the long-term relationships of gold with other assets we wish to provide the reader with the basis for a different, long-term perspective of the current market situation and reveal mutual over- or under-valuations.

#### 1) Dow / gold (currently 8.1x)

At 8.1x, the ratio is currently slightly above the long-term median of 6x. This means that gold is still relatively inexpensive in comparison with the Dow Jones index. 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 1.3x. We think that values of 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 6,200/ounce.



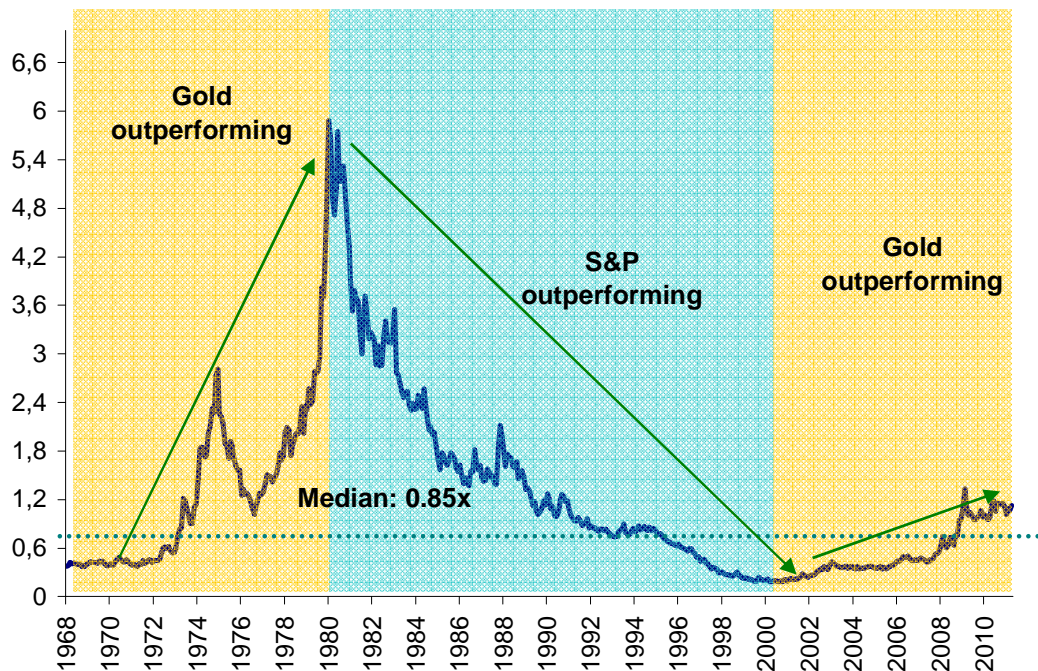
# Special Report Gold



Sources: Erste Group Research, Bloomberg

## 2) Gold / S&P 500 (currently 1.12x)

Currently the ratio is above its long-term median of 0.85x. Looking at the development in the 1970s, we expect a dynamic increase towards higher levels. 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 8,000/ounce (given a constant S&P index).



Source: Erste Group Research, Bloomberg

## 3) Gold / silver (currently 43x)

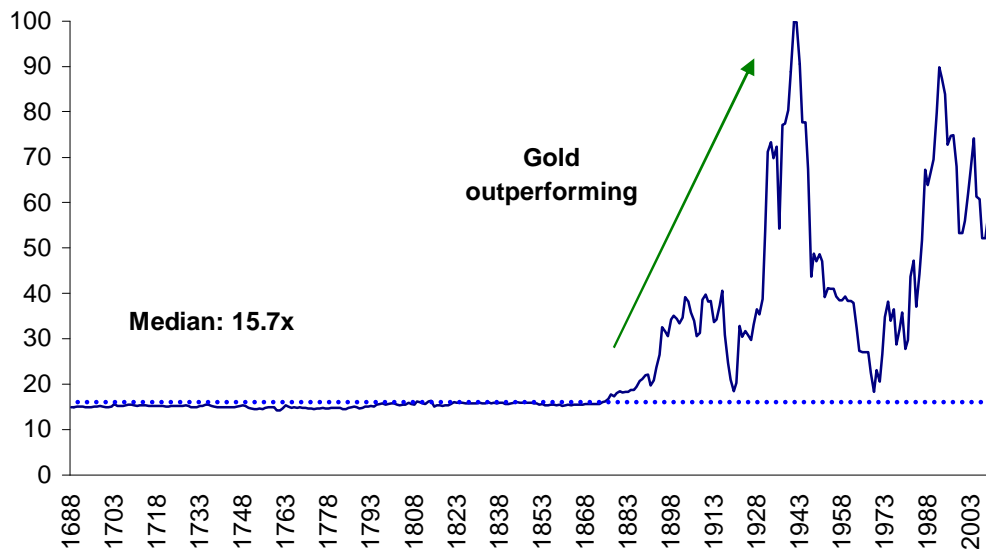
Looking back over the centuries, we find that gold has been substantially more expensive since the beginning of the 20th century than in the previous three centuries. The long-term median (since 1688) is 15.7x. This also reflects the actual ratio of physical supplies: gold is about 17 times scarcer than silver. According to USGS, the measured and assumed silver

