
MANAGER'S RISK ASSESSMENT METHODOLOGY

BMG FUNDS

September 11, 2015

Physical Gold Bullion is a Monetary Asset

In order to accurately assess the risks associated with investing in precious metals, it is crucial to take into consideration the varying types of investments. Gold, and to a lesser extent silver and platinum, can be a monetary asset or a commodity. Each one can be an investment, but can also be considered money. Some forms of gold, such as futures contracts, unallocated certificates, precious metals ETFs and precious metals unallocated accounts, are investments, while physical bullion held on an allocated basis is not an investment – it is a monetary asset. Gold is money.

Gold has been used as money for over 3,000 years because it meets all the criteria for money. It functions as a unit of account, a medium of exchange and a store of value. While currencies fulfill the first two attributes of money, they have not provided a store of value. Gold is durable, portable, divisible, consistent, intrinsically valuable and, of crucial relevance today, it cannot be created by central banks or politicians. Gold is a tangible asset; fiat currency is merely printed paper created by government decree.

1. Gold, silver and platinum are traded on the currency desks of the major banks and brokerage houses, not the commodity desks. Traders understand gold is money to be traded or used as a hedge against paper currencies.
2. The world's central banks hold about 32,000 tonnes of gold in reserves. While there has been a lot of media attention given to central bank sales in the past, gold holdings have not significantly declined since 1980. Central banks have become net buyers since 2009, and

have been adding gold to their currency reserves. Central bankers understand gold is money.

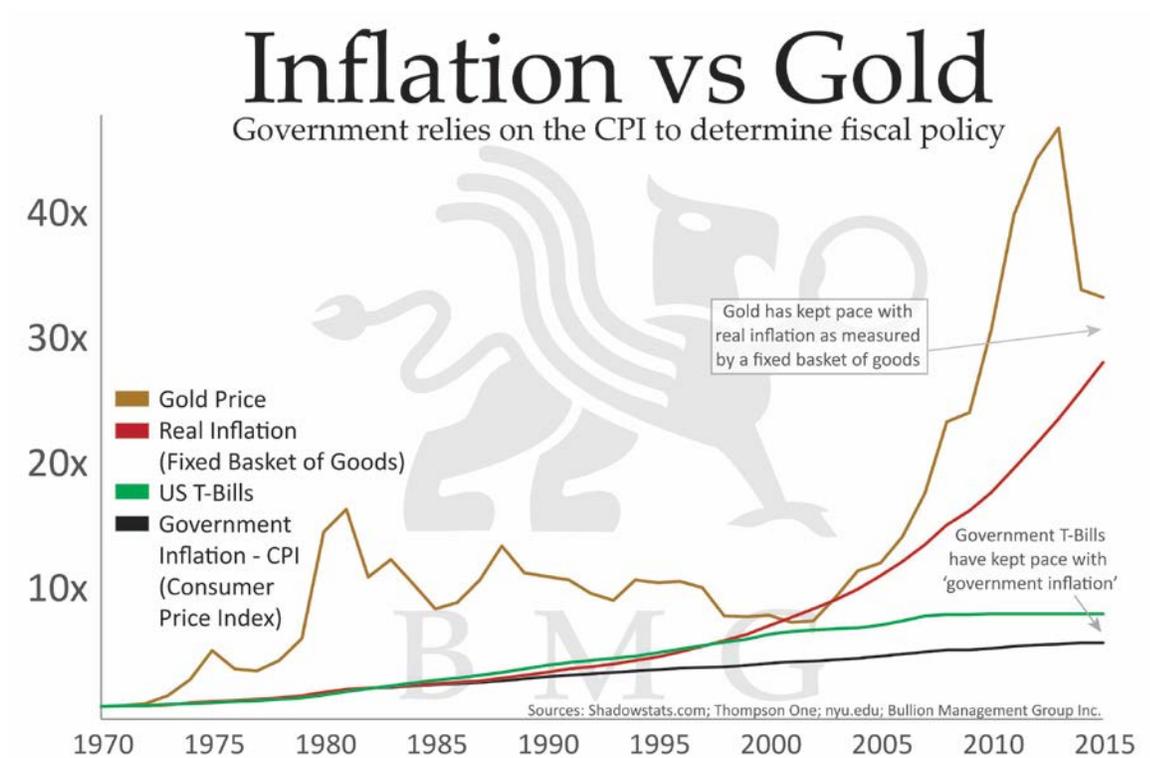
3. The average turnover rate between the eleven market making members of the London Bullion Market Association (LBMA) is over US\$31 billion per day, with the volume estimated at seven to ten times that amount. Clearly, this has nothing to do with jewelry sales and everything to do with the exchange of money and hedging of currencies around the world.
4. Gold holdings are classified as monetary assets, together with currencies, by both the US government and the Canadian government.

The definition of “investment” is the commitment of money or capital to purchase financial instruments or other assets in order to gain profitable returns in the form of interest, income or appreciation of the value of the investment. Through this transfer of capital, in the expectation of a profit, an investor gives up their capital and puts it at risk. In return, the investor receives dividends or interest as compensation because their capital is at risk; they may get back less than they invested, or they may get back nothing at all.

