December 31 ${ }^{\text {st }}$, 2009:
A Decade of Destruction (unless you owned gold)

## Perspective

The stock market, which has historically been a discounting mechanism for the future prospects of the economy and individual companies, has become much more akin to a casino of late. Perspective seems to remain lost, as the typical investor cannot see the forest through the trees. As a result, I feel it is necessary to divert from my usual format a bit, and first take a look back at the decade before summarizing performance and providing my outlook.

It was a decade of destruction, to put it mildly. The stock market's performance put in its worst decade in history. The S\&P 500 and Dow Jones Industrial average closed 1999 at 1469.25 and 11,497.12, respectively. At the year-end 2009 close on these indexes (of 1115.10 and $10,428.05$ ), market averages declined $24.1 \%$ and $9.3 \%$, respectively, for the entire decade. With figures like this, is it any wonder that the typical investor has become so short-sighted in looking at their returns?

Conversely, gold closed at $\$ 287.80$ on the last day of trading in 1999. (Silver, the other "precious" metal, closed 1999 at $\$ 5.41$. But for the purposes of this report, I will simply focus on gold.) As you are likely aware, gold is one of a select few major asset classes that performed exceptionally well this decade. With gold's 2009 closing price of $\$ 1096.60$ per ounce, a gain of $281 \%$ for the decade, many argue that it is overvalued. It is typically reported by these same people that stocks must be undervalued following such a long period of weak performance.

However, I think that once we put these moves in perspective, rather than simply focusing on price, you will come to the opposite conclusion.

As long-time clients know, I have almost entirely avoided stocks in general since late 2000. I outlined my case for this in my April 2002 Portfolio Strategy Update, and also wrote about the investment case for gold with Debt Time Bomb in early 2004 (well in advance of the housing and dollar collapse). These references are not meant to pat myself on the back. However, they do help put the markets in perspective, as to me, it was rather obvious early into the decade that the broad equity markets carried a very high level of risk due to historically high valuations and burgeoning debt levels.

As Mark Twain once wrote, "History never repeats, but it often rhymes." While this statement was not directed at financial markets, it certainly holds true. I have dedicated the better part of my career to the study of financial market history, and it has guided my clients well. While I do not profess to know the immediate future of the markets, I have been rather adept at identifying the intermediate and long term direction of asset classes based on market risk, valuation, fundamental analysis, and historical market trends.

By looking back into the last decade and beyond, we may be able to provide some historical context for the future.

## Equity Valuation

The first chart, presented from Robert Shiller's excellent book "Irrational Exuberance," shows a graphical representation of the stock market's 10 year annualized real return versus the price/earnings ratio at the beginning of each ten year period.


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Source: Robert Shiller. Irrational exuberance
* Indicates date is in 1800"s
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The quality of the chart is admittedly poor, as I re-copied it from my 2002 strategy update (page 6 of the first link above). But it shows a general inverse correlation to the annual ten-year real return on equities relative to the price/earnings ratio in January for each year indicated. As you can see by studying the chart (first published in early 2000), the higher the beginning " $\mathrm{P} /$ /E ratio," the lower the general annualized 10 year real return.

For historical perspective, prior to the 1990 's, $\mathrm{P} / \mathrm{E}$ ratios were only calculated based on actual trailing year results. Once valuations began to get higher and higher, such figures were changed to "forward looking" and/or "operating earnings" for stocks. This may seem like a subtle difference (it helps to make stocks look "cheaper"), but to gauge valuations historically, we need to keep apples to apples comparisons.

At the year-end 1999 market close, exactly one decade ago, stocks were trading at more than 30 times trailing annual earnings (consistent with the methodology of all the figures in the above chart). While I don't mean to simplify the analysis of the markets, is it any
wonder that stocks performed poorly this last decade? The chart shown above would have had to be revised just after publication to even accommodate such a large P/E reading at the beginning of 2000. Such a high reading had never before been seen, with the closest figure (at the bottom right of the chart) represented by the 1929 figure.