# Special Report Gold

resources are actually only about 6 times as high as the ones of gold. Therefore silver is at the moment clearly undervalued at a ratio of 43x relative to gold.

Silver, like gold, is a monetary metal, but it's 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.

## Gold/silver ratio since 1688



Sources: Measuringworth.com, Erste Group Research

In ancient Egypt, gold was worth 13.3x as much as silver. This ratio was based on astronomical calculations (on the basis that the moon travels 13.3 times faster through the heavens)<sup>114</sup> and remained stable for more than 800 years until the period of the Lydians. In times of bi-metalism the ratio was usually between 10x and 15x. However, it is obvious that the ratio was not set by the market, but by the respective governments. From 1870 onwards the ratio increased sharply, which could mean that the free market had started to accept gold as primarily monetary metal.

## Gold/Silver ratio in times of bi-metalism

Year	France	England	Venice	Germany	Mean
1300		9.29	10.84	10	10.04
1350	11.11	11.57	14.44	11.33	12.11
1400	10.74	11.15	11.69	11.37	11.24
1450	11.44	10.33	12.1	11.12	11.25
1500	11.83	11.15	10.97	11.12	11.27
1550	12.07	12.23	11.07	11.38	11.69
1600	11.68	10.9	12.34	11.5	11.61
1650	13.5	13.34	15.37	11.64	13.46
1700				14.81	14.81
1750				14.53	14.53
1800				15.68	15.68
1850		15.7			15.7
1900		26.49			26.49

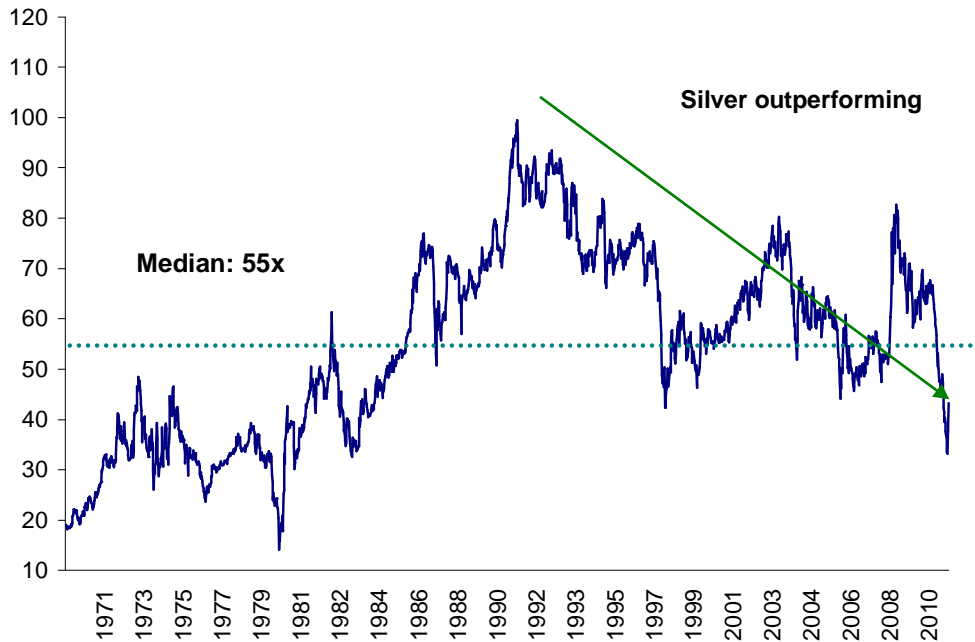
Sources: *The Prudent Investor*, "A History of Money" John F. Chown

