# Gold is for Real Wealth Preservation – Not Speculation

## Gold and its Investment Properties

### A Webinar Presented March 8, 2011

## Webinar Summary

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## Presentation Outline

- What is inflation?
- Why gold is a leading indicator of inflation
- Why you should be watching gold, not oil
- Understanding the Dow: Gold Ratio and how it affects your investment strategy
- How well gold performs under extreme conditions
- Why gold is a better inflation hedge than the GSCI
- The amount of gold that will insure an equities portfolio against inflation
- What kind of an investment is gold?
- Gold is the ultimate portfolio diversifier for wealth protection.
- Conclude with Q&A

## Overview

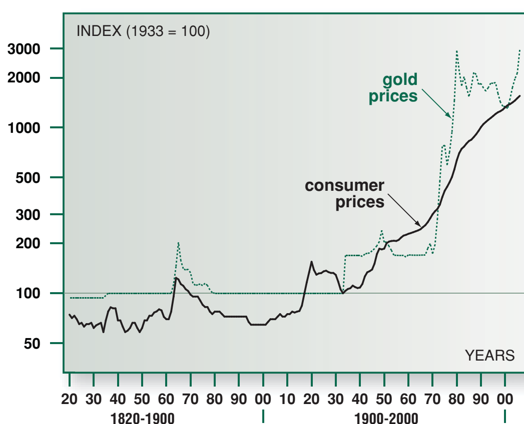
- Investors are right to pay increasing attention to gold, but its role in the economy and capital markets is still greatly under-appreciated
- Some use the price of gold as an indicator of currency depreciation and an inflation warning
- That is controversial especially in the United States, where the consumer price index is barely moving
- Investors are also influenced by academics and policymakers who have long denied the significance of gold
- Other investors view gold as an investment in its own right, but there are plenty of critics of that too
- My thesis will be that gold is legitimate and valuable as *both* an economic indicator *and* an investment option

# I. Gold as a leading indicator of inflation[1]

Figure 1

**U.S. Consumer Prices and the Market Price of Gold**

**since 1820**

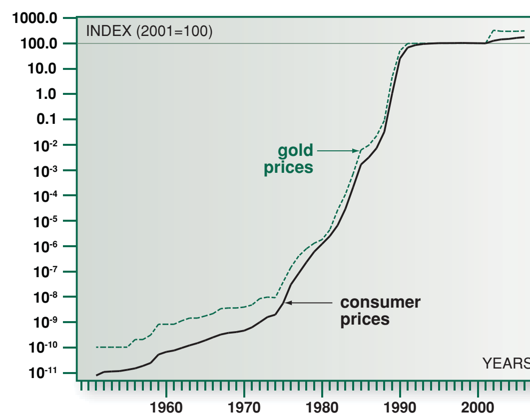



**Data:** Calendar-year averages of daily prices for gold (Roy Jastram, *The Golden Constant/Metals Week/Wall Street Journal*) and of monthly U.S. consumer prices (Federal Reserve Bank of New York/Bureau of Labor Statistics).

Figure 2

**Consumer Prices in Argentina and the Market Price of Gold**

**since 1951**




**Data:** As for Figure One, together with calendar-year averages of monthly consumer price indices (International Monetary Fund) and dollar exchange rates (International Monetary Fund/Oanda.com).

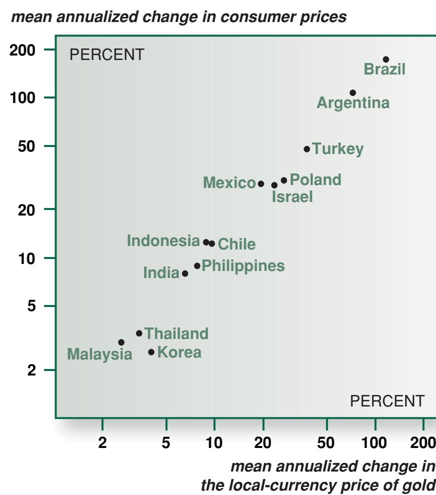
- In recent times North American investors have lost sight of the link between the price of gold and the cost of living
- There are several reasons for this unawareness, the main one being simply a short collective memory span
- As Figure 1 (US Consumer Prices and the Market Price of Gold) shows, there is a long-range parallel between gold and US consumer prices, and it remains intact
- You can see an increasing disconnect in the last few years
- Reasons for the disconnect include the long time lag that separates market prices like that of gold from price measurements made by government statisticians, particularly in the United States
- In fact, the CPI has been re-engineered on many occasions and these modifications have changed its behavior
- Every time that the government has overhauled the CPI, the resulting index has been "stickier" and less responsive to current events
- To use it as we do in the chart as if it were a single statistic with a history of nearly 200 years is not technically valid
- That long history should be shown as a tacking together of several separate indices that behave differently
- Where currencies are unstable, the parallel between the gold price and the cost of living is much more visible than in the United States where the currency was historically stable most of the time
- Figure 2 (Consumer Prices in Argentina and the Market Price of Gold) shows the case of Argentina in the postwar period, during which gold rose and the currency fell cumulatively by 13 powers of 10!
- This chart suggests that the cost of living, over the long haul, may rise slightly faster than the price of gold
- But such differences might be little more than measurement error in estimating the consumer price index
- A wider survey of currencies of various degrees of instability reveals a long-term relationship of near-perfect proportionality, as shown in Figure 3 (Consumer-price Inflation and Currency Depreciation Relative to Gold)
- What's shown illustrates one of the major regularities in all of economics
- It is known as the Law of One Price, and stipulates that where prices have time to change freely they are directly proportional to currency depreciation
- When exchange rates are stable, of course, this pattern is not visible
- This evidence makes it plain that inflation (especially high and varying inflation) is a currency phenomenon more than anything else
- The Law of One Price applies to developed countries as well when their currencies change
- Figure 4 (Inflation and Gold Prices in 16 Developed Economies) illustrates it for the floating exchange-rate period from 1972 to date, although the degree of currency change is far less than in Figure 3
- There has not yet been enough time for all indexes of consumer prices to adjust fully, and the slope of the least-squares line shown is only about 0.75

1. "The first 'law' of money: Inflation thrives when a currency dives," *International Forecaster*, H. C. Wainwright & Co. Economics Inc., June 28, 2007.