In contrast, physical gold bullion or physical paper currencies locked in a vault are not invested; they are simply being stored. Since neither is invested, they don't earn interest or dividends, but they don't have any counterparty risk. The major difference between gold and currencies kept in a vault, however, is that gold's purchasing power has consistently increased, while paper currencies have consistently declined year after year. Holding bullion in a vault means there is no investment, so there is no risk of getting back less gold than was initially deposited, and there is no risk of the gold's value falling to zero. There is no need to be compensated by way of interest or dividends, as there is no risk to capital over the long term. There is also minimal risk of losing purchasing power. BMG BullionFund (the **Fund**) and BMG Gold BullionFund (the **Gold Fund**) (collectively, the **Funds**) only purchase and

store unencumbered physical precious metals bullion. The Funds represent the least risky method for retail investors of owning physical bullion through a financial product on the market.

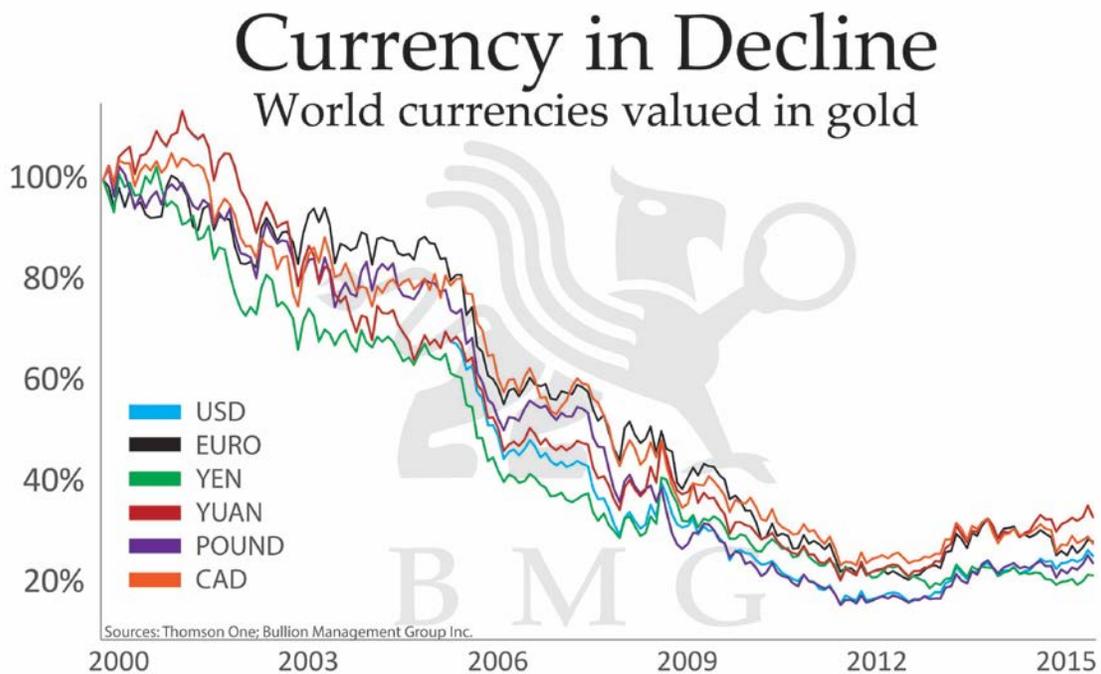
Both gold and currencies can easily be taken out of the vault and given to someone else (invested) in return for dividends or interest. But the investor who gives up their gold or currency, risk not getting it back.



Currency held in a vault, however, loses purchasing power every day as its value is eroded through inflation. Currency, then, must be invested in an attempt to offset this depreciation. Currency held in a bank account is also an investment, as it is legally a loan to the bank in return for interest. This rate of interest historically never matches the rate of decline of the

currency's purchasing power. The chart below shows how all of the major currencies have declined over the last decade when measured in gold ounces.

In reality, it is this decline in currencies that is reflected in gold's performance. Gold is the mirror image of the debt-based currency it is priced in. Over the long term gold is not volatile; currency is – gold is the constant.



It is crucial to recognize that physical gold bullion is not someone else's promise of performance or someone else's liability, and as a result it has no counterparty risk. Apart from physical gold bullion held directly, or on an allocated and insured basis in a vault, all other forms of gold ownership are, in fact, investments. Paper gold certificates, unallocated bullion accounts, ETFs, shares in gold mining companies and futures contracts all have counterparty risk and are either someone else's promise of performance or someone else's liability. They may have their place in

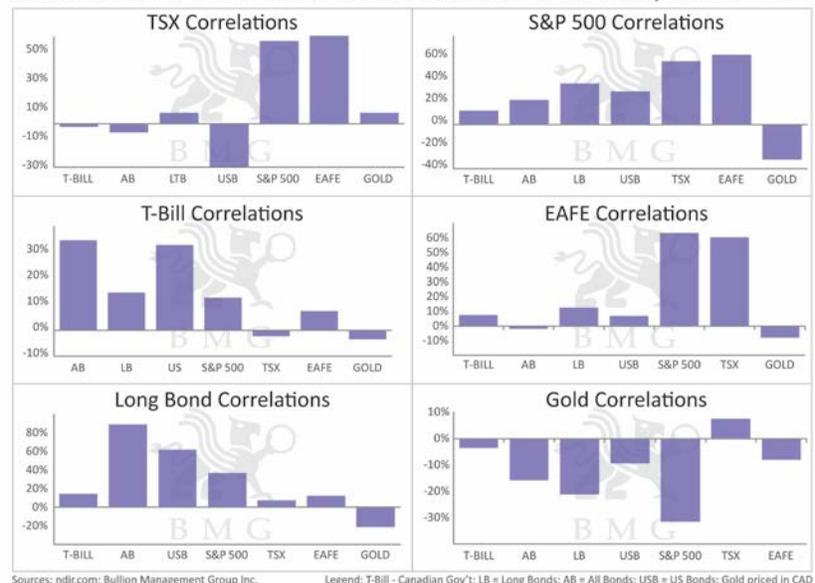
a portfolio, but they are all investments, and thus attract all of the risks associated with financial assets.

