

# Gage Wealth Management Group

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## **INFLATION PROTECTION**

**DEFINING DEFLATION AND INFLATION:** Deflation is defined by Webster's Collegiate Dictionary as a contraction in the volume of available money or credit that results in a general decline in prices. Inflation is defined as a continuing rise in the general price level, usually attributed to an increase in the volume of money and credit relative to available goods and services. Inflation can occur in investment assets like stocks, bonds or real estate and/or in the cost of living and consuming as measured by the CPI, the consumer price index for goods and services. As the stock, bond, and real estate bubbles since 1996 have shown, when assets rise in price faster than economic growth, it is generally not considered a problem unless a crash occurs like early 2000 in stocks and 2007 in real estate.

It is important to note that economic contraction is often erroneously referred to by the press and financial industry as deflation instead of recession. Economic contraction, called a recession or depression, is not deflation and inflation can climb when economic contraction is severe. Two significant US recessions occurred between 1968 and 1980 as inflation climbed from around 3% up to 11%. The Federal Reserve's official position as of 2013 is that inflation is low and unlikely to occur despite near record low interest rates and large increases in the monetary base.

**WHAT CAUSES INFLATION:** An oft-quoted statement from Milton Friedman and Anna Schwartz pretty much describes it, "inflation is always and everywhere a monetary phenomenon." When money supply, the monetary base, and debt expand at rates exceeding that of a country's GDP growth rate, then inflation will eventually result because more units of money are chasing the GDP output of goods and services. In other words, the creation of currency and debt in excess of true growth create inflation. The velocity of money, whether it is spent fast and passes quickly or slowly from one individual to another, also drives prices but it is difficult to quantify and varies about a wide unpredictable mean based on inflation expectations and emotions, bank lending and investment policies, and other factors.

Demand for a given good or service is often presented as the cause of a rise in prices but this is never the root cause of overall long-term inflation, it is the result of excessive monetary expansion. If, for example, the supply of money and credit in a given economic system were to match the growth rate of the economy, a rising demand for oil or decline in the supply of oil might drive up prices but money or credit would have to be taken from elsewhere in the economy, say automobiles or health care, and the overall aggregate price level would stay about the same. Keynes suggested that money and credit should be expanded at around 2% per year to account for economic and population growth, increasing the supply when the economy needed stimulation and paying back the debt after the economy recovered. Keynes, however, lived in a time when currency and debt were tied to gold and once the US went fully off the gold standard in 1971, the supply of money and credit has risen more or less continuously and at a rate far exceeding GDP growth. Inflation can also occur when workers demand more compensation.

**MEASURING INFLATION:** The Bureau of Labor Statistics (BLS) calculates and publishes inflation data monthly. It is essential to examine the methodology involved in the construction of these indexes. There are several versions of the CPI put out but the two most often quoted numbers are the "core" CPI and the CPI-U (urban) index. The core CPI index removes food and energy costs on the premise that their prices are too volatile and the CPI-U includes them and tracks a wide variety of goods and services.

The CPI numbers produced by the BLS underlie many other key statistical calculations and have real-world effects. The GDP is adjusted by the CPI to show true economic growth. Government and financial industry predictions of GDP growth are always too optimistic and downward revisions in the numbers are common. Weak numbers can cast doubt on the economy and investments and present problems for the Federal Reserve and US government. Productivity gains, GDP output divided by hours worked, income and spending, and other key economic statistics are heavily influenced by inflation adjustments and the lower the adjustment is, the better the economy looks. This is particularly critical in that Social Security and various benefit programs, government salaries, and government budget plans are adjusted for the reported or expected inflation rate and high inflation makes them more expensive.

**HOW TRUSTWORTHY IS THE CPI?** For over two decades the BLS has repeatedly revised their methodology for the creation of the monthly CPI number. Virtually all modifications have resulted in lower inflation rates. John William's is an economist with over 25 years experience examining government statistical data, [www.shadowstats.com](http://www.shadowstats.com), and calculates the inflation rate using 1992 methodology and 1980 methodology. He finds that the modifications made over the years have lowered the inflation rate by several percentage points.