Figure 3

**Currency Depreciation Relative to Gold**

13 Emerging Countries, annual data, 1982-2006

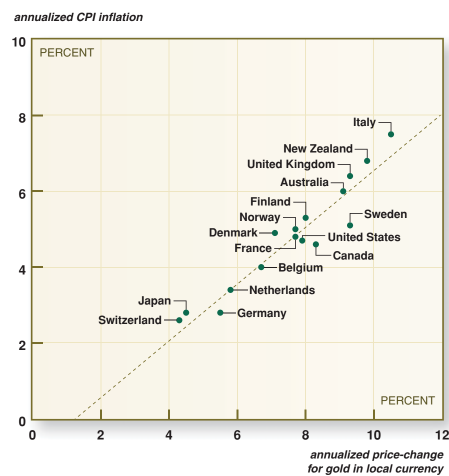



**Data:** Calendar-year averages of currency values in terms of the U.S. dollar (Oanda.com and International Monetary Fund) and of consumer-price indices (International Monetary Fund). Currency values are converted to gold terms using the dollar price of gold (*Metals Week/Wall Street Journal*).

Figure 4

**Inflation and Gold Prices in 16 Developed Economies**

1972-2009




- But when a longer time period is used, such as the 60 years beginning in 1949, the slope is much closer to 1.0
- To sum up, the consumer price index is a very slow-moving indicator relative to the currency depreciation of which it's a symptom

## II. What is inflation?[2]

- However definitive all this evidence, the link between currency depreciation and inflation plays a relatively small role in the thinking of our current policymakers
- This is why the media, and ultimately so many investors as well, are confused about what exactly inflation is
- It's therefore useful to see where a number of other ideas about the nature and origin of inflation, the most important of which are listed in Figure 5 (Symptoms and indicators of inflation), fit in
- Although every item in the list has some value, all except the last one also suffer from serious deficiencies
- First, for the man on the street, inflation is nothing more than a rise in the cost of living
- But prices for consumers are actually only one component of the general price level

Figure 5

**Symptoms and indicators of inflation**

1. An increase in the cost of living
2. Rising labor costs
3. Rapid Growth in the money supply
4. Interest rates heading up
5. Shifting performance edge from stocks and bonds toward real estate and commodities
6. Depreciation of the dollar in the foreign-exchange market
7. Depreciation of the dollar relative to precious metals other than gold
8. Depreciation of the dollar relative to gold

- Other components include wholesale prices, industrial prices and commodity prices
- It's natural, but slightly misleading, for government policymakers and the news media to concentrate their attention on consumer prices
- Unwisely, investors tend to follow suit and act as if there is no inflation when the cost of living index fails to rise
- This can be a mistake if the official index has been engineered to show low inflation; and also if globalization is forcing consumer prices down relative to prices elsewhere in the economy
- A second widely-watched indicator is a rise in labor costs
- I still hear claims that inflation isn't an economic problem until the cost of labor is rising rapidly
- But wages have always lagged behind the cost of living and so are never a timely indicator of inflation

2. "Inflation and long-term portfolio management," *Strategic Asset Selector*, Wainwright Economics, December 2006.

- And this time around, globalization is forcing real wages down
- Still another popular definition of inflation is a rapid rise in the money supply
- The reason it's a bad idea for investors to rely on this is that it may actually be an inverse indicator, as Figure 6 (The Inverse Relationship between MZM Growth and Inflation) shows
- Most measures of money in circulation are much more closely correlated with economic growth than with the rising cost of living
- Rising interest rates are usually a symptom of inflation too, and historically they are correlated with both the dollar's depreciation and the rise in the cost of living

Figure 6

**The Inverse Relationship between MZM Growth and Inflation**

**from 1974**

| | *rate of inflation as measured by:* | | |
|---|---|---|---|
| *AVERAGES for years in which MZM growth was:* | *consumer price index* | *GDP deflator* | *producer price index* |
| fastest *(six years averaging 16%)* | 3.2% | 3.3% | 0.1% |
| intermediate *(twelve years averaging 8%)* | 5.5 | 5.0 | 3.9 |
| slowest *(six years averaging 1%)* | 6.5 | 5.1 | 6.7 |

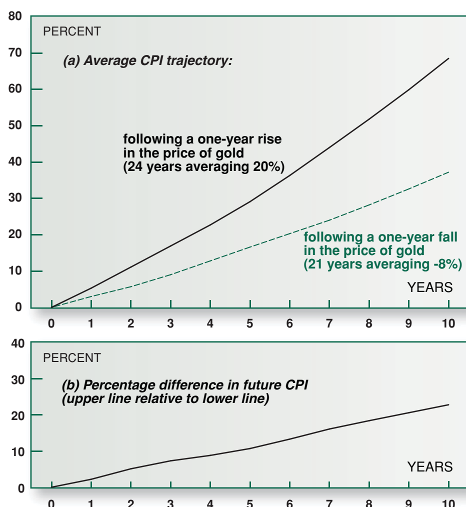
**Data:** Calendar-year averages of monthly totals for money of zero maturity (Federal Reserve Bank of St. Louis) and of consumer and producer price indices (Bureau of Labor Statistics); and of the quarterly price deflator for gross domestic product (Bureau of Economic Analysis).