It is important to keep in mind that the 1929 number represents the P/E in January of 1929, a full eight months prior to the September $3^{\text {rd }}, 1929$ peak and subsequent crash in October. This is important as the financial markets can do anything they want in the near term. 1929, as an example, had a significant rally going into September of that year (close to $20 \%$ ), despite then being more overvalued than any other time in history. So by no means are such valuation tools meant to be used as a timing indicator. However, such analysis is often a good gauge of intermediate to long-term risk associated with stocks.

Many argue that now that stocks are currently more than $29 \%$ below their all-time highs of October 2007, they must be cheap. Well, again, we must keep this in context. At 1115.10 on the S\&P 500, with actual 12-month earnings estimated for 2009 to come in at about $\$ 44.50$ (according to Standard and Poor's), this still puts the price/earnings ratio just over 25 . Certainly, stocks are priced nominally well below their recent highs, but they are far from cheap.

While stock prices have come down substantially, the earnings stream of companies has fallen nearly as much. Risk still remains exceptionally high, as stock prices remain higher than any period in history (with the exception of the 2000's and 1929). Again, not to oversimplify the analysis for the stock market, but 10 year real returns would be an anomaly to be anything better than flat a decade into the future. To find value in the current market, one would have to anticipate an incredibly strong economy into the indefinite future (an assumption which I am highly skeptical).

This point cannot be stressed enough: The single biggest determinant for a profitable investment is the price paid for the asset. (Note the term "investment," as trading and speculation are a bit different. Price is certainly important, but in the very near-term, many other factors may come into play). Given all of the unprecedented government intervention in the financial markets, anything can happen in the near-term. But stocks in general, as a buy and hold investment vehicle, still carry an historically high level of risk from such high valuations.

Gold

Turning to gold, many argue that the yellow metal is "too high" and must come back down. With gold recently making all-time highs, and posting gains each and every year this decade (with the exception of 2000), many argue that it is due to fall. It has often been deemed to be in a bubble by many market pundits, and it seems that it is almost universally deemed as "overvalued" among the investment community. I often hear that it is a "barbaric relic" with little practical use other than jewelry. It seems as if almost everyone loves to hate gold as an investment.

So let's take a moment to tackle a few of these perceptions. First, gold is not a barbaric relic. It is and has been a form of currency for more than two thousand years. Unlike
paper currencies, which are nothing more than colored pieces of paper (well, fabric technically), gold is a finite resource. It cannot be created out of thin air like paper currencies, which is the reason that it has never lost all of its value. This is not to say that it cannot lose value, as it can, has, and will over various time frames. However, there is no central bank trying to manipulate its value or abuse its supply like all paper currencies have. For this reason, it is not surprising that gold is the only form of currency that has withstood the test of time, while all paper currencies in history have eventually lost all of their value.

Second, while this last paragraph is true and will always be true, it speaks nothing of actual price. Is gold overvalued, as many argue that it is? After all, it has been up each and every year for the last nine years, despite such poor performance in stocks and many other asset classes. To answer this, we cannot simply look at the price of gold. As gold is a time-tested form of currency, we must value it relative to other currencies.

Virtually every central bank around the globe is printing their paper money at a record pace. So it is no real surprise that gold is at or near all time highs relative to virtually every major paper currency. However, as gold is a commodity that is priced in U.S. dollars worldwide, the most relevant comparison is to the dollar. So we must compare the value of gold to the U.S. monetary base (defined as the currency in circulation plus the financial institutions' reserve requirements held at the central bank - which in the U.S. is the Federal Reserve).

Take a look at the following chart of the monetary base of the U.S. Dollar (taken directly from the St. Louis Federal Reserve's own website).