We acknowledge that holding physical bullion in the BMG open-end mutual fund trust format removes gold from its purest form of money and places it in a financial vehicle that attracts the investment label; however, 99% of the Fund's assets are bullion and its monetary role should be kept foremost in mind when assigning risk classification to the Funds.

Another advantage gold and precious metals have, which again is not taken into account using traditional risk analysis techniques, is that over the long term, precious metals have a negative correlation to all the other asset classes that are generally used to build investment portfolios. As a result, precious metals provide true diversification, and when considered as a portfolio asset, tend to reduce risk and lower the volatility of the entire portfolio.

Gold has a negative correlation to almost all major asset classes, which can be seen in the chart below.

Asset Class Correlations of Annual Returns; 1970-2014



This is of paramount importance, as most portfolios consist of components, typically stocks and bonds, which are priced in US dollars. Gold's negative correlation to the dollar, as well as most other currencies, helps protect portfolios against currency devaluation and associated inflation. The massive debt crisis that the US and Europe are facing is exacerbating the differential between gold and currencies, and this will continue as the debt crisis magnifies. Again, these points are not considered when using traditional risk analysis.

When considering how to assess the risks that may be assigned to a financial product, in this instance the Funds, it is of primary importance to establish what types of risk the product is exposed to. There are numerous types of risk that apply to some financial products that do not apply to others. Careful consideration was given to the following types of risk and their relevance to the Funds when determining their risk profile.

Types of Risks

Liquidity Risk

Liquidity risk is associated with the market on which the product trades. A financial product that can be sold quickly without price concession is considered liquid. Small unlisted stocks, privately held mortgages and real estate are somewhat illiquid and can be difficult to sell on a timely basis without incurring significant discounts and costs. In a broad market decline, even publicly listed stocks can become illiquid, with smaller public companies being vulnerable to no-bid or highly unattractive bid situations. This was evident in 1987, when many stocks had no bids, and again in 2010, during the "Flash Crash" in May that year, when many stocks temporarily had unattractive bids or non-existent bids.

Gold and silver bullion are traded by members of the LBMA 24 hours per day in New York, London, Zurich, Hong Kong, Tokyo and Sydney. Currently the average daily turnover is \$31 billion. The turnover is the net difference in trades between the members, while the trading

volume is estimated at seven to ten times that amount. Platinum trades in Zurich and in the UK on the London Platinum and Palladium Market; however, no volume or turnover data is available. As such, the liquidity risk of precious metals is very low, and at least comparable to if not better than traditional publicly traded stocks and bonds. The Fund is an open-end mutual fund trust that is purchased and redeemed daily at Net Asset Value. As a result, it has the same liquidity as bullion itself and, therefore, low liquidity risk.

Management Risk

Most mutual funds rely on the performance of a manager to provide positive returns for the fund. The manager's skill in picking stocks or other assets, market timing, use of derivatives, hedging, leverage, security lending, and other factors plays a large part in the overall performance of the fund. This adds a huge intangible risk to most funds, as the skill of the manager could vary from year to year, or the manager could change.

Conversely, the Fund does not rely on the skills (or lack thereof) of any particular manager, but instead has a fixed mandate of purchasing equal dollar amounts of physical, unencumbered gold, silver and platinum bullion. This mandate cannot be changed without unitholder and regulatory approval. The Fund cannot market time, hedge, rebalance, lease bullion, employ any type of derivative or employ leverage. As such, the performance of the Fund is purely dependent upon the price of bullion, the relative value of the Canadian dollar to the US dollar and the level of management expenses. As a result, the Fund is completely independent of management skills, thereby eliminating management risk.

International Risk

International risk can include both political risk and currency risk. Political risk includes issues such as nationalization or confiscation of assets, punitive tariffs, taxation or regulatory

issues. Most financial products, including precious metals, may be subject to these issues if stored in politically unstable countries. Canada, where all the Fund's bullion is stored, represents one of the most politically stable and secure democracies in the world and, as a result, is one of the safest places to store bullion, thereby significantly reducing international risk.

Currency Risk

Currency risk must also be taken into account when investing in financial products. The chart below shows, gold has outperformed all major indices in all major currencies for over a decade.