- But since the Fed is actively involved in manipulating interest rates, they are not a market indicator
- At times like the present they reflect other Fed concerns, such as the financial condition of the banking system
- Even when interest rates are set in a free market, they are a lagging indicator and the price of a bond is a measure of expected inflation, not actual inflation
- A lesser known indicator based on market behavior is the shifting performance edge between paper securities like stocks and bonds and physical assets such as real estate and commodities
- When physical assets outperform paper assets it's a sure sign of inflation
- The disadvantage here is that different assets perform differently, so that the broad inflation picture cannot be pinpointed with precision
- In general, early warning of inflation appears in the dollar's performance as a currency, and not in consumer prices, other than those for commodities like food and energy
- Foreign exchange rates are fast-moving and timely indicators of the dollar, but different currencies may tell different stories
- That reflects the fact that each is a paper asset that reflects the creditworthiness of the issuing government
- Besides, national currency movements tell a lot about relative inflation, but not necessarily much about absolute inflation when there is a general flight away from paper money
- It's better to express the dollar's depreciation in terms of physical assets such as commodities, precious metals, or gold specifically
- But different commodities also tell different stories, and nearly all commodity prices are susceptible to changes in the economy's performance

Figure 7

**the Price of Gold**

**from 1950 to 1994**

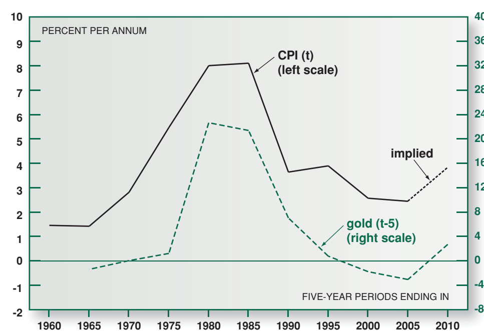



**Data:** Calendar-year averages of daily gold prices (*Metals Week*) and the monthly consumer price index for all urban consumers (Bureau of Labor Statistics).

Figure 8

**The Long-Term Relationship Between Gold and the CPI**

**since 1950**




**Data:** Five-year averages of monthly data for gold prices (Bridge Commodity Research Bureau) and the consumer price index for urban consumers (Bureau of Labor Statistics). Price changes are measured from one five-year period to another, beginning with 1946-50, and are re-expressed as an annualized rate of change. The gold-price change is plotted five years in advance of the CPI change.

- That even includes precious metals such as silver and platinum
- By this lengthy process of elimination, we are left with the price of gold as the single most attractive measure of inflation for the purpose of making investment decisions
- Its price is set by the market, ambiguity is at a minimum, it is sensitive and timely, it's a leading indicator of all the other symptoms and indicators of inflation, and it's not sensitive to the economy
- Although consumer prices and the price of gold eventually converge, the difference in timing is enormous
- Figure 7 (The Systematic Response of Consumer Prices to the Price of Gold) shows how long it takes for the US consumer price index to respond to a change in the gold price
- The trajectories in this chart suggest that it takes at least five years for just half of the response to show up
- Allowing for this 5-year difference, Figure 8 (The Long-term Relationship between Gold and the CPI) shows that the dollar price of gold and the US CPI really do move in parallel over time
- The broken line depicting the gold price has been shifted five years to the right to demonstrate this

## III. Watch gold, not oil[3]

- People are far more aware of the effect on their lives of a rise in the price of oil than in the price of gold
- In terms of its obvious role in the economy, oil is far the most important of all commodities, and its price is the one that gets the most attention from investors and the media
- Gold is one of those commodities that gets in the news only when its price is changing dramatically, while oil prices are watched closely even when they are stable
- But there are several ways in which the gold market provides more accurate information about inflation than the oil market

Figure 9

**Correlations among Movements in Inflation Rates, Oil and Gold**

**From 1951**

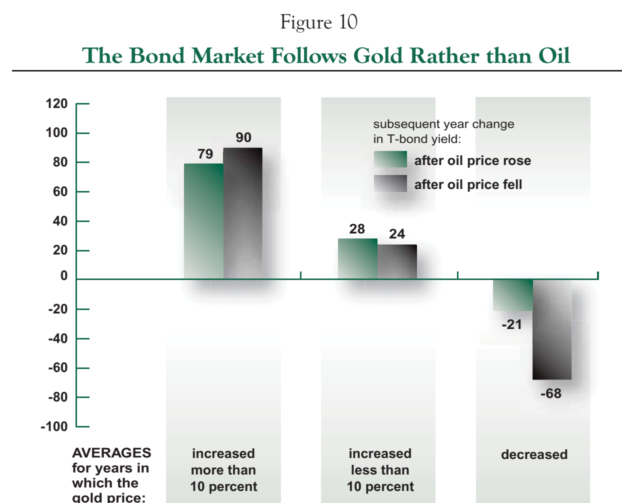
| *Commodity indicator* | *Producer-price inflation One year ahead* | *Consumer-price inflation One year ahead* |
|---|---|---|
| Gold | .37 | .50 |
| Oil | .01 | .23 |

**Data:** Calendar-year averages of monthly indices for producer prices (all commodities) and consumer prices (all urban consumers) and of daily prices for gold bullion and Brent crude oil (Reuters Commodity Research Bureau; *Wall Street Journal*).

- As a leading indicator of consumer-price or producer-price inflation, for example, correlations between oil-price changes and inflation a year ahead are much lower than those for gold, as Figure 9 (Correlations among Movements in Inflation Rates, Oil and Gold) illustrates
- Moreover, when oil-price and gold-price data are combined in a single least-squares equation to anticipate inflation, only the gold variable is statistically significant
- Precisely because it anticipates inflation so well, gold is also a powerful predictor of interest rates
- Figure 10 (The Bond Market Follows Gold Rather than Oil) demonstrates how unhelpful oil-price changes are in predicting changes in the bond market
- The bars show the average response of the bond market to whether oil rose or fell in the previous year depending on whether the price of gold had risen significantly, or had risen slightly, or had fallen
- For example, when gold had risen more than 10 percent, bond yields rose to the same extent regardless of the oil price
- There is a triangular relationship between oil, gold and bonds, and it is illustrated in Figure 11 (The Triangular Relationship between Gold, Oil and the Bond Market)
- The diagram points out that the relationship between oil and bonds is roughly contemporaneous
- Gold is correlated with both oil and bonds, but moves in advance of both by a year
- What is it that's different about gold, then?
- Unlike oil and other commodities which are produced only to be consumed, gold is produced almost exclusively for accumulation

Figure 10

**The Bond Market Follows Gold Rather than Oil**




**Data:** As for Table 1, together with calendar-year averages of daily ten-year Treasury bond yields (Federal Reserve Board).