The CPI has been reduced in three ways. It has been reduced by omissions: e.g. no housing prices have been included in it since 1984 even though housing prices have tripled or more in many parts of the country since then. Instead, "owners equivalent rent" was inserted to capture housing costs and rents rose far more slowly than housing prices. Today, the majority of the items in the CPI are "hedonically" adjusted: e.g. car prices aren't included in the index at the price a real buyer would pay. Instead, since automobiles are continually getting better their dollar price is adjusted downward even though the real cost is moving upwards. They are deemed a "hedonically" better and cheaper buy. And, the contribution of rising prices to the the majority of CPI items is adjusted downwards because of "chain weighted linking"; e.g. if the price of beef goes up then chicken is substituted in the index on the assumption that consumers will eat more chicken and reduce their food costs.

Shadowstats.com reports current statistical data and also recalculates them using the statistical agency's 1990 methodology and 1980 methodology. As of mid-2013, the BLS is reporting inflation in the 1.5-2% range. John Williams calculates the true rate as over 5% using 1992 methodology and 8% using 1980 methodology. Whatever the real inflation number might be, it is obvious that US inflation data isn't something which is comparable over time, the CPI is not a benchmark, and it is subject to many adjustments designed to lower it. The idea behind the index was to provide a measure of what it takes to enjoy a constant standard of living. In January 2010, Michael Boskin, who along with Allen Greenspan in 1997 argued for and got the CPI reduced by about 1%, recanted a bit and published an opinion piece in the Wall Street Journal about growing deception, CPI understatement, and optimistic distortions in government statistical reporting. In June 2013 a former head of the BLS publically stated that in his opinion the current official CPI numbers much understate inflation. The US government is highly motivated to report low inflation for political and budgetary reasons. As of 2012, further use of chain weighted linking to reduce the CPI has been proposed to address rapidly rising US deficits.

**HOW HIGH HAS INFLATION BEEN HISTORICALLY?** For 1926-2011, the official CPI inflation rate was close to 3% per year resulting in a compound reduction of purchasing power by about 95%. It is worth noting that the Federal Reserve's initial and continuing mandate has been to maintain stable prices. It has failed miserably in that regard. Historically, currency debasement and inflation have been the universal rule for all countries, even in ancient Greece and Rome. An IMF study in 2011 found that the average life span for a currency based on paper, often called fiat currency, has been 42 years in the post-WWII period. The US dollar has been a fiat currency for 42 years since President Nixon severed the final link between the US dollar and gold in 1971.

We can also measure US inflation referenced to gold, a form of money which can't be debased. In 1926 gold was officially priced at \$25 an ounce. In September 2013 it was trading around \$1300 an ounce or roughly 52 times its value in 1926. Thus, based on gold, the dollar is worth 1/52th or 1.9% of what it was worth in 1926 and has lost over 98% of its purchasing power. When gold is used as a measure of real returns for asset classes, equity returns last century look pretty meager. From 1926-2009, the S&P 500 only gained about 25% priced in gold, not much above the rate of inflation. Priced in inflation adjusted CPI based dollars it approximately doubled in that 84 year period. From 1971 through its peak over \$1900 an ounce in 2011, gold gave a return very close to that of the S&P 500 stock index with dividends reinvested, both up about 50 times in value. Prior to 1971 gold's price had been fixed by the US government since the 1800's and a comparison with other investments isn't possible. In true purchasing power as measured by a depreciating dollar value or gold, stock returns have not been all that spectacular over the last century. "Real" inflation adjusted returns are far lower than the "nominal" returns Wall Street and the financial press frequently quote.

**EQUITIES AND INFLATION:** Equities are often promoted by Wall Street as protection against inflation and over several decades that is true. Dimson et. al. ("Triumph of the Optimists", 2003, updates from 2009-2012 from "Credit Suisse Investment Returns Yearbook", 112 years of data for 19 countries) estimate a true equity premium above short-term sovereign government debt of 4-5% for a globally diversified equity portfolio with a small/value tilt. Fama and French of DFA estimate similar premiums. Since short Treasury debt returns about 1% above the rate of inflation long-term, a globally diversified equity portfolio can reasonably be expected to return 5-6% after inflation.

Equities tend to do well during periods of declining inflation, low inflation, even deflation. For 1982-2000, a period where inflation and interest rates more or less continuously declined, the US enjoyed its biggest bull equity market in history. But, from 1968 through 1982, equities did poorly, declining about 50% and only managing to break a little above even in inflation adjusted terms after 14 years. Bonds also did very poorly due to rising interest rates. During periods of rising inflation, consumer and corporate borrowing costs increase, mortgage interest rates increase, and consumers and businesses have less money to spend on growth, investment, homes, cars, and durable and non-durable goods and services. Cycles of rising inflation and interest rates and declining inflation and interest rates have occurred in roughly 10-20 year intervals for the last 100 years though increases and decreases are not smooth and continuous.