<sup>114</sup> Please refer to „Geld-Gold-Gewissen“, Gérard Klockenbring and Ferdinand Lips „Gold Wars“

# Special Report Gold

## Gold/Silver ratio since 1970 (currently 43x)

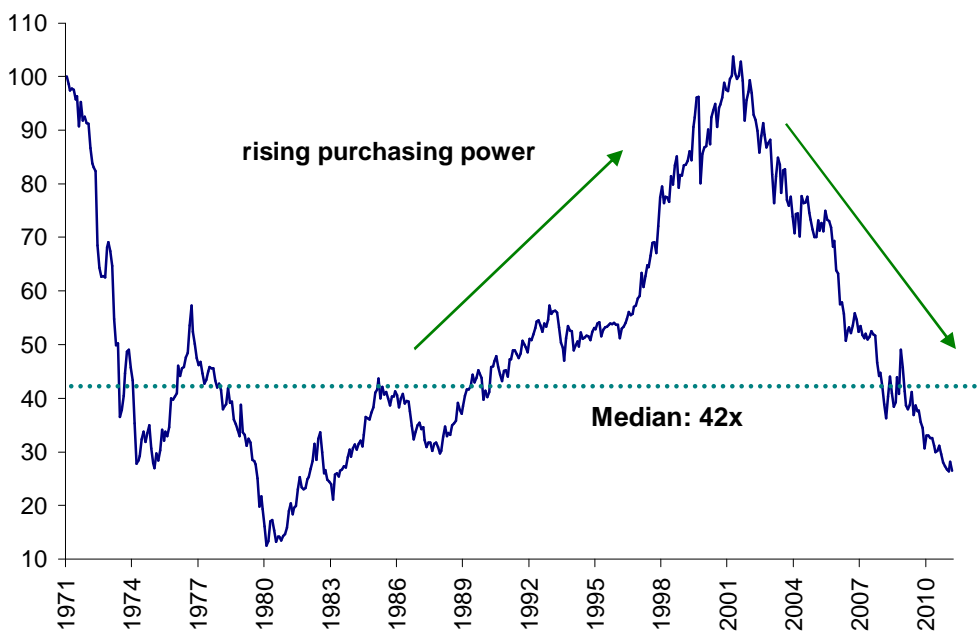
Currently the ratio is about 43x and thus above the median of the 40-year average of 55x. This means that silver is expensive relative to gold in terms of the 40-year time horizon. The all-time low was hit in 1980, when 1 ounce of gold would buy 14 ounces of silver. The ratio set its historical high in 1940, when 1 ounce of gold was worth 100 ounces of silver. We saw similarly high values in 1990.



Sources: Erste Group Research, Datastream

## 4) Disposable income / gold (currently 26x)

The comparison of per capita income in the USA with the gold price reveals the drastic decline in purchasing power relative to gold. Whereas at the beginning of 2000 the disposable income would have still bought you 100 ounces of gold, this ratio has in the meantime fallen to 26. The all-time-low of the ratio was set at 12x in 1980.