3. "Why gold, not oil, is the superior predictor of inflation," *Interest-Rate Outlook*, Wainwright, March 2005.

Figure 11

**The Triangular Relationship Between Gold, Oil and the Bond Market**

from 1968

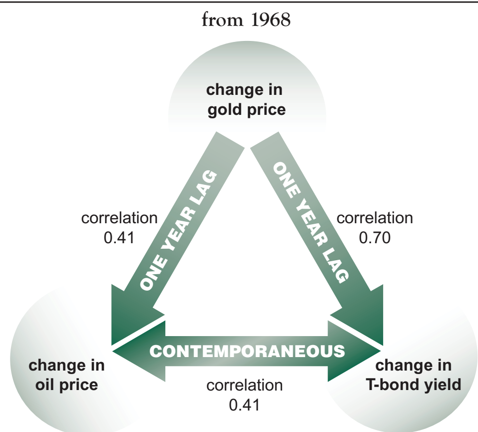
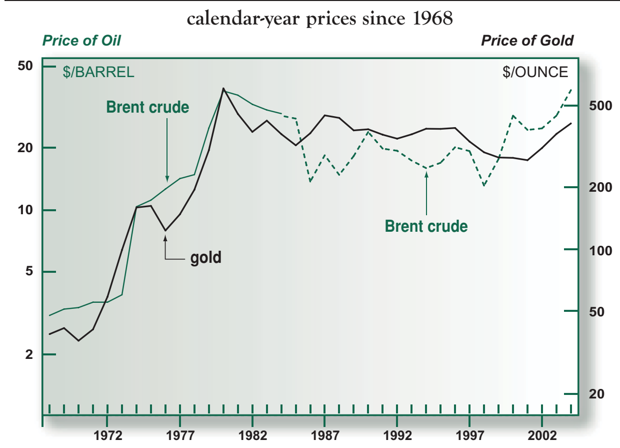



Figure 12

**The Co-movement of Oil and Gold Prices**

calendar-year prices since 1968




**Data:** As for Table 1. Prior to 1984 crude oil prices are from Reuters Commodity Research Bureau.

- Gold is different because the reservoir of it that is traded in world markets dwarfs any possible interruptions in the annual flow that result from either supply or industrial demand
- The annual flow of newly mined gold adds only about two percent a year to the gold supply, far less than any other commodity
- This reservoir stabilizes the purchasing power of gold in terms of other goods
- Changes in the gold price are thus a good barometer of changes in currency values – and ultimately in the absolute level of prices
- By contrast, in order to use oil for its main purpose (the production of energy) it is necessary to consume it – literally to destroy it in the process of converting it to energy, water and carbon dioxide
- The variability of oil is visible in the ratio between the prices of oil and gold, which has been something like a natural constant over the long haul
- As Figure 12 (The Co-movement of Oil and Gold Prices) illustrates, the price of oil has revolved around movements in the price of gold
- This accords with the idea that the gold price reflects inflationary pressures in general, while the oil price contains information that is specific to the energy sector
- In short, the gold price is a reliable barometer of the value of the dollar; the oil price is not

## IV. The Dow-gold ratio[4]

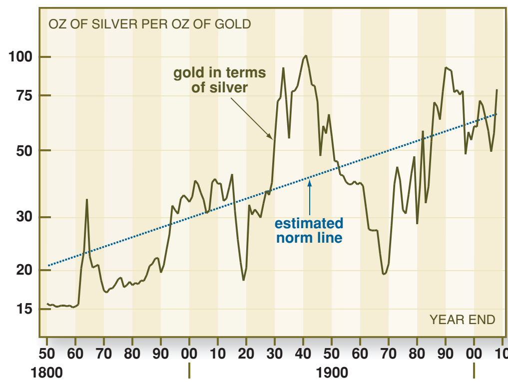
- As a market signal, the primary role that gold can play is to detect and measure a change in the real value of the dollar and other currencies
- But it also has a secondary role: as a benchmark for valuing other assets to determine whether they are "cheap" or "dear" by historical standards
- For example, the price of silver relative to gold is a valuation indicator for silver
- The upper graph in Figure 13 (a: The Ratio between Gold and Silver Prices and Its Estimated Norm) shows the silver-gold ratio back to the early nineteenth century
- Investors would expect that silver is much more likely to appreciate in price when its ratio to gold is historically low than when it is high
- The lower graph in Figure 13 (b: Convergence between Gold and Silver Prices) confirms this and also provides an idea of how long it takes for the silver-gold ratio to return to its trend or norm after it has been disturbed
- Another application of the same thinking concerns the Dow-gold or S&P-gold ratio, the history of which is shown in Figure 14 (The Ratio of US Equity Prices to the Price of Gold from the end of 1814)
- The history is long enough to demonstrate that, over the long haul, equity prices appreciate faster than the gold price
- Figure 15 (Norm Reversion in the Stocks-gold Ratio) divides the history into groups of specific years according to how high or low the ratio then was

4. "The Dow-gold ratio: what drives it, and what it portends," *Strategic Asset Selector*, Wainwright, December 2005 and "The equities-gold ratio since 1814," *Strategic Asset Selector*, Wainwright, March 2009.

Figure 13a & b

**The Ratio between Gold and Silver Prices and its Estimated Norm**

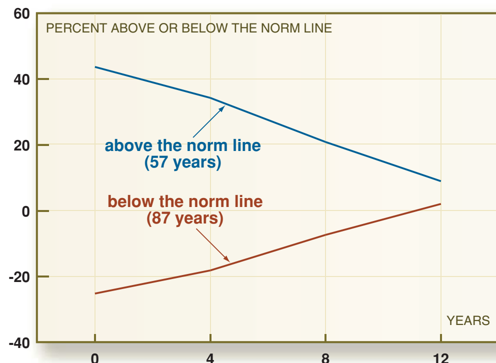
**from the end of 1850 to the end of 2008**