Currency devaluation is set to continue as the global monetary debt-based system, which has been in force since the gold exchange standard was severed in 1971, has become a long-term financial reality – without significant economic growth, more and more fiat (paper) currency creation will be required to meet existing and future obligations. This has led to the ongoing currency debasement that, in the last decade alone, has seen the US dollar lose over 60 percent of its purchasing power when compared to gold. Since the year 2000, gold has increased in value in 12 of the 15 years. Governments cannot control it; they cannot print more of it. Until governments around the world stop spending beyond their means, stop running huge deficits, stop incurring massive debts and stop creating fiat currency, currency devaluation will continue and gold will increase in relative value as against those currencies.

Default Risk and Credit Rating Risk

Default risk and credit rating risk are associated with debt instruments. Clearly, when a bond or a mortgage defaults, the investor will suffer losses. The investor may also suffer losses if a debt instrument's credit rating is downgraded. This results in a reduction in price of the bond to generate a higher yield in order to compensate investors for the higher level of risk. The value of bonds decline as interest rates rise. Since the physical unencumbered bullion held in the Fund is not anyone else's liability, it is not subject to these risks.

Furthermore, the Fund's bullion is not subject to any third-party liabilities. Even if the Fund's manager, Bullion Management Services Inc. (BMS), or the Custodian were to declare bankruptcy, the assets would still belong to the unitholders and would not be subject to seizure by any creditors of BMS or the Bank of Nova Scotia. A new Trustee/Manager would be appointed, or the Fund could be wound up, the bullion sold and the proceeds distributed to its unitholders. Because of the size of the precious metals market, the sale of the Fund's bullion would not represent a sizeable transaction and would not likely result in a 'fire sale' as would be the case with many traditional financial assets.

Interest Rate Risk

Interest rate risk affects most asset classes. While changes in interest rates have a direct impact on debt instruments, they also have an indirect impact on stocks, real estate, commodities and precious metals. However, due to the high amount of debt at all levels in the US and most other Western countries, the central banks' ability to raise rates without risking a massive collapse of the economy is limited for the foreseeable future. This has been acknowledged by the US Federal Reserve, the ECB and the Bank of Canada. As such, interest rate risk is limited.

Loss of Purchasing Power Risk

Purchasing power risk is essentially inflation risk. It impacts all asset classes, which is why returns and performance should always be measured in real terms rather than just nominal terms. In 2007, the best-performing stock market in nominal terms was that of Zimbabwe, with returns of 18,000 percent. The importance of factoring in inflation becomes apparent when you consider that Zimbabwe's inflation rate was over 68,000 percent. During high inflation periods, financial assets such as stocks and bonds tend to underperform, while tangible assets such as real estate, commodities and precious metals tend to outperform financial assets and inflation. While the inflationary hedging properties of precious metals are generally acknowledged, the purchasing power of precious metals actually increases during deflationary periods. This is because, during deflationary periods, other assets decline more rapidly in price, and by a much greater amount than precious metals. By holding precious metals, the risk of loss of purchasing power is greatly reduced.

Market Risk

Market risk is the risk that the fair value of bullion investments will fluctuate because of changes in market prices or transaction timing. The market price of gold, silver and platinum is impacted by a variety of factors including demand, supply, international events and economic events. The Funds employ a purchase-and-hold investment strategy, with purchases allocated to precious metals as per the Funds investment objectives. On a short term basis the Funds are exposed to market risk as are all other financial assets.

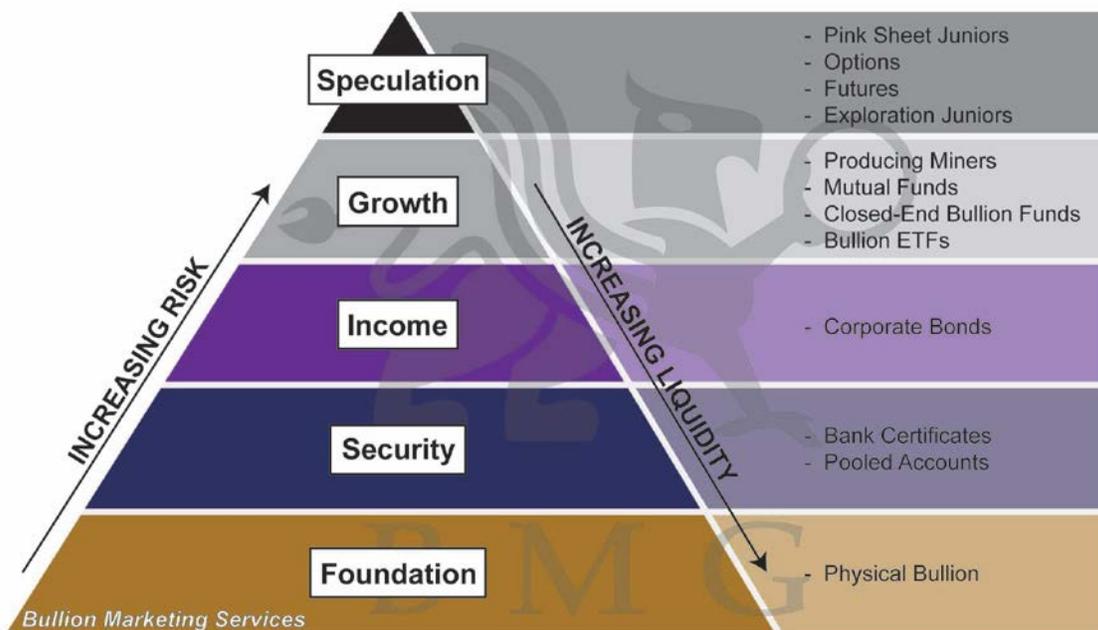
Systemic Risk

Systemic risk encompasses several factors such as market risk, economic risk, inflation risk, default and international risk. Systemic risk can also include terrorist attacks, war, oil supply disruptions, a major stock market crash, the collapse of a major financial institution or a breakdown of the banking system. Systemic risk is not diversifiable with financial assets, and will affect all asset classes including precious metals. However, once any initial liquidation takes place, precious metals tend to outperform all other asset classes and, as such, bullion is sought as a refuge and is traditionally considered a safe haven.