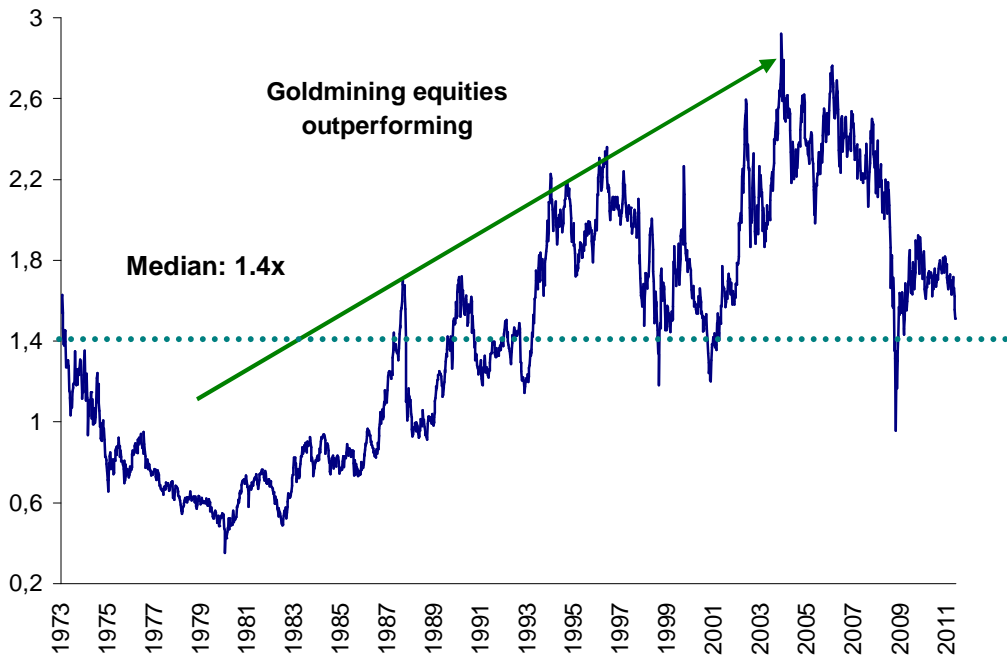


Sources: Erste Group Research, Datastream

# Special Report Gold

## 5) World Gold Mining index / gold (currently 1.5x)

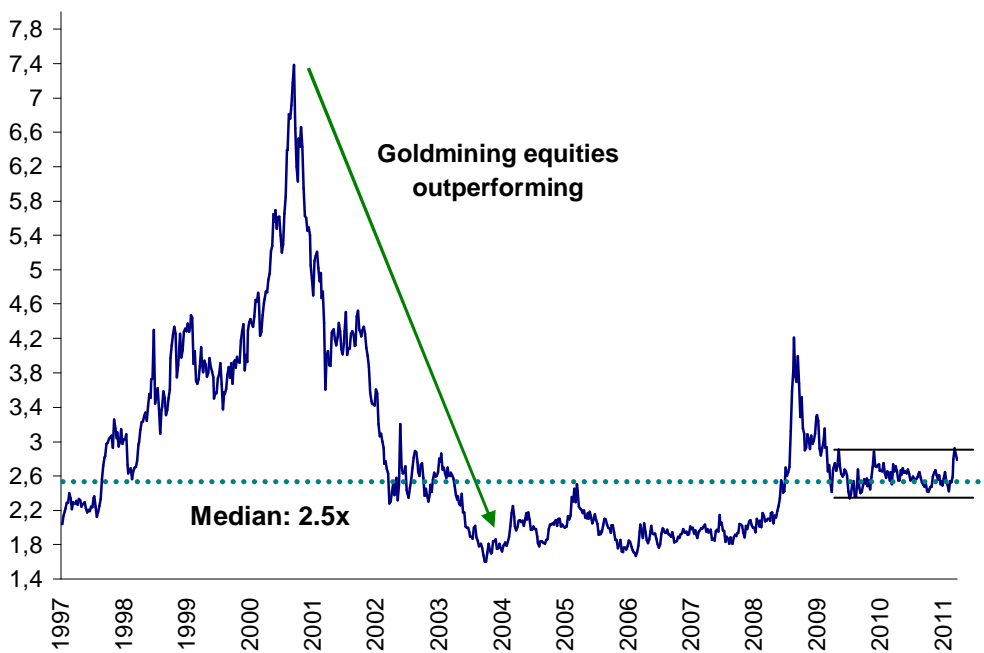
Currently the ratio of the World Gold Mining index and gold is 1.5x and thus slightly above the long-term median of 1.4x. A rise indicates that gold shares are outperforming gold. The chart shows that since the beginning of the bull market shares have not outperformed gold.



Sources: Erste Group Research, Datastream

## 6) Gold / HUI (currently 2.7x)

The ratio of the gold price to the Amex Gold Bugs index (HUI) is currently 2.7x. Although the index has made attempts at breaking out of its long and gruelling sideways movement, it has so far failed to generate any sustainable relative strength. The sideways trend shows therefore that gold mining shares have not outperformed gold and have indeed performed more or less in line with the gold price since 2003. The average of the ratio is 2.8x, and its median is 2.5x.