**Convergence between Gold and Silver Prices**

**from 1850**

***AVERAGE gold-silver ratio after years in which the ratio was:***

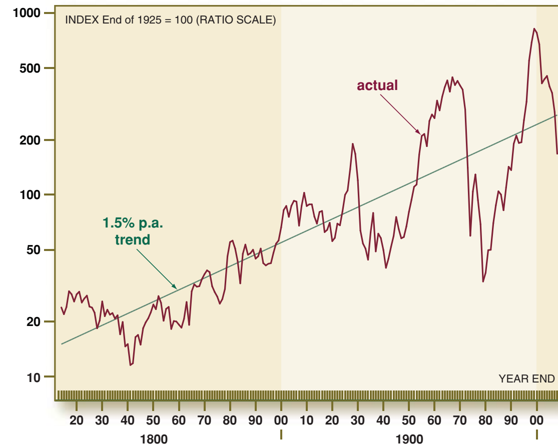



- The result is a very interesting and unsymmetrical pattern
- The stock market performs superbly when it is extremely cheap according to this ratio
- But the market does not perform particularly badly when it is extremely dear
- Figure 16 (The Slow Convergence of the Stocks-gold Ratio Toward its Norm) shows the speed with which the stocks-gold ratio re-converges to its trend after it has been pushed away
- It takes about nine years to achieve complete convergence
- So the price ratio of stocks to gold can be very informative about the future course of the stock market
- Where are we now?

Figure 14

**The Ratio of US Equity Prices to the Price of Gold**

**from the end of 1814**




**Data:** Year-end prices for gold (Global Financial Data/Finfacts Ireland and *Metals Week/Wall Street Journal*) and for US large-cap stocks (Ibbotson Associates/Morningstar and University of Chicago/Dimensional Fund Advisors).

Figure 15

**Norm Reversion in the Stocks-Gold Ratio**

**from 1815**

***subsequent cumulative stock-market performance***

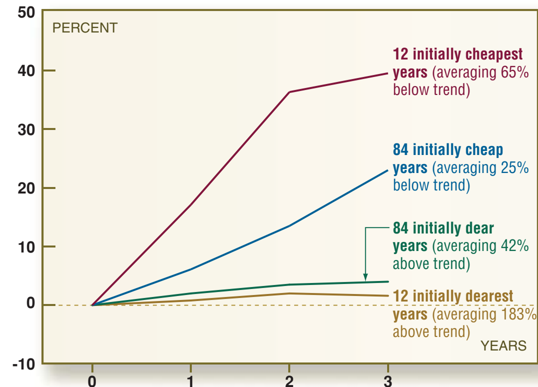
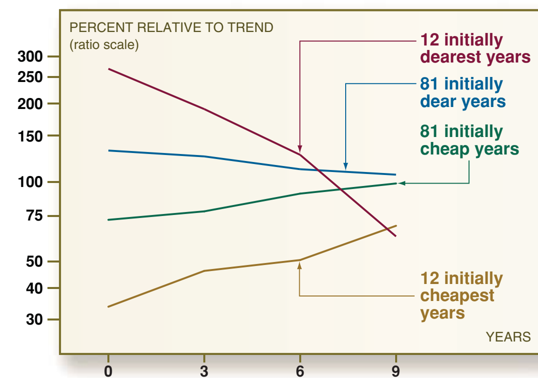



Figure 16

**The Slow Convergence of the Stocks-Gold Ratio Toward Its Norm**

**from 1815**

***AVERAGES for:***



# V. How gold performs under extreme conditions[5]

- Many investors think of gold as a risky asset, because in modern times its price has been volatile when expressed in terms of paper money
- But this is mostly an illusion due to the instability of the currency
- It has long been known that the purchasing power of gold is roughly constant over extremely long periods of time
- Thoughtful investors should therefore treat gold as a very safe asset, and by and large markets do that
- Gold also has other kinds of safety properties
- For example, the market for bullion is worldwide in scope, and very liquid
- During the last few months of 2008, as the US economy collapsed, commodity prices fell across the board, by as much as 50 or 60 percent in many cases
- Gold fell much less and bounced back to its pre-crisis level within a matter of weeks
- That extreme event was a good test of the stability and resilience of an investment in gold, but a more comprehensive test appears in Figure 17 (Price Performance of Gold in the Midst of Bad Economic Events)
- This table uses a wide range of economic and financial variables that provide danger signals for investors to show that, in most cases, gold produces positive returns under extreme circumstances
- In Figure 18 (Tail Correlations between Quarterly Stock and Bond Returns and the Price Performance of Gold) we estimate whether the return from gold is negatively or positively correlated with the return from stocks or bonds when those assets are producing their most negative returns
- As this table shows, using quarterly return data, gold is negatively correlated with bonds and stocks when they perform badly, and therefore tends to compensate for losses in the other two assets
- Taking together both bodies of evidence, gold is an extremely helpful asset to include in portfolios through thick and thin

Figure 17

**Price Performance of Gold in the Midst of Bad Economic Events**

| *Ten calendar quarters in which:* | *Average result* | *Average gold price change* |
|---|---|---|
| Stocks fell most | –18% | 4.1% |
| Industrial production declined most | –5 | 4.4 |
| Oil prices rose most | 52 | 16.0 |
| Unemployment rose most | +1.3% pts. | 5.8 |
| Housing prices declined or did not rise | –0.3% | –0.8 |
| Leading indicators declined most | –2.5 | 2.8 |
| Bonds yields rose most | 139 b.p. | 4.0 |
| Bond yields declined most | –171 b.p. | 6.8 |
| Short-term rates rose most | 215 b.p. | –1.8 |
| Short-term rates declined most | –281 b.p. | 1.9 |

**Data:** quarterly changes in the month-end S&P index (Standard & Poor's), price index for single family housing (Office of Federal Housing Enterprise Oversight), yields on 10-year Treasury bonds and 91-day Treasury bills (Federal Reserve Board); and quarterly changes in the monthaverage industrial production index (seasonally adjusted; Federal Reserve Board), price of WTI crude oil (Bridge Commodity Research Bureau), unemployment rate (seasonally adjusted; Bureau of Labor Statistics), and the index of leading indicators (Conference Board).