**FIXED INCOME AND INFLATION:** During periods of inflation, lenders and investors demand higher interest rates from debt. They want to avoid being hurt by a decline in the purchasing power of the interest they are paid and so bonds do poorly. Bonds purchased when interest rates are low or extremely low decline in value as rates rise. The longer the maturity of the

bonds, the more they decline. A rough rule of thumb is that an increase of 1% in market interest rates for a given quality and maturity bond will cause a decline in the value of previously purchased bonds of similar maturity approximately equal to their maturity or, for a portfolio, the duration of the portfolio. For example, a mutual fund with a duration of 5 years could be expected to decline about 5% if tomorrow morning interest rates rose 1% on 5 year bonds. These shifts in bond value and share price value in bond mutual funds are not linear, but approximate.

Dimson et al. compared bond returns for 19 countries for 112 years, 1900-2011, 2,128 country-year observations. When inflation was in the bottom 5%, strong deflation, equities gave a real return of 11.2%, strong, but dramatically underperformed bonds at +20.2%. When inflation was in the top 5%, strong inflation, equities lost 12.0% to a decline of 23.2% across bonds for the sample period. Over the entire period, bonds gave a geometric real return of 1.7% to stocks 5.4% with a standard deviation of 10.4% to stocks 17.7%.

Long maturity bonds are particularly treacherous and this is why DFA and most advisors recommend only short or intermediate maturity ranges, 1-8 years or so out. If one purchased a 30 year Treasury in 1941, one would not have broken even until 1991 after inflation. But, as an illustration that even relatively long-term asset class returns constantly alternate, if one purchased 30 year Treasuries in 1981 when interest rates were in the high teens, their return was slightly above the S&P 500 with dividends reinvested for 1981-2011 even though that period includes the biggest bull market for stocks in US history. In the US as of mid-2013, short interest rates are near zero, longer rates are near 40 and 50 year lows, borrowing and debt by the Federal government are rising rapidly, aggregate money supply growth is at record levels, and the next interest rate cycle is certainly upwards. We can't, however, know when it will start. This does not bode well for future bond returns.

**REAL ESTATE AND INFLATION:** Real estate is usually purchased with borrowed money, leverage, and in times of declining or low interest rates, tends to do well. Rising mortgage interest rates hurt real estate. As of 2013, US mortgage rates are close to record lows, around 4.5% and well below historical averages. Robert Shiller of Yale has housing price data going back to the late 1800's and finds real inflation adjusted return in housing for that period around 1%, fairly close to T-bills. Since 1987, when the Case-Shiller index of housing prices for 10 major cities began, home prices produced a real return of 1.15% after inflation. During the inflationary 1970's, housing returned 1.02% per year. Dimson et al. looked at real housing prices across six countries for which data were available from 1900-2011. They found that, after controlling for country-specific factors, real housing appreciation was very weakly correlated with inflation at -.20 and concluded that real housing prices seem relatively insensitive to inflation but have kept pace with it over the long run.

Commercial real estate has tended to return less than housing, offering rents and cash flow with less in price gain. REIT's, publically traded investment real estate in apartments, condos, shopping centers, hospitals, and other entities, have generally offered returns comparable to common stocks. From February 1993 through April 2010, DFA's US REIT portfolio gave an annualized inflation adjusted return of 7.07%, about 1.5% above the S&P 500. Investors should bear in mind, however, that REIT's can be highly volatile. In the early 1970's, the NAREIT index dropped over 80% and for the inflationary 1972-1982 period, lost over 17% per year. Dimson et al analyzed commercial real estate returns using a limited portion of their data base and controlling for country specific factors and found a correlation between commercial property and inflation of -.33. They conclude that "given its relative illiquidity, commercial real estate has to be considered as a long-term commitment...and is not an investment that should be initiated because of a new concern about inflation risk."

**GOLD AND INFLATION:** Gold is a special case commodity in that it has been considered money, a store of value and a medium of exchange, for 5000 years, note the comments above. A WSJ article (8-21-10), "Rethinking Gold", reports research by Ibbotson indicating a 0.08% correlation between gold and inflation but a -0.65% correlation between gold and the US dollar since 1980. The author suggests that gold is a currency, not a commodity, and massive US Treasury borrowing and the emergence of "Currency Wars" (The Economist, October 16-22, 2010) are strong drivers for future US dollar declines.