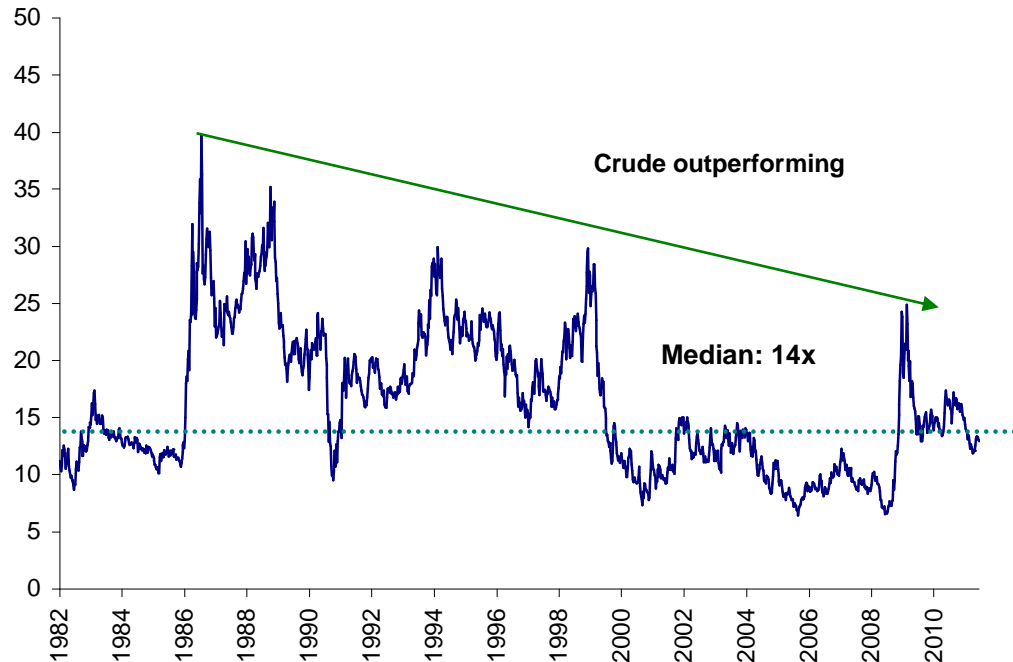


Sources: Erste Group Research, Datastream

# Special Report Gold

## 7) Gold / oil (currently 13.6x)

The current ratio of close to 13.6x is only slightly below the long-term median. The all-time high was set in 1986, when one ounce of gold would have bought almost 40 barrels of oil. On the other hand, in 2008 the ratio hit its historical low at less than 6 barrels per ounce.



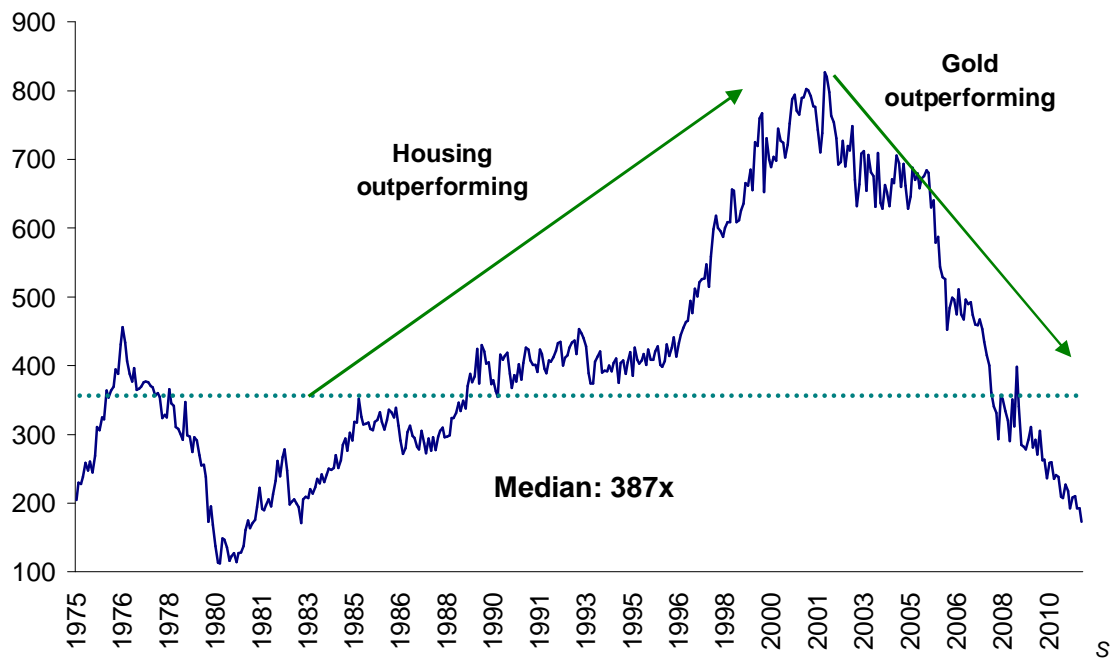
Source: Erste Group Research, Datastream

Oil and gold command a strongly positive correlation. Both commodities are traded in US dollar 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 purchase power of gold can also be measured in terms of this ratio. For example, one ounce of gold today buys the same amount of oil as in 1945, 1983, and 2002.