Loss of Capital Risk

Loss of capital risk concerns the loss of part or all of the original value of an investment, dealing with a volatile investment, having to sell at an inopportune time or having the investment not deliver the expected returns. Stocks and bonds are financial assets that can and often do become worthless. You only have to consider the once-blue-chip stocks such as Enron, WorldCom, Air Canada and Nortel to appreciate the real risk of the potential loss of capital in stocks. In 2008 we saw the world's largest bank, Citibank, lose 60 percent of its

value in six months. Gold meanwhile is in its eleventh straight year of gains in US dollars. Real estate can suffer uninsured losses, mortgage foreclosure or environmental factors that can make it almost worthless. Some commodities, such as consumables, can deteriorate over time and lose value. Mining company shares, futures contracts, options, pooled accounts and certificates and other gold derivatives can all become worthless. Conversely, precious metals bullion (which the Funds purchase exclusively), cannot default, the amount of ounces held cannot deteriorate and the value cannot decline to zero. During times of economic stress, banking crisis or currency devaluations, financial assets and real estate can become totally illiquid, while bullion will actually increase in value and maintain its liquidity. As a result of these attributes, precious metals bullion has minimal risk with respect to loss of capital over the long term.



Underperformance Risk

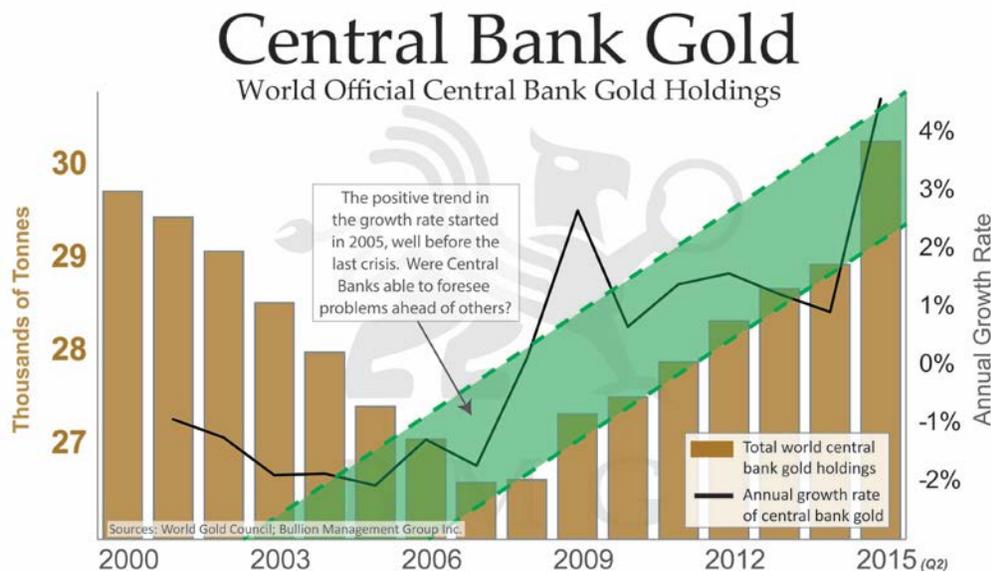
All asset classes are subject to underperformance risk. While we have seen many companies on the stock market significantly underperform in recent years, precious metals too are

susceptible to underperformance risk. This was the case during the 19-year period from 1980 to 1999.

During one of the longest and strongest bull markets in stock market history (1980-2000), throughout which there was a constant increase of global money supply, some central banks reduced their gold holdings with a great deal of publicity. Many central banks leased their gold, which was sold into the marketplace and caused an artificial supply. The estimates of total leased gold vary, but as much as half the central bank holdings of 30,190 tonnes may have been leased out.

At some point in the future, however, this leased gold will have to be repaid or massive defaults will occur. Similarly, economically viable gold mines are becoming more difficult to find and operate.

Since 2009 central banks have become net buyers of gold as they seek to diversify away from the US dollar and other currencies.



Based on the above discussion points, we can see that classification of risk is a complex matter and precious metals actually have less exposure to most types of risk than asset classes that are,

typically and historically, deemed to have lower risk profiles under traditional risk measurement models. Bonds are a perfect example of this. In the present market place, under traditional risk calculation methodology, bonds have a lower risk profile than precious metals. Currently, however, bonds are much more exposed to underperformance risk and purchasing power risk. This is because of uncertainty caused by unsustainable debt levels in most developed economies, as well as increased inflationary pressures brought about by unprecedented high levels of debt and increasing money supply levels.