Gold possesses many desirable qualities. Unlike paper and digital currencies, it is very difficult to debase. It is nobody's liability and rests on no counterparty's promise to pay. About half of all gold above ground is held by central banks and is likely to remain that way. It is not a consumable commodity used up like energy or agricultural products, gold is nearly indestructible, and its supply is relatively inelastic to demand. Mining is expensive and energy intensive and even at full output the world gold supply can only be increased at a little over 1% per year, unlike paper and digital money which can be increased at will at any time with no limits. Over the last decade, global gold mining costs have tripled while production has grown little. As of September 2013 gold is trading at or below its cost of production.

For millenia, the price of commodities like horses and potatoes has stayed fairly constant if measured in gold weight. The longest lasting paper currencies have survived for a little over 100 years and post-WWII that has dropped to 42 years on average according to the IMF. Gold is a true measure of inflation and gains over time against fiat paper currency. JP Morgan, the financial titan who bailed out the US banking system in 1907, stated, "Gold is money. Everything else is paper."

Though used in technology, dentistry, jewelry and art, gold has limited intrinsic value as commodity. It's value is in its rarity and the costly process of producing new supply. If all the gold ever taken out of the earth were melted down and formed into a cube, the edge of that cube would be about 80 feet and fit on the average lot of a suburban US tract home. Estimated remaining global reserves are about a third of this. Like original Van Gogh paintings, prime ocean view real estate, flawless investment grade diamonds, and Bugatti automobiles, gold's value is based on its rarity. Paper money, unlike gold, can be produced and debased at will by governments and central banks and they have always chosen to do so. Gold cannot be created at will and cannot be debased, unless alchemy finally realizes its dream of changing lead into gold.

Over very long time frames gold tracks true inflation closely. For 1802-1997, gold returned 0.1% less than the inflation rate, however, from the 1870's up until 1971 gold price was fixed by the US government so a total return figure likely understates true gains in gold's value. During the inflationary 1972-1982 period, gold returned 11.4% per year, over 10% per year above any other asset class. Dimson et al. looked at gold returns in 19 countries for 112 years and found that when inflation was in the bottom 5%, strong deflation, gold returned 12.2%, a bit below bonds but above equities. When inflation was in the top 5%, strong inflation, gold gave a real return close to zero but far above all other asset classes. This makes sense in that gold is the only asset that does not have its real value reduced by inflation; it is an accurate measure of inflation over very long time frames. Dimson et al. found that gold was the only asset class with a positive correlation to inflation, +.26. Equities correlated at -.52, bonds at -.74, bills at -.62, commercial real estate at -.33, and housing at -.20.

Well-respected research house, Ibbotson (Idzorek, CFA, 2005), looked at the benefits of including gold bullion in fully diversified equity and fixed portfolios covering 1971-2004. They recommended that 7-15% of an investor's diversified equity and fixed portfolio be placed in gold bullion. For the last decade, 2000-2009, gold returned over 350%, despite low reported inflation within the US, soundly trouncing a near-0% return for the Dow.

Wall Street, academia, and the mainstream financial press are generally critical of gold and discourage its ownership and allocation in portfolios. The likely reason for this is that the financial industry doesn't make much money from gold and can't M&A it, IPO it, charge high management fees for it or lever it up and derive revenue from it. Investors are constantly warned of a possible gold bubble and lectured on the lack of intrinsic value in gold or its low long-term return versus equities or the 20 year gold bear market from 1980-2001. Critics argue that it is a lump of metal and doesn't produce interest, dividends, or profit growth, thus its value must be subjective and only what investors accord to it. The problem with these

arguments is that "fiat" paper and digital currency, and stocks and bonds priced in them or real estate purchased in borrowed fiat dollars, are only worth what investors accord to them if they are not linked to something of value that can't be created at will by central banks and governments..like gold. And, 20 year bear markets have occurred in stocks, bonds, and real estate. not just gold. Gold is discussed elsewhere on this site in more detail under "Alternative Assets".