## 8) Home price / gold (currently 173x)

At the moment it takes close to 173 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 in relation to property. The long-term median is 403x. However, we are still far away from the 1980 all-time low of 100x.

# Special Report Gold



ources: Erste Group Research, Datastream

## **Ratio analysis: conclusion**

The long-term comparison of gold and other asset classes paints a clearly positive picture. While many ratios are close or slightly below the long-term 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”. We expect the highs of 1980 to be tested or even exceeded, given that the extent of the current debt crisis goes much beyond the situation at the end of the last big bull market. **Bull markets end in euphoria, and this substantiates our argument in favour of an imminent transition to an accelerated trend phase.**

# Special Report Gold

## 19. Conclusion

Gold is currently experiencing a renaissance as an investment class

**“Fiat money has no place to go but gold”**  
Alan Greenspan

**The (financial) world is at the moment long in questions but short in answers. We believe that gold is one of the right answers in times of chronic uncertainty.** It is said that “trust is a delicate flower; once destroyed, it will not return easily”<sup>115</sup>. We believe that the trust lost in the past years will not be regained any time soon, and that the situation will actually still get worse. The Eurozone is going through a breaking test, and the US dollar is gradually losing its status as the leading global currency.

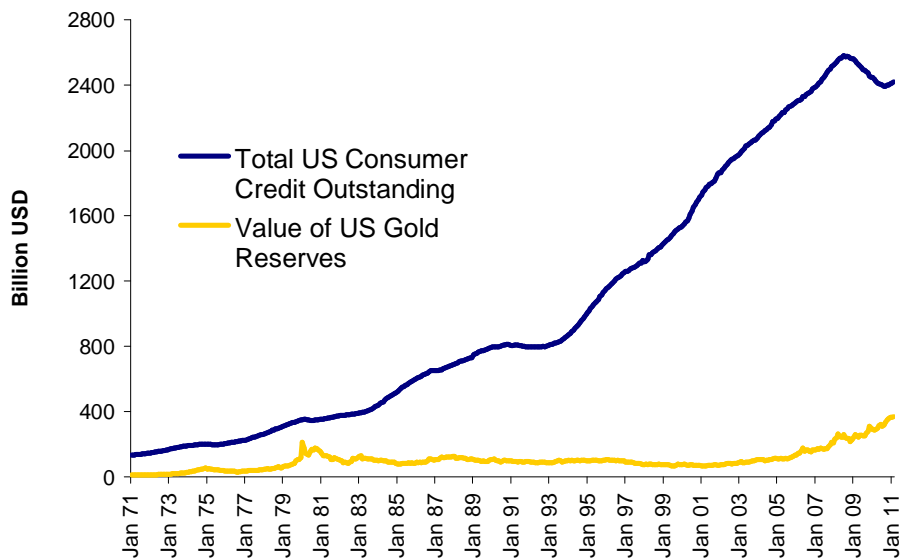
**Don’t fight the Fed – buy gold!**

**The global expansion of monetary supply should continue to provide gold investments with a positive environment.** The reaction to the current crisis is already feeding into the next crisis. Trying to resolve a crisis with the very same instruments that caused it (i.e. an expansive monetary policy) would seem to be clutching at straws. The driving forces of wealth are savings and investments, not consumption and debt. The weak US dollar is a logical consequence of the quantitative loosening, which from our point of view is just a euphemism for printing money.