Figure 18

**Tail Correlations between Quarterly Stock and Bond Returns and the Price Performance of Gold**

**From 1951**

| *Quarterly return from:* | *All data* | *Upper & lower quartiles* | *Upper quartile alone* | *Lower quartile alone* |
|---|---|---|---|---|
| S&P 500 | –.058 | –.056 | .170 | –.210 |
| Long Treasuries | .040 | .173 | .448 | –.155 |

**Data:** as for Table 1, together with quarterly returns from long Treasury bonds (University of Chicago/Dimensional Fund Advisors).

# VI. Why gold works better than "linkers"[6]

- When it comes to inflation, Wall Street tends to be late seeing it coming
- That's partly because of the widespread obsession with the consumer price index as the gauge
- The price of gold has been signaling a return of inflation for some years now; but it is taking Wall Street a long time to recognize it
- Portfolio managers are beginning to seek investment instruments with which they can protect themselves from the pernicious effects of this inflation
- The two leading candidates are, of course, gold and index-linked bonds – or, in the US, TIPS which are indexed to the CPI
- To the extent that investors can anticipate that the CPI is about to climb more rapidly, TIPS prices should be driven up

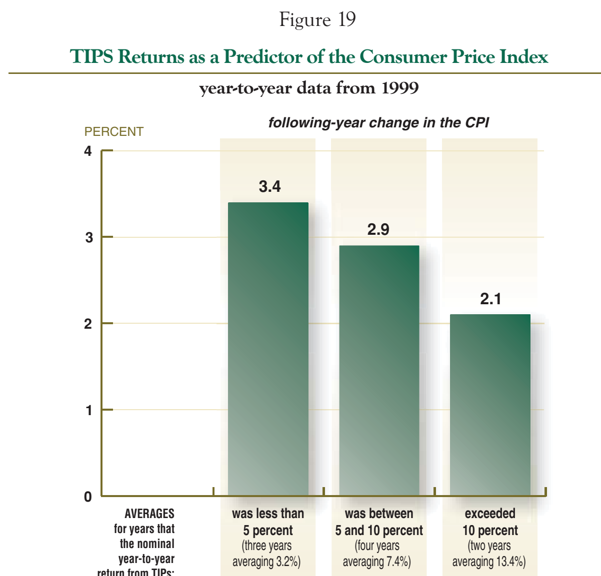
5. "Gold keeps its head when other assets are losing theirs," *Strategic Asset Selector*, Wainwright, July 2006.
6. "The mysterious relationship between CPI inflation and the TIPS market," *Interest-Rate Outlook*, Wainwright, August 2009.

- But Figure 19 (TIPS Returns as a Predictor of the Consumer Price Index) shows that it doesn't work that way
- This chart demonstrates that higher returns from TIPS are actually followed by lower CPI inflation, and vice versa
- This result might seem extremely surprising, but it can be explained if the CPI is as inadequate a measure of inflation as I have been arguing
- When inflation is actually imminent, the rise in the CPI will be a pale and late-arriving reflection of it
- And since TIPS are protected against the CPI itself but not against the full amount of inflation that it signals, TIPS prices fall instead of rising

Figure 19

**TIPS Returns as a Predictor of the Consumer Price Index**

year-to-year data from 1999




**Data:** Calendar-year averages of the monthly consumer price index (Bureau of Labor Statistics) and of month-end total-return indices for TIPS (Barclays PLC).

## VII. Gold is a better inflation hedge than the GSCI[7]

- When investors seek a hedge against the depreciation of the dollar and its inflationary consequences, gold and commodity futures are two rival candidates
- Both are liquid assets that can be added to a portfolio and whose annual returns are inversely correlated with the performance of stocks and bonds
- Figure 20 (Comparing the Influence of Gold and GSCI on Bond Market Returns) compares gold with the Goldman Sachs Commodity Index or GSCI as a hedge in the bond market
- The impact of GSCI is seen by comparing each gold-colored bar with the green bar next to the left of it
- But the impact of gold is three times as great, as is seen by comparing the two gold-colored bars or the two green bars
- So gold is three times better than GSCI for hedging a bonds portfolio
- Figure 21 (Comparing the Influence of Gold and GSCI on Stock Market Returns) repeats these calculations for the stock market
- Again, the data show that gold is the better hedge

Figure 20

**Comparing the Influence of Gold and GSCI on Bond Market Returns**

from 1971

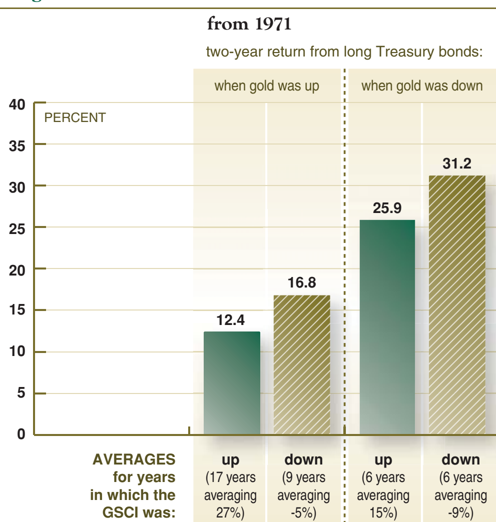
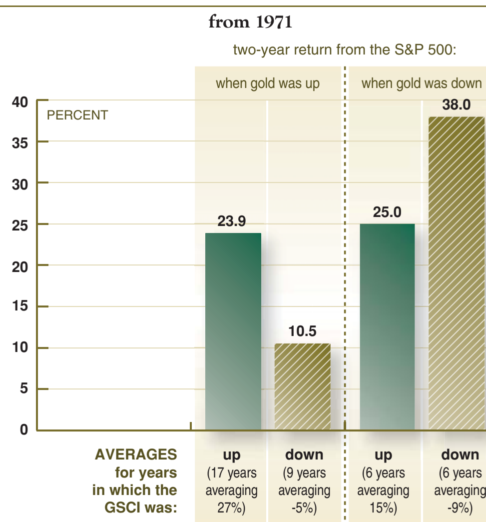



Figure 21

**Comparing the Influence of Gold and the GSCI on Stock Market Returns**

from 1971




7. "What makes for a better inflation hedge: GSCI or gold?," *Tactical Asset Selector*, Wainwright, September 2010.