What you see is a rather stable monetary base until the late 1960's (when we still had and abided by a gold standard). Most strikingly, you can see that the monetary base has absolutely exploded since the beginning of the financial crisis two years ago, and is now topping $\$ 2$ trillion. We can take this data, over virtually any time frame, to determine a fair value for gold priced in dollars. As stated earlier in this report, gold is up just under
three fold in the last decade, roughly in line with the rise in the monetary base over the same time period. So from this standpoint, the rise in gold this decade is by no means excessive relative to the new supply in the monetary base over the last ten years. To conclude that the rise in gold makes the price of gold overvalued, one would have to presume that the price of gold was also overvalued 10 years ago (when it was trading at its lowest levels since 1979, as you can see in the chart below).


Now, the monetary base and money supply is not exactly the same thing, although they are quite similar. The chart at the bottom of page 4 does not imply that we have literally printed a trillion dollars worth of paper money in the last two years. As defined above, the monetary base is the amount of currency in circulation plus bank reserve requirements held at the Fed. As we are on a fractional reserve banking system, we do not need to actually "print" money to increase the amount of money in the system. The Fed can do the electronic equivalent of printing money by giving financial institutions additional money in the form of reserve requirements.

While most agree that the monetary base is an accurate representation of the amount of money created, some skeptics of gold might try to make the argument that this electronic injection of money to banks is not applicable. But that is a debate for another time. My only response to those skeptics is that Federal Reserve members themselves have previously stated that they could, and have actually now done, the electronic equivalent of dropping dollars from helicopters (see page 7 of this 2003 report from Federal Reserve members, and also Bernanke's own version under "Curing Deflation" about half way down his speech, "Deflation: Making Sure 'It' Doesn't Happen Here"). Regardless, as you'll see below, even when we look at the most conservative figures for what constitutes "money," gold is still significantly undervalued.

In a moment, we'll take a look at a few precise valuation measures. But first, I want to briefly summarize and provide a very simplified recent history of gold and the gold standard. The U.S. Dollar established itself as the world's reserve currency in the early $20^{\text {th }}$ century, in part because the U.S. maintained a version of the gold standard after the

British abandoned their gold standard. One could exchange $\$ 20.67$ for an ounce of gold, or cash in an ounce of gold to receive $\$ 20.67$. Off and on, this posed some problems to currency exchanges around the globe, as the U.S. was on a gold standard but many other countries were not. In the U.S., the gold standard was partly attributed to helping prolong the Depression and the corresponding deflation, so Franklin D. Roosevelt devalued the Dollar in 1933 by changing the exchange rate from $\$ 20.67$ per ounce to $\$ 35$ per ounce. This change helped the U.S. corner the gold market in the 1930's as foreigners converted gold for dollars, as they could now get more dollars for each ounce of gold.

At times, problems persisted as some countries could simply print money, convert their currency to dollars, and exchange for U.S. gold. This would deplete gold reserves and force the U.S. to decrease the money supply. During such periods, the U.S. would try to combat this issue by temporarily suspending the gold standard. To solve this seemingly persistent problem, the Bretton Woods Agreement was enacted in 1944, whereby the U.S. was to maintain enough gold in our vaults to back all U.S. currency. One could still exchange an ounce of gold for $\$ 35$, or vice versa. But more importantly, foreign countries were indirectly pegged to gold by default, as they were to maintain a currency relative to ours. In effect, the entire world was now on a gold standard. Gold and paper money worldwide was now one and the same, the same way that two $\$ 5$ bills are precisely the same as one $\$ 10$ bill.

This worked well for a while, but by the late 1960 's and early 1970 's, trade pressures around the world began to build again, due in part to expanding trade deficits from the likes of oil price increases and expenses due to the Vietnam War, among other things. It was widely viewed that the increasing costs were not being offset by cuts in other government expenditures. In 1972, the gold standard was again reset to preserve faith in the system (this time to $\$ 38$ per ounce), but trust in the system between countries was already falling apart. Foreigners began demanding gold for payment instead of dollars. Reluctantly, the U.S. made some of those payments, but put a stop to them shortly after as we did not want to give up our gold reserves. (You can see this process in the monetary base chart shown previously, as the monetary base remained somewhat stable until the late 1960's.)