Types of Risk Measurement

Due to the complex nature of risk classification methodologies and how different types of risk affect asset classes, significant consideration was given to which method of risk analysis would best measure the risk profile for BMG Funds. We will now turn our attention to the different risk analysis methods available and analyze how appropriate they are for our Funds.

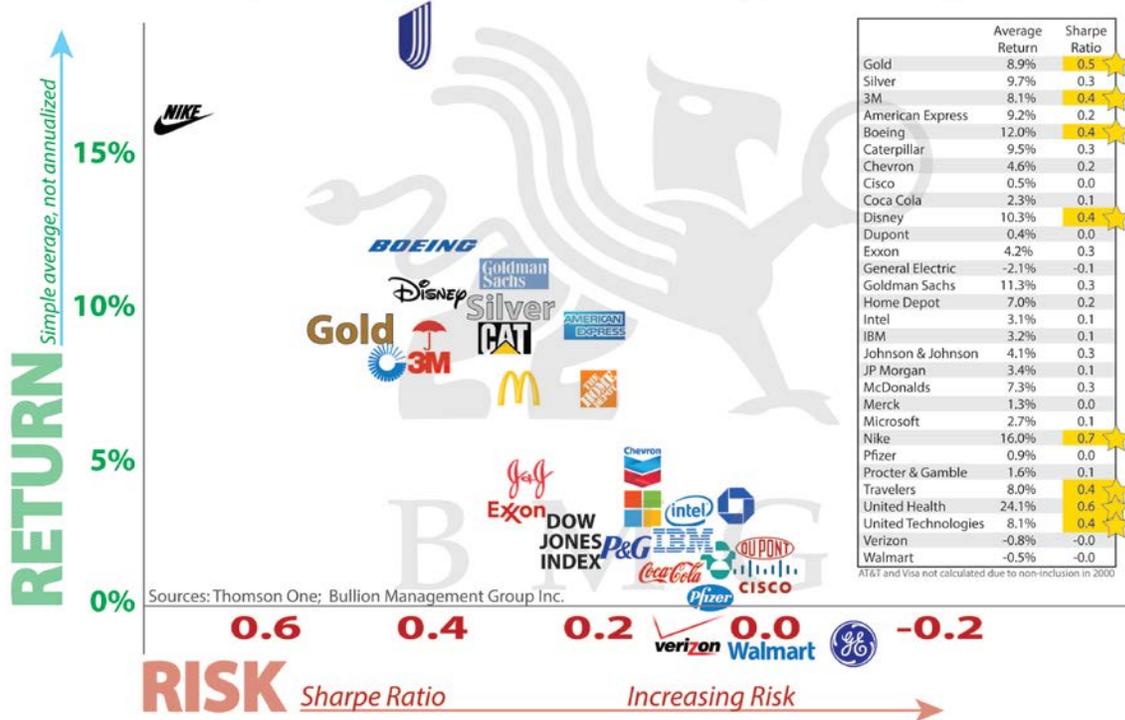
Standard Deviation

Standard deviation is the most commonly used measure of risk and the prevailing standard industry measurement for determining risk classification. Standard deviation calculates the total variance associated with the expected return. It simply measures how volatile or widely spread an investment's (or portfolio's) returns are from its mean, over a period of time. If monthly or yearly returns remain fairly close to the mean, then the standard deviation is small; if returns are widely dispersed from the mean, then the standard deviation is large.

In *The Limitations of Standard Deviation as a Measure of Bond Portfolio Risk*, by Brett Wander and Ron D'Vari, the authors explain in detail the flaws of using standard deviation to measure risk not just limited to bonds, and conclude that "relying on it can often produce misleading and inaccurate conclusions."

How Much Risk is in Your Return?

Dow Jones Stocks and Precious Metals; Jan 2000 - Sept 2015



The chart above shows the standard deviation plotted against returns since 2000 for gold, silver and platinum, as well as for the 30 individual Dow stocks and the Dow itself. Comparing the volatility of gold to the entire Dow index is not a like-to-like comparison, and it is important to note that indices such as the Dow and the TSX have a distinct advantage over individual assets such as precious metals: When a stock performs poorly for a consistent period of time, or the company declares bankruptcy, it is simply removed from the index and replaced with a better-performing stock. Of the 30 Dow stocks in 2000, only 21 remain today. As such, the index is constantly provided with an artificial boost to its performance. Precious metals do not have this luxury. Also, the Dow's 30 stocks provide a naturally lower volatility level from the diversity realized with 30 items, as opposed to one item such as gold.

Standard deviation must also be compared to overall returns. Clearly an investment that generated high returns is not the same as an investment that experienced volatility with low or negative returns.

However, even taking this into account, compared to the individual Dow components, gold's volatility is less and its performance is higher. Gold has outperformed 93% of the Dow Jones members in terms of Sortino Ratio. Gold and platinum place in the upper left quadrant of low risk and high returns, while most of the Dow components fall into the lower right quadrant of high risk with lower returns.