COMMODITIES AND INFLATION: Commodities like oil and natural gas, base metals like copper, and agricultural products are tied to and constitute inflation, and, like gold, their returns are uncorrelated with equities and fixed income. For 1972-1998, the Goldman Sachs commodities index, GSCI, returned 10.3% per year, about 5% per year above the rate of inflation. During the 1972-1982 period, however, they did not protect against inflation, averaging a loss of -1.56% per year.

There is a problem for investors attempting to track rising commodity prices. Commodity index investments available to investors are based on levered commodity futures contracts, not cash prices, and futures prices can move far above and below cash prices. The 2008 oil price bubble was driven by futures contracts, pushing oil from the \$60/barrel range up to \$150, then crashing it down to \$35, all in less than a year. Leah Goodman's book, "The Asylum", examines the history, characters, and corruption of commodities exchanges with a particular focus on oil prices in 2008. Another revealing book is Charles Geisst's, "Wheels of Fortune". gyrations in commodities prices are frequently due to futures markets, not large variations in supply and demand. In March 2012 the United Nations Conference on Trade and Development released an extensive and detailed analysis of the US futures market, presenting data indicating that high frequency traders (HFT) have caused US commodity futures prices to disconnect from real world supply and demand fundamentals since 2008. In Q213 US gold prices dropped 22.8% from massive short selling in the Comex futures market while global demand for real gold was at record levels both before and during the periods where short futures contracts suppressed gold prices.

Capturing futures returns isn't a precise business either. It is interesting to compare 2011 returns for DFA's commodity index tracker, DCMSX, and Pimco's fund, PCRIX. Both aim to track the same index, the Dow/UBS index. DFA uses a different contract roll strategy and returned -12% to Pimco's -29%. Pimco, however, managed to reduce this by 15% or so due to holding inflation protected securities, which did exceptionally well in 2011. Such a wide disparity for one year suggests that investors may find it difficult to capture real spot/cash commodity returns in funds using commodity futures contracts delevered by bonds.

**INFLATION PROTECTED TREASURY ISSUES AND INFLATION:** In the late 1990's the US government introduced two types of bonds designed to protect investors from inflation, I-bond savings bonds and TIPS, Treasury Inflation Protected Securities. I-bonds are purchased at face value and increase in value monthly. Interest is paid when the bond is redeemed. They may be redeemed at any time after a twelve-month holding period and grow in value with inflation-indexed earnings for up to 30 years. I-bond returns result from a combination of the long-term fixed rate and an inflation rate adjustment every six months. The adjustment is based upon the CPI index and added on to the value of the bonds. If there is no inflation the bond price is not reduced so they can never decrease in value. Interest is exempt from state and local taxes and there is a three month interest penalty if redeemed during the first five years. I-bond holders can elect to pay tax each year or defer it for up to 30 years as they gain in value.

TIPS are a lot like conventional T-notes and bonds and their interest rate is paid on the inflation-adjusted value of the bond every six months. An adjusted face value is announced monthly when the new CPI numbers are released. As long as inflation occurs, the face value of TIPS goes up and the interest payments, calculated as a percentage of face value, go up. If deflation occurs the face value of the bond will decline but never below the purchase price of \$1000. At maturity investors receive their final inflation-adjusted face value. Just like conventional fixed income instruments with long maturities, TIPS are subject to price variation as market interest rates shift and other factors effect bond prices. Investors pay Federal income tax but not state tax on all interest received each year plus on any gains in inflation-adjusted principal even though they will not receive that principal until the bond matures. I-bonds and TIPS are available from Treasury Direct and are not available from most brokerages and not typically held at brokerages except in mutual funds containing them. Variations of these two securities are sometimes available in corporate form or in CD's. General advisory opinion is that I-bonds are best held in taxable accounts due to the tax deferral option while TIPS are best held in tax-deferred accounts.

How well have inflation-adjusted securities done historically? The best long-term data we have comes from the UK. Though not identical, the structure of US inflation protected bonds and UK inflation protected bonds is similar. Dimson et al found that for 1981-2000, UK inflation protected bonds underperformed conventional short, intermediate, and long bonds and even money markets. Dimson et. al. (2003, Triumph of the Optimists) calculate a real "premium" for inflation protected bonds of -1.25%. In their 2012 update on inflation linked bonds (Credit Suisse 2012 Investment Returns Yearbook) they note that the real yield on inflation-linked bonds provides a forward-looking statement of inflation adjusted yield to maturity. As investors fled to safety during the 2008-2011 banking crisis, real yields on inflation linked bonds close to 10 years in maturity declined to zero and in several issues turned negative. Thus, all investors could expect from these bonds was the inflation adjustment offered by government

statistical agencies and, as we note above, that adjustment is suspect and very likely greatly understates true inflation. Dimson et al conclude that at the beginning of 2012, such bonds "can make little contribution to achieving a positive real return over the period from investment to maturity."

