REX
Exchange Traded Funds

Is Gold Smarter than Smart Beta?

This unique asset hedges when you most need it to and has experienced positive returns over time

Gold is a unique asset. It serves as both a safe haven and a diversifier for equity portfolios. Over time, it has provided a hedge when you need it most—but it also has served as a less correlated source of return when the market has risen. From the end of 1998 to the end of 2016, gold's annualized return was 8.0% compared to the S&P 500 Total Return Index's 5.4%.[1] There have been four calendar years during this stretch where the S&P 500 had negative performance, 2000, 2001, 2002 and 2008. Gold's average annual return during those years was 6.7% compared to an average loss of -20.0% for the S&P 500 Total Return Index.

Like gold, equity allocations that track factors such as growth, value, dividend yield, and minimum volatility have proven to have shown positive returns over time. However, they lack the characteristics of a gold overlay during market drawdowns. In other words, they perform well when markets rise but fall with the market during drawdowns.

Through 2016, gold remained a diversifier, with a -0.35 correlation to the S&P 500 Total Return Index. Despite such negative correlation, both gold and the S&P 500 experienced positive performance in 2016, with gold gaining 8.14% and the S&P 500 Total Return Index gaining 11.96%. That correlation comes into perspective when you compare it to leading smart beta indexes such as the Russell 1000 Growth Index, the Russell 1000 Value Index, the Dow Jones Select Dividend Index, and the MSCI USA Minimum Volatility Index. All four indexes had correlations with the S&P 500 above .80 during this same period.[2]

That kind of similarity should not come as a surprise to investors because the overlap between index components of these smart beta indices and index components of the S&P 500 is very large. Gold, on the other hand, arguably has zero overlap simply because it belongs to an entirely different asset class with differing risk and return drivers.

During the year, we have seen two main drawdown periods for the market[3]:

- China Downturn (Jan 4–Feb 11)
- Brexit (June 8–27)

In both cases, gold was a safe haven. However, as the market rebounded, gold managed to preserve much of these gains year to date.

Index	China Downturn (Jan 4 – Feb 11)	Brexit (Jun 8 – Jun 27)	2016
S&P 500 Total Return Index	-10.3%	-5.2%	11.96%
Russell 1000 Growth Total Return	-11.2%	-5.5%	7.08%
Russell 1000 Value Index Total Return	-10.6%	-5.3%	17.34%
Dow Jones Select Dividend Index	-2.3%	-2.8%	21.98%
MSCI USA Minimum Volatility Daily Gross TR USD	-4.7%	-0.8%	10.67%
Spot Gold	17.7%	6.3%	8.14%
S&P 500 Dynamic Gold Hedged Index	6.1%	0.7%	20.98%

Source: Bloomberg. Note: YTD calculated from 12/31/15 - 12/31/2016

[1] Source: Bloomberg

[2] During this time period, the Russell 1000 Growth Total Return had a correlation of 0.97 , the Russell 1000 Value Index Total Return had a correlation of 0.97, the Dow Jones Select Dividend Index had a correlation of 0.87, and the MSCI USA Minimum Volatility Daily Gross TR USD had a correlation of 0.88. Source: Bloomberg.

[3] Reflects the two largest peak-to-trough drawdowns for the S&P 500 Total Return Index during the 2016 calendar year.

You can access gold in a capital-efficient way

In an investment portfolio with finite assets, implementing a diversification strategy can mean de-allocating from potential exposure that has embedded long-term gains, ultimately producing a suboptimal mix of strategies. Similar to currency-hedged equity investing, gold-hedged equity investing "overlays" a core investment, such as US equities, with long gold futures. This approach provides a portfolio with notional exposure to an amount of gold with a value approximately equal to 100% of the underlying stock portfolio's value, using a small additional up-front cash outlay.

This approach contrasts with other ways of obtaining gold exposure because it preserves the use of capital while being able to match notional dollar weights. For instance, if you have $1 million in S&P 500 exposure and want to match it with $1 million in gold, the total investment necessary would be $2 million. Products that track gold futures overlaid on market cap–weighted stock indices would only require $1 million to get the same exposure. Gold overlay indices, such as the S&P 500 Dynamic Gold Hedged Index and the FTSE Emerging Gold Overlay Total Return Index, reflect the theoretical performance of this capital-efficient way to capture gold's return streams without having to deallocate from a core US and developed market large-cap equity portfolio.

Unlike incorporating other diversifying factor indexes, incorporating gold does not require a deallocation of the existing portfolio, yet it retains and enhances the effect of diversification. The improved performance of combining two assets that both have positive historical returns should be obvious—but the risk adjusted return profile may also increase where the assets are diversified. For example, the Sharpe ratio since the end of 1998 of the S&P 500 Total Return Index has been 0.27 compared to the S&P 500 Dynamic Gold Hedged Index's Sharpe of 0.43.[4] The Sharpe ratio is a common metric used to describe historic return per unit of risk.

Unlike Smart Beta, Gold has Provided Both Downside Protection and Uncorrelated Returns to Equities