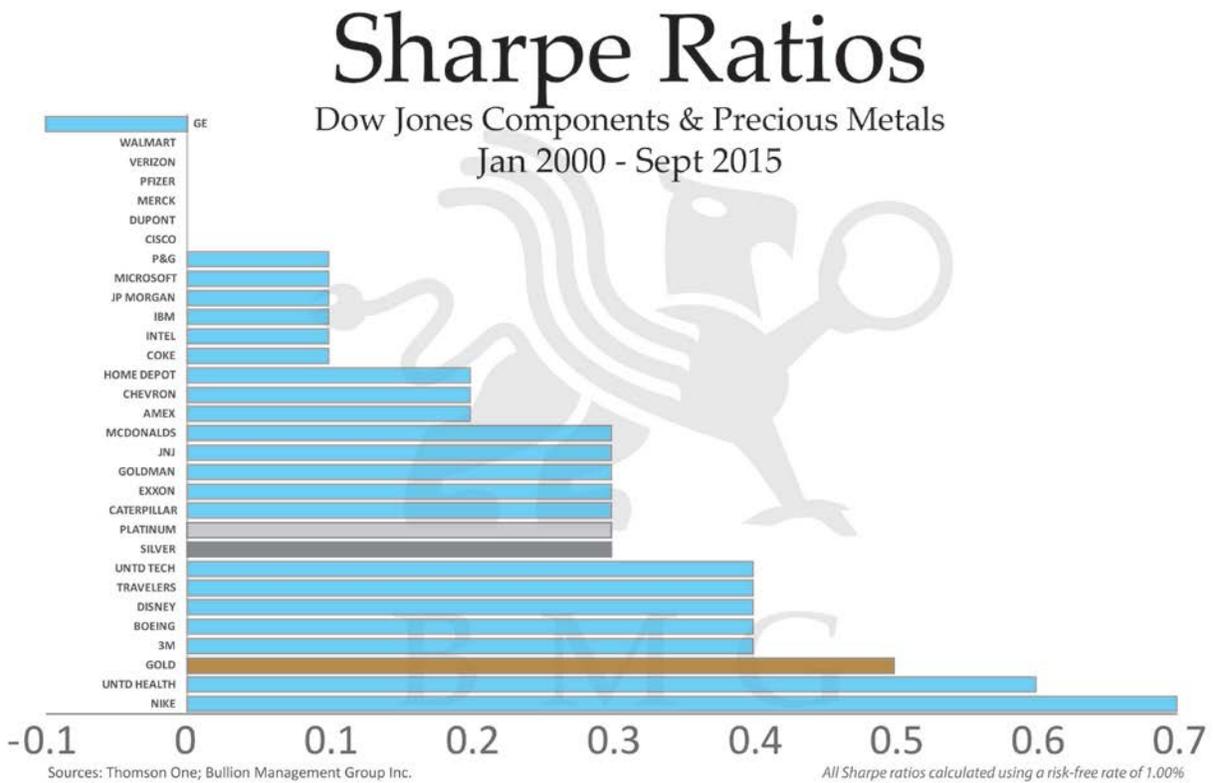
Perhaps the most important criticism of standard deviation as a measure of risk is that it assigns equal importance to both positive and negative deviation. Fluctuations in returns that occur above the mean result in the same negative risk assignment as those that occur below the mean, whereas only negative deviation is of concern in any measurement of investment risk. This is inherently misleading to investors who are only concerned with downside volatility.

Sharpe Ratio

The Sharpe Ratio (risk-adjusted rate of return) was developed by Professor William Sharpe in 1966, and is the most commonly used measure of risk-adjusted return. It measures the amount of excess return the investor is receiving in exchange for the extra volatility assumed in holding a riskier asset. This is a crucial advantage over standard deviation as it allows an investor the ability to quantify an investment's risk relative to its investment performance in order to decide if a financial product is worth the risk. It is broken down into three components: asset return, risk-free return and standard deviation of return. After calculating the excess return, the Sharpe Ratio is obtained by dividing that excess return by the asset's standard deviation. This ratio or risk-free rate of return is used to gauge whether the investor

is being properly compensated for the additional risk incurred by investing in the risky asset. Traditionally, the risk-free rate of return is the shortest-dated government Treasury bill.

The interpretation of the Sharpe Ratio is straightforward: the higher the better. A high Sharpe Ratio means that the investment delivered a high return for its level of risk or volatility, which is always good. As a result, using the Sharpe Ratio provides a more meaningful insight to investment performance than simply looking at returns or volatility separately. The chart below compares the Sharpe Ratios of gold, silver and platinum against the Dow components—all three metals are top performers.



While we determined that the Sharpe Ratio provided a more reliable indicator of risk than standard deviation alone, it still considers volatility on the upside as well as the downside.

Sortino Ratio

While the Sharpe Ratio is the most famous risk/return measure, others have been developed. The Sortino Ratio is similar to the Sharpe Ratio, but its denominator focuses solely on *downside* volatility, not overall volatility.

Upside volatility being used in a way that increases the risk profile of a financial product is misleading. When a financial product is purchased, the aim is for that product is to go up. Measuring volatility in upward movements of the product is disingenuous, as the product is performing as desired. It is only downside volatility that is relevant and unwanted. This is a serious flaw in the calculation of both standard deviation and the Sharpe Ratio as a measure of risk.