Let's compare returns for three Vanguard fixed income funds from January 2007 through January 2012.

Fund	Duration	5yrs	1yr	YTD Jan-March 2012
Inflation Protected VIPSX	7.85 yr	8.06%	15.72%	2.20%
Short-term bond index VBISX	2.70 yr	4.84%	3.22%	0.60%
Intermediate bond Index VBIIIX	6.51 yr	8.25%	12.06%	1.64%

The year 2011 was a very strong one for inflation linked bond appreciation as investors rushed into them out of fear over inflation and drove prices up and yields close to zero or negative. Short term bond yields dropped to record lows, largely due to the Federal Reserve's near-zero interest rate policy. This, obviously, won't occur again since rates are near zero. When we calculated the same comparison back in early 2011, the five year returns for inflation protected securities indicated they had underperformed both short and intermediate bond indexes, not promising. Both DFA and Vanguard offer inflation linked bond indices.

Larry Swedroe, (CBS Moneyline, 3-2-12) advocates substantial exposure to inflation protected bonds, noting that TIP's correlated with inflation at .21 for the 1997-2011 period (meaning that inflation "explains" .21x.21 or about 4% of the price variation in TIP's, not much) and TIP's reduced the standard deviation in a portfolio with 50% equity and 50% fixed by about 13% (that would be a standard deviation around 10-11% reduced to 8.5-9%%, not much). Many proponents of inflation protected securities point to periods of strength. In 2011, Vanguard's inflation protected fund, VIPSX, returned 14.5%. Since the interest rate component of this return was in the 1% range, the rest of the return was due to a strong rise in bond prices for inflation protected securities. This occurred even though the Federal Reserve viewed inflation as mild and deflation as the major economic risk, basing its view on a core inflation rate around 2% (core inflation data omits food and energy prices). Market sentiment affects inflation protected bond prices just like conventional bonds, another risk. As of March 2012, five and ten year TIPS were yielding -1.18% and -0.11% respectively. The only future yield on these bonds will be the inflation adjustment and, as noted above, BLS inflation data understates the true inflation rate. Brett Arend, a well-known journalist for the WSJ, published a piece on CBS

Market watch on May 6, 2011 entitled "Holding TIPS will make your poorer." In it he argues that they are an investment guaranteed to lose investors' money and notes with the yield at that time on five year TIPS around -0.5%, investors were guaranteed a loss of 2.5%. Only the inflation adjustment could make the return positive.

Although we don't have sufficient long-term data on US inflation protected securities to make meaningful comparisons with conventional bonds, at this point they don't appear promising for longer time frames. It will take longer to determine if inflation linked bonds offer investors real value after inflation. Problems with CPI calculation methodology, the risk that downgrades in US Treasury debt will drive down prices, and varying investor demand for inflation protection make it difficult to determine how much protection these bonds offer from inflation and what their total return is likely to be long-term..

**CONCLUSIONS:** Historical data going back over 2000 years show that history is inflationary. Since 1926 the US dollar has lost about 98% of its purchasing power and there's little reason to expect its decline to stop or reverse. Stocks and bonds have always been paper assets priced in paper currency and vulnerable to the effects of inflation. Today, even real estate prices have been affected by paper since a good deal of the rise in housing prices in the US to their 2006 peak occurred as trillions in complex derivative mortgage paper priced in fiat currency was put underneath housing. Gold is the only asset class which has offered inflation protection long-term.

As of 2013, total Federal Reserve holdings and US government debt is still increasing rapidly from high and record levels, resulting in additional money supply and inflation risk. And, the US trade deficit is still high, running roughly \$35-\$50 billion per month. One possibility is that the US dollar could lose its status as the world's exclusive reserve currency, suffer reduced purchasing power, and greatly increase the cost of US imports, fueling inflation. As of 2013, China and other former major purchasers of debt have ceased buying US Treasuries and are no longer adding to their exposure. Many emerging market and BRIC countries as well as others have moved or are moving to conduct business transactions between nations using their own currencies and avoid the US dollar. As always, future economic and market events are unpredictable and so is inflation.