By 1975, Bretton Woods was abandoned entirely, although the breakdown began four years earlier with the U.S.'s decision to suspend gold convertibility in 1971. A true fiat (paper) currency system ensued, which allowed countries to print their own currency without anything needed to back it. (This is the reason why the long-term chart for gold begins in 1975). This amount of money printing led to runaway inflation in the 1970's until Paul Volcker, then Federal Reserve Chairman, vowed to break the back of inflation by increasing interest rates above the level of inflation shortly after beginning his term in 1979.

Obviously, printing paper dollars does not create wealth, so you can quickly begin to see how abuse happens over time (and why all paper currencies eventually lose all of their value). For a short time in the early 1980's, and the only time since the gold standard was abolished, gold spiked to a level that was commensurate with the massive increase in the money supply. After all, gold is money, can always be exchanged for other money, and was deemed to be an alternative currency that the government cannot inflate away.

Briefly, it was like a de facto gold standard again, as the price per ounce of gold rose to a level whereby gold reserves covered the aggregate amount of paper dollars being created.

However, the scare of a paper currency collapse at that time was short-lived, and a new monetary era began. Gold was tossed aside once the paper currency system survived. From that point, the price of gold continued to decline for more than 20 years despite an ever-increasing paper money supply during the entire period. With faith in colored pieces of paper now acting as a suitable medium of exchange, created out of thin air and nothing but trust needed to back them, each country was able to print as much money as they wanted to pay for whatever spending suited them. Which is where we still stand today.

So the question remains: Has gold become worthless in an era of paper money? Not by any stretch. Sure, for a time it lost significant value. But it is a far larger leap of faith than I am willing to make to presume that the longest standing medium of exchange in the world no longer carries any value. Instead, I choose to look at gold as just another currency, and the following is my attempt to illustrate its fair value relative to other (paper) currencies.

The most commonly used argument I hear for gold's valuation compares the price of gold to the level of inflation. The concept is simple. The last time the value of gold traded at a level whereby the U.S. held enough gold reserves to cover the aggregate value of the U.S. money supply was 1980 . If we simply adjust gold's price at the time for the level of inflation since, we get a fair value on gold of about $\$ 2400$ per ounce.

But this simplified view, while still looking attractive to gold bulls, poses one major problem. It uses the government's calculation of inflation, which continually changes over time. I won't bother to get too deep into the topic, but very few would argue that the reason the formula to calculate the CPI is changed so often is to actually understate the real level of price increases. For this reason, lets focus on money creation, as rising price levels are largely a result of inflation, caused by an increase in the money supply.

To me, the most compelling valuation method we can use for gold, simply takes the money supply and calculates the value of gold should gold reserves be used to back the currency. This is the most pure way of looking at where the price of gold should trade, as it simply treats gold as a currency relative to other currencies, mainly the U.S. dollar. Since gold trades in dollars worldwide, and because the U.S. has the world's largest gold reserves ( 8133.5 tonnes, or 263 million troy ounces), we can calculate the value gold would trade at if we re-enacted a gold standard and backed the currency with gold reserves. (Please note that a troy ounce does not precisely weigh the same as an ounce. It is very close, but for purposes of this paper, I will be using round numbers.)

Most agree that to make this calculation, we would compare the gold reserves to the monetary base, which is all physical banknotes and coins, held by both the public and by the banks as cash reserves (termed vault cash). Using the current monetary base of about $\$ 2$ trillion, the price of gold would need to reach about $\$ 7600$ per ounce in order to back the amount of aggregate dollar creation. This figure seems staggering until you consider the massive amount of money that has been created since we dropped the gold standard.