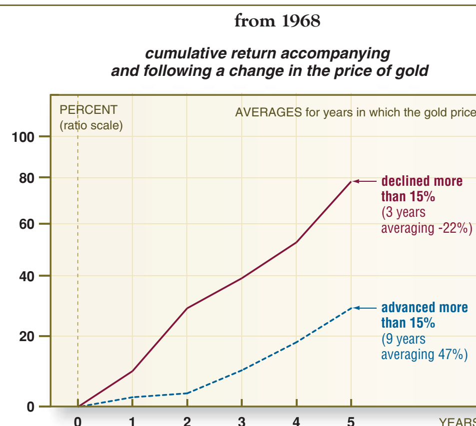
## VIII. How much gold is needed to protect a FI portfolio against inflation?[8]

- When gold is added to a fixed-income portfolio, it greatly improves the ratio of return to risk, because bond-price movements are inversely correlated with the changing price of gold
- We have to allow for the fact that it takes up to two years for the impact to be fully felt, as Figure 22 (How US Treasuries Under-perform when the Dollar Depreciates relative to Gold) indicates
- That's seen by observing that the divergence between the two lines widens until year two
- Figure 23 (The Return-Risk Ratio of Bonds-Gold Portfolio Returns) looks at the ratio of risk to return for the portfolio as the amount of gold in the mix varies
- The return to risk ratio is maximized when the percentage of gold is 21 percent, but that does not exactly result in a portfolio that is immune to inflation
- Figure 24 (The Inflation Sensitivity of Bonds-Gold Portfolio Returns ) uses the two-year cumulative change in the price of gold as a measure of the damage done by inflation to the annual performance of a T-bond portfolio

Figure 22

**How US Treasuries Underperform when the Dollar Depreciates Relative to Gold**

**from 1968**




**Data:** Calendar-year averages of month-end spot gold prices (*Metals Week/Wall Street Journal)* and total-return indices for long Treasury bonds (University of Chicago/Dimensional Fund Advisors).

- The diagram shows that the sensitivity of portfolio returns to a one percentage point change in the gold price for portfolios with different gold content
- Sensitivity is almost exactly zero at a mix of 15% gold and 85% Treasury bonds
- That is equivalent, I would argue, to providing 100 percent protection against inflation

Figure 23

**The Return-Risk Ratio of Bonds-Gold Portfolio Returns**

**as a function of portfolio composition, from 1968**

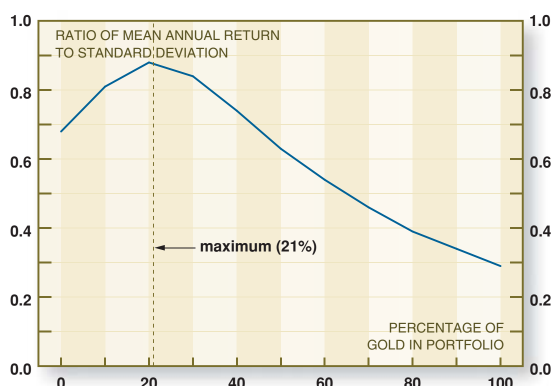
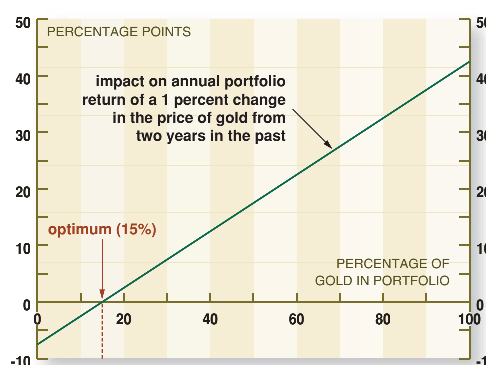



Figure 24

**The Inflation Sensitivity of Bonds-Gold Portfolio Returns**

**as a function of portfolio composition, from 1968**




**Data:** As for Figure One. As a measure of the damage done by inflation to a Treasuries portfolio we use the cumulative two-year change in the price of gold.

## IX. How much gold is needed to protect an equities portfolio against inflation?[9]

- Much the same can be said about hedging an equities portfolio against inflation, although the details are a bit different
- Price movements in the broad equity market are inversely correlated with gold, as shown in Figure 25 (US Equities Under-perform when the Dollar Depreciates relative to Gold)
- In this case, the delay in response lasts several years as shown by the widening divergence between the two lines
- So in Figure 26 (The Inflation Sensitivity of Stocks-Gold Portfolio Returns ) we use the five-year cumulative change in the gold price instead of the two-year change
- This diagram shows that the sensitivity of the portfolio is zero when it contains 15% gold and 85% equities

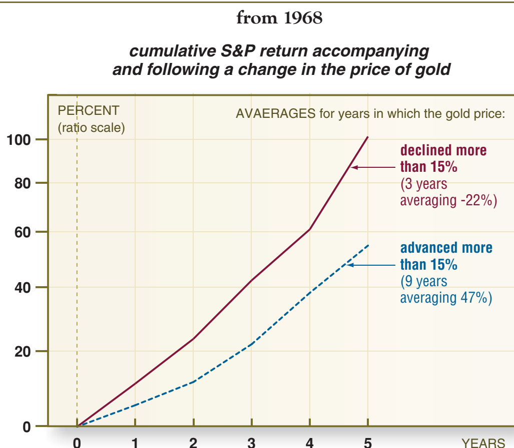
8. "How much bullion to put in a fixed-income portfolio today?," *Interest-Rate Outlook*, Wainwright, July 2010.
9. "How much bullion would equity investors need to hold to insure against inflation?" *Strategic Asset Selector*, Wainwright, June 2010.