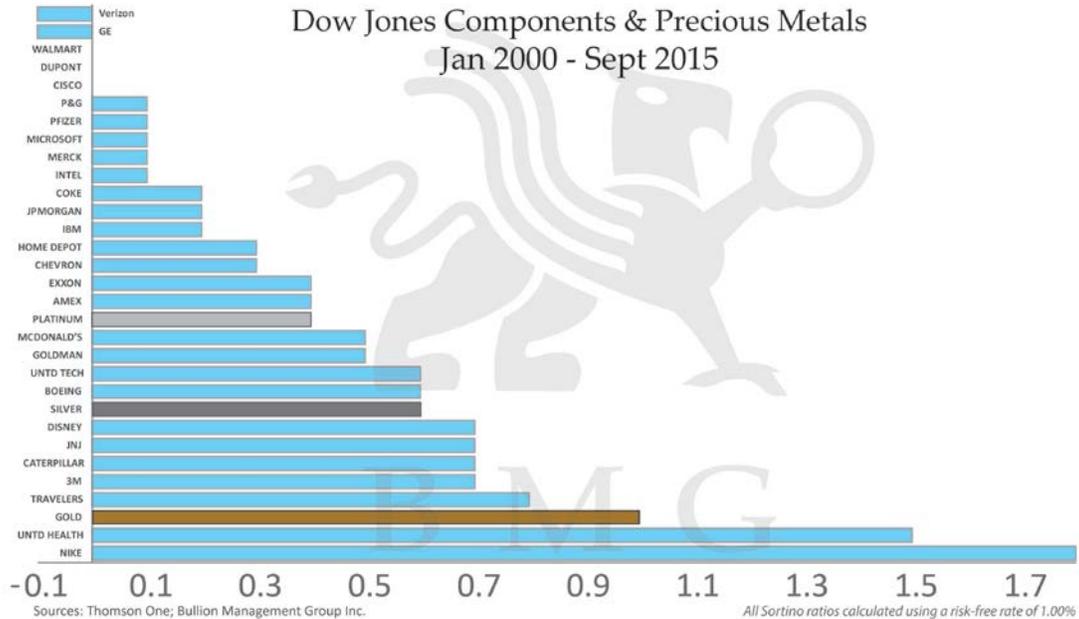
The higher the Sortino Ratio the better, as the ratio represents the performance of the investment per unit of downside risk. An investment with a losing performance or more downside risk would have a negative Sortino Ratio.

The following chart compares the Sortino Ratio for gold, silver and platinum against the Dow components. Again, it is clear that gold, silver and platinum represent the lower risk, since a great deal of the volatility has been on the upside, while the Dow components have primarily experienced downside volatility.

As such, the Sortino Ratio is a more meaningful measure of investment risk than standard deviation.

Sortino Ratios

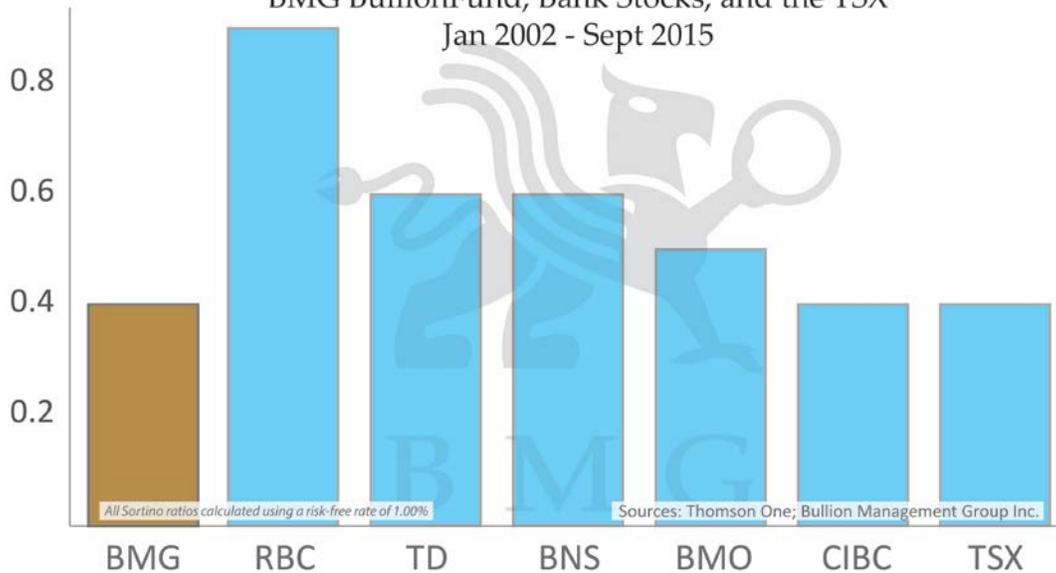
Dow Jones Components & Precious Metals
Jan 2000 - Sept 2015



To illustrate this point further, we compared the Fund (BMG 100) with four of the major banking shares in Canada, and the TSX. These are traditionally seen as low risk, low volatility securities. The following chart shows that, using the Sortino Ratio, both the major banks and the TSX demonstrate higher risk than the Fund. This is because all of the banks suffered tremendous downside during the 2008 financial crisis, as did many of the components of the TSX, whereas the Fund performed extremely well in comparison. The Sortino Ratio reflects this crucial consideration far more effectively than standard deviation.

Sortino Ratio

BMG BullionFund, Bank Stocks, and the TSX
Jan 2002 - Sept 2015



We trust the above analysis will help investors understand risk in a more comprehensive way. **As a result, in the Manager's opinion, a risk rating of "Medium" for the Funds is conservative.**