As I stated earlier, some skeptics might argue that the monetary base overstates the money supply, as bank reserve requirements are not always actual paper dollars. Giving the skeptics their due, although it is a stretch given the fact that the bank reserves are redeemable in cash, let's now make the same calculation with overly conservative figures by using the most narrow definition of money (M0). M0 includes only the actual physical paper currency (and coins) in circulation. This total was $\$ 853.2$ billion as of the end of 2008, according to the Federal Reserve. Even using this extremely conservative figure, gold would need to be about $\$ 3150$ per ounce for gold reserves to back the currency at present. (The most recent release by the Fed, issued earlier today, estimates the current currency in circulation at just over $\$ 930$ billion, which correlates to a figure over $\$ 3500$ per ounce for gold.)

As compelling as the case for gold's undervaluation is using the previous examples, lets use one last method to gauge the value of gold relative to all paper money created worldwide. According to Mike Hewitt of dollardaze.org, all of the world's paper currency in circulation, valued in U.S. dollars, is over $\$ 4.4$ trillion. Again, this is the narrowest (most conservative) definition of money, as it is just the actual physical cash that you can feel, see, and touch. The top 107 gold owning countries have a total of $30,217.3$ tonnes of gold as reserves. Certainly more countries own gold, but each of the rest of them own less than one-tenth of a ton, which makes the math negligible to include them as well. Should all of that tangible fiat money in circulation be under a single currency, backed by the cumulative world's central banks holdings of gold, gold would need to trade at about $\$ 4500$ per ounce to back it.


The chart above shows the growth in worldwide physical currency in circulation since 1971, when the Bretton Woods agreement fell apart. The point is that gold cannot just be produced out of thin air, the way paper money can. As gold is just another currency, it can be valued relative to other currencies. And it doesn't take an economics major to
recognize that a currency with a finite supply is likely to increase relative to another currency whose supply is continually growing.

There just isn't that much gold in the world relative to all of the colored pieces of paper being tossed around as money. Since the beginning of time, only about 163,000 tonnes of gold has been found and brought above the ground. This puts the total value of all aboveground gold worldwide (jewelry, collectibles, investments, central bank reserves, etc.) at about $\$ 5.5$ trillion at the time this paper is being published. All of it, if placed in a single area, would fill only about two Olympic sized swimming pools. And only about 2500 tonnes of gold are produced each year worldwide (valued at about $\$ 88$ billion at current prices). Combined, the largest 107 gold owning countries in the world own less than onefifth of all worldwide gold. Yet, very few of these countries are accumulating gold despite printing massive amounts of paper dollars, as if wealth can be created with a single bill and a Xerox machine.

In short, I do not believe gold is anywhere near what would be considered a "bubble." That term is tossed around so loosely of late, but mostly by people who not only did not see the stock market or credit (real estate) bubble, but who clearly do not even know the definition of a bubble. A financial bubble occurs when an asset is deemed to be so safe, and such a sure thing, that almost all available free capital flows into the asset by virtually all investors and speculators alike, regardless of valuation. As the price rises, it reinforces the psychology of the masses, until everyone who would consider purchase and had capital to do so, has done so. At some point, there is no more net capital available to flow into the asset, and the upside becomes exhausted. The bubble has "burst" at this point, and there are only net sellers as the price then falls dramatically.

Gold is far from this definition of a bubble. In fact, outside of a select few other money managers, very few investors that I know of even own gold (or silver for that matter). At present, of the estimated $\$ 200$ trillion in worldwide investable assets, only $\$ 800$ billion is gold ( $0.4 \%$ ), according to hedge fund manager John Paulson. Hardly an asset I would consider over-owned, but one that does look undervalued for the reasons stated above.

Unless you believe that a country can create wealth by printing colored pieces of paper with numbers on them, you can only conclude that gold is undervalued as a currency.