**No deleveraging so far**

**Given that the majority of debt has neither been written off nor paid off but simply transferred, the problem of excessive debt is still waiting to be resolved.** There has been no deleveraging, only an adjustment of booking entries from the private to the public sector. The quantitative easing has left monetary stability short on credibility, and it will be very difficult to remedy this situation. **In this fragile environment gold will continue to thrive.**

**Total consumer credit outstanding vs. US gold reserves @ market value**



Sources: Fed St. Louis, Datastream, Erste Group Research

**“Muddling through” instead of comprehensive reforms**

**A wrong diagnosis of the cause leads to wrong solutions.** The systemic issue is not the lack of tax revenue, but excessive spending. Further tax hikes cannot consolidate the public finances on a sustainable basis. Only structural reforms on spending can achieve that. **According to Schlesinger<sup>116</sup>, saving is tantamount to holding back on consumption in the present in order to be able to consume more in the future. The opposite is true for credit, where today’s benefit is bought with tomorrow’s shortcoming.** However, this disadvantage seems to be in general disregard, being passed on to future generations. Although we are faced with the largest public debt in times of peace ever, a comprehensive

<sup>115</sup> Otto von Bismarck

<sup>116</sup> “Staatsverschuldung ohne Ende? Zur Rationalität und Problematik des öffentlichen Kredits“ (Public debt and no end in sight? Of the rationality and problem of public credit), Schlesinger, Weber, Ziebarth

# Special Report Gold

consolidation of public debt is apparently not up for discussion. The necessary, deep cuts are being postponed, and the policy of “muddling through” continues. **A painless therapy does not seem to exist. We believe that gold is an effective medicine.**

**“Flight to quality“ will continue**

**Both fear trade and love trade<sup>117</sup> are the driving factors of this bull market.** The fear component is driven by the negative real interest rates, the excessive government debt, and the rising fear of a collapse of the system. This component is currently regarded as the only reason for the gold bull market. However, this perspective disregards China and India, which are the driving forces on the demand side. The high traditional gold affinity and the rising wealth will support demand in the long run. By 2020 emerging markets will generate 50% of global GDP, up from 19% in 2000. The majority of the emerging countries are significantly keener on gold than the industrial nations are.

*“Most great primary bull markets last longer and carry farther than the majority of investors (even the bulls) expect”*

Richard Russel

**“The Times They Are a-Changin’”  
Bob Dylan**

**Gold has been ridding itself of its reputation as a “barbarous relic”, emphasized in the 1980s and 1990s, and will ultimately turn into an own investment class again.** The paradigm shift definitely has psychological reasons. The unshakeable myths and misunderstandings (gold does not pay interest, the purchase of physical gold is expensive, gold is speculative and volatile...) are currently subject to demystification and reassessment. Given that after the bear market that lasted 20 years many such arguments, defamations, and convictions ended up sticking in people’s minds, achieving a change of mind is tedious and time-consuming. But the same (alleged) killer arguments are still being brought forward, and even Ben Bernanke is “confused” about the rising gold price and does not understand it<sup>118</sup>.

The fact that not many market participants actively participated in the last high of the gold price in the 1970s is a positive aspect. This is probably also why the majority of investors still doubt the sustainability and justification of the bull markets although we are in its tenth year. **In the 1970s it was an unwritten law to invest at least a fifth of one’s portfolio in gold.**

*“I prophesy that in 1950 every Treasury in the world will be talking about my ideas, and by that time, of course, the problems will be quite different, and my ideas will be not only obsolete but dangerous.”* John Maynard Keynes<sup>119</sup>

**The perfect environment for gold**

**Gold, as antagonist of uncovered paper currencies, remains an excellent hedge against worst-case scenarios.** Low real interest rates and high counterparty risk provide the perfect environment for gold. Both are clearly the case at the moment, and we expect this scenario to last. At the current real interest rates, gold is an obvious alternative to short-term government bonds, current accounts, or time deposits. After many years of a chronic low-interest-rate policy, we do not believe that interest rates, along the lines of Paul Volcker’s, would be possible without the system collapsing. **Therefore this time the gold bull market should end for different reasons than at the beginning of the 1980s.**

<sup>117</sup> U.S. Global Investors Special Report „Fear Trade and Love Trade“

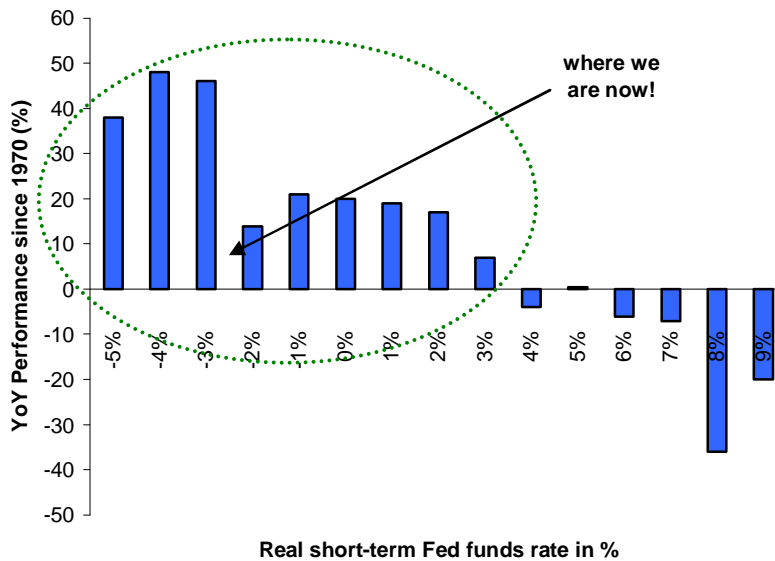
<sup>118</sup> “Bernanke Puzzled by Gold Rally”, Wall Street Journal, June 2010

<sup>119</sup> “The World will save money in the 1950’s”, J.M. Keynes, Fortune Magazine



# Special Report Gold

Average annual performance of gold at varying real interest rates



Sources: Deutsche Bank, Erste Group Research, Datastream

## QE3 should not be ruled out

**We believe that the saving efforts of the US government constitute lip service of the purest water, given the imminent presidential elections in 2012.** Due to the elections and the tepid economic growth a new edition of the Quantitative Easing scheme should not be ruled out (after an “observation period”). In order to deal with the current difficulties in the financial sector but also in the real economy the Fed and the ECB will be forced to keep the interest rates at (historically) extremely low levels. **Negative real interest rates and the gold price have traditionally had a very strong correlation. Therefore we believe that gold represents the essential basis of a portfolio, especially in the current fragile environment.**

*“If you don't trust gold, do you trust the logic of taking a pine tree, worth \$4,000-\$5,000, cutting it up, turning it into pulp, putting some ink on it and then calling it one billion dollars?”* Kenneth J. Gerbino

### Further pros:

- The global reflating policy will continue
- Global USD reserves amount to about USD 5 trillion; the need for diversification is enormous
- De facto zero-interest rate policy in USA, Japan, and Europe
- The central banks have changed their attitude towards gold
- Investment demand will remain high; Wall Street has discovered gold
- Commodity cycle has a long way ahead
- Geopolitical environment still fragile
- Chinese central bank wants to increase its gold reserves

### Cons:

- Gold is often held as ultimate reserve and money of last resort and is thus liquidated in extreme financial situations
- De-hedging has practically come to an end
- Futures positioning (CoT) relatively neutral; open interest indicates negative divergence
- Greece, Portugal, and Italy hold relatively sizeable reserves and may (have to) sell them
- A slump in economic growth would definitely have a negative impact on the gold price
- Double dipping: recessions are generally not a good environment for the gold price (N.B. it is the measures that are taken during the recession that stimulate the gold price later on)

**According to Carl Menger's theory of subjective value, the value of a good is derived from the marginal utility with regard to the set goal.** This means that the value of a good or

# Special Report Gold

## Still an excellent risk/return profile

a service is therefore no objective value, but the result of a subjective process of valuation ("Value does not exist outside the consciousness of men"). Therefore the question of price targets is difficult to answer. But given the fact that the majority of debt has neither been written off nor paid off but simply transferred, the problem of excessive debt is still waiting to be resolved. As far as the sentiment is concerned, we definitely do not see any signs of euphoria. Scepticism, fear, and panic never line the final stretch of a bull market. Therefore we believe that our long-term price target of USD 2,300/ounce, as formulated a few years ago, could therefore come out on the conservative side.

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

In the short term, the seasonality of the gold price seems to suggest the continuation of the sideways movement, followed by the strongest seasonal period in September. **In the long run we could see a future where rather than asking for the price of gold, people will much more often ask for the price *in* gold. Our next 12M target is USD 2,000. We believe that the parabolic trend phase is still ahead of us. This phase should take the gold price to our long-term target of at least USD 2,300 at the end of the cycle.**

*Ronald-Peter Stöferle, CMT*