- It is a coincidence that the same gold component, namely fifteen percent, is the right amount to immunize either a fixed-income portfolio or an equity portfolio against inflation

Figure 25

**US Equities Underperform when the Dollar Depreciates Relative to Gold**

**from 1968**

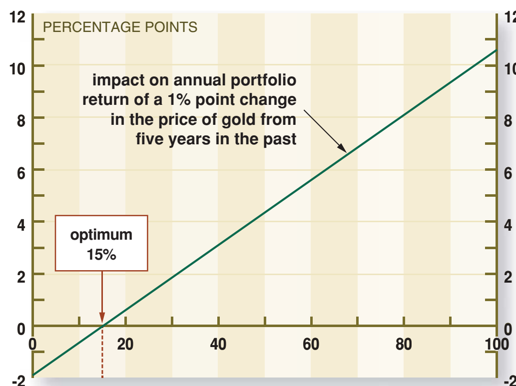



**Data:** Calendar-year averages of month-end spot gold prices (*Metals Week/Wall Street Journal*) and total-return indices for the S&P 500 stocks (University of Chicago/Dimensional Fund Advisors).

Figure 26

**The Inflation Sensitivity of Stocks-Gold Portfolio Returns**

**as a function of portfolio composition, from 1968**



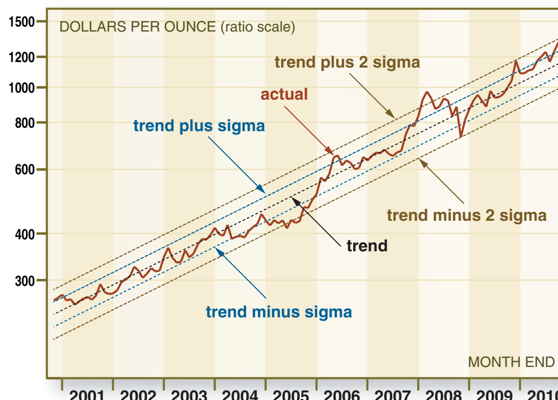

**Data:** As for Figure Two. As a measure of the damage done by inflation to a equity portfolio we use the cumulative five-year change in the price of gold.

# X. What kind of an investment is gold?[10]

Figure 27

**Trading Range for the Price of Gold**

**since September 2000**




- Many talking heads are warning that owning gold constitutes speculation rather than investment, but there really isn't any analytical distinction
- All investment involves risk, and is to some extent speculative
- Of course, some investment vehicles are obviously more volatile than others
- Gold, however, is not one of these – it is only superficially a volatile asset
- While it's a universal convention to express prices and investment performance in dollar terms, the conventionality of a practice is no guarantee of its validity
- Fictive conventions can mislead otherwise thoughtful people
- The value of gold, though potentially volatile in nominal terms, has always been recognized as extraordinarily stable in real terms
- Even measured in US dollars, the price of gold is not always volatile, as the gold standard era demonstrated
- Since 1970, it has often jumped around from one week to the next; but year to year it can be very consistent, as shown in Figure 27 (Trading Range for the Price of Gold) for the past ten years
- The gold price has fluctuated within quite a narrow channel around its strong upward trend
- Gold is neither an inferior investment (as its detractors keep saying) nor is it superior (as some of its fans claim)
- At any one time gold may be a superior investment, an inferior investment, or anything in between; it depends on economic conditions
- When gold is inferior, assets that are defined by paper-money contracts, including bonds and stocks, are superior; and vice versa, as shown in Figure 28 (The Relative Performance of Stocks and Bonds when the gold price rises and when it falls)
- Even within a one-year time frame, the inverse correlations are both impressive
- It is often said that gold is not a natural investment because it "has no intrinsic value" or "offers no income, no dividend, no earnings"; but the same thing can be said about a Treasury bill

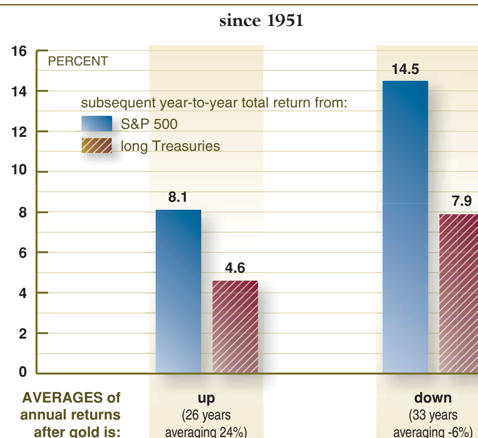
10. "Why are some saying that gold is a bad investment?" *The Capitalist Perspective*, Wainwright, December 2010.

- A T-bill offers return of principal plus capital gain, both nearly certain in nominal terms but uncertain in real terms
- Gold offers the converse: both nearly certain in real terms, but uncertain in nominal terms

Figure 28

**The Relative Performance of Stocks and Bonds when the gold price rises and when it falls**

**since 1951**




**Data:** Calendar-year averages of daily spot prices for gold (*Metals Week/Wall Street Journal*) and of month-end total-return indices for the S&P 500 and long Treasury bonds (University of Chicago/Dimensional Fund Advisors).

## Synthesis:

- According to Adam Smith, "there is much ruin in a nation"
- At the same time, as other classical economists emphasized, economies are also resilient
- Smith attributed the strength of an economy to what he called the "Invisible Hand" whereby prices were free to fluctuate and direct the allocation of resources to their most productive uses
- At least theoretically, currency instability was an important threat to the performance of an economy because it implied the randomization of prices
- Even at the time when Smith wrote, ancient and medieval history was full of warnings
- Soon enough, currency instability arrived in France, where the revolutionaries tried to finance their government with the issuance of new paper money in arbitrary amounts
- The American Founding Fathers varied in their attitude to the French experiment with paper money, Thomas Jefferson being opposed and Benjamin Franklin being in favor
- In France, hyperinflation and chaos followed, and the experience became a salutary lesson for many watching governments, especially that of the infant United States
- It strengthened their resolve for more than a century thereafter to keep currencies sound via the Gold Standard
- In the 20th century this lesson has been erased from the public mind and it seems that many of us are condemned to repeat the experience of seeing inflation eat away our assets
- In a nutshell, currency instability is nothing less than an Invisible Threat, the negative counterpart to Smith's Invisible Hand
- It's a threat that deserves more respect from economists and policymakers than it receiving

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