## Outlook

I was fortunate to recognize a major secular shift in financial markets nearly a decade ago, and I believe that we are only about a third to halfway into this cycle. But this relates to either time or price, and speaks nothing to the immediate future. Make no mistake, we are in an unprecedented environment, whereby debt levels are off the charts from any historical perspective and the government is conducting the largest economic experiment in history.

Traditional investors focus mainly on stocks and bonds, as they have for the last few decades. Unfortunately, valuations for equities are extremely high, and are not compensating investors for the level of risk being taken. Bonds are in the same boat. With yields near historic lows and money printing increasing like never before, I see
significant risk in the bond market as interest rates have nowhere to go but up over the intermediate to long term.

We currently have a government that is creating money out of thin air and increasing debt at an historic clip. Furthermore, they are monetizing the debt at present by taking printed money and using it to buy bonds in an attempt to artificially keep interest rates lower than they would otherwise be. Additionally, free money (and in no small amounts) has been given to otherwise bankrupt companies, helping the stock market perform better than it otherwise would (had all those companies simply gone under).

On one hand, we have overvalued assets from any historical standard for both stocks and bonds. On the other hand, we have a government doing everything in their power to prop up these assets. I simply do not know which side will win out in the immediate future, but risk remains exceptionally high. It seems too early to anticipate the bottom in interest rates or a near term top in equities, although either or both could happen at any time, as nobody, including government, is bigger than the markets. The markets will eventually win out, although the timing is simply guesswork. As risk remains historically high, I choose to largely recommend that clients keep their chips off the table when betting in these areas.

Alternatively, where I see little risk is through capitalizing on the money printing by anticipating a continued easy monetary policy. With an economic recovery dependent on borrowing from the future, foreclosures continuing to mount, unemployment in the double digits and underemployment over $17 \%$, and historically high debt levels from both the government and the consumer, I remain confident that money printing and its electronic equivalent will continue as it has for decades. The dollar will rally again, as nothing goes up or down in a straight line, but if we look past the near-term gyrations, I see nothing to indicate that the dollar will not continue to weaken over time.

Thus, much of the same strategies I have implemented throughout the decade still apply for the time being, although short-term strategies will be dictated by price. I anticipate continued strong performance in the future for precious metals (gold and silver), hard assets outside of real estate (oil and alternative energy, agriculture, and water to name a few areas also on the radar), and currencies represented by central banks that are relatively more prudent than the Federal Reserve. For now, I simply want to focus on money making strategies that logically benefit from an increasing money supply, rather than guessing how, when, and to what degree government machinations may prop up assets that do not make prudent investments on their own accord.

This focus on risk management has served portfolio performance extremely well during the worst decade in market history. While the average investor has suffered significant losses this decade, client portfolios are at or near all-time highs previously reached in Q2 2008. But the portfolio focus which helped clients largely avoid the historic decline in 2008 proved too conservative for 2009 . Client portfolios gained just above or below double digits this year, which was outpaced by the $23 \%$ gain in the S\&P 500. Although performance was sound this year, my focus on risk management in 2009 was a noticeable drag on returns for the first time in years. While this weighs on me, the underperformance of 2009 pales in comparison to the outperformance of 2008 and the decade as a whole.

Despite the last nine months, risk analysis and prudence has proven to be extremely effective in preserving and building long-term wealth.

It has been incredibly trying to be patient and wait for the markets to widely present themselves with real value for investing. But such is the nature of financial markets. The stock market generically will provide value again, but I don't see it in the immediate future without significantly lower prices. I also anticipate an opportunity to short bonds reasonably soon, but the idea still seems premature. As always, low risk individual ideas should present themselves from time to time, but they have been few and far between of late. So for now, I anticipate sticking with investments that should logically capitalize on the printing of money. This has served us well for any time period going back past March, and I anticipate that it will continue to provide solid absolute and relative performance going forward.

As always, should you wish to discuss this or any other topic in more detail, please just let me know. I hope 2009 has treated you well and wish you nothing but further prosperity in the New Year and coming decade.

Sincerely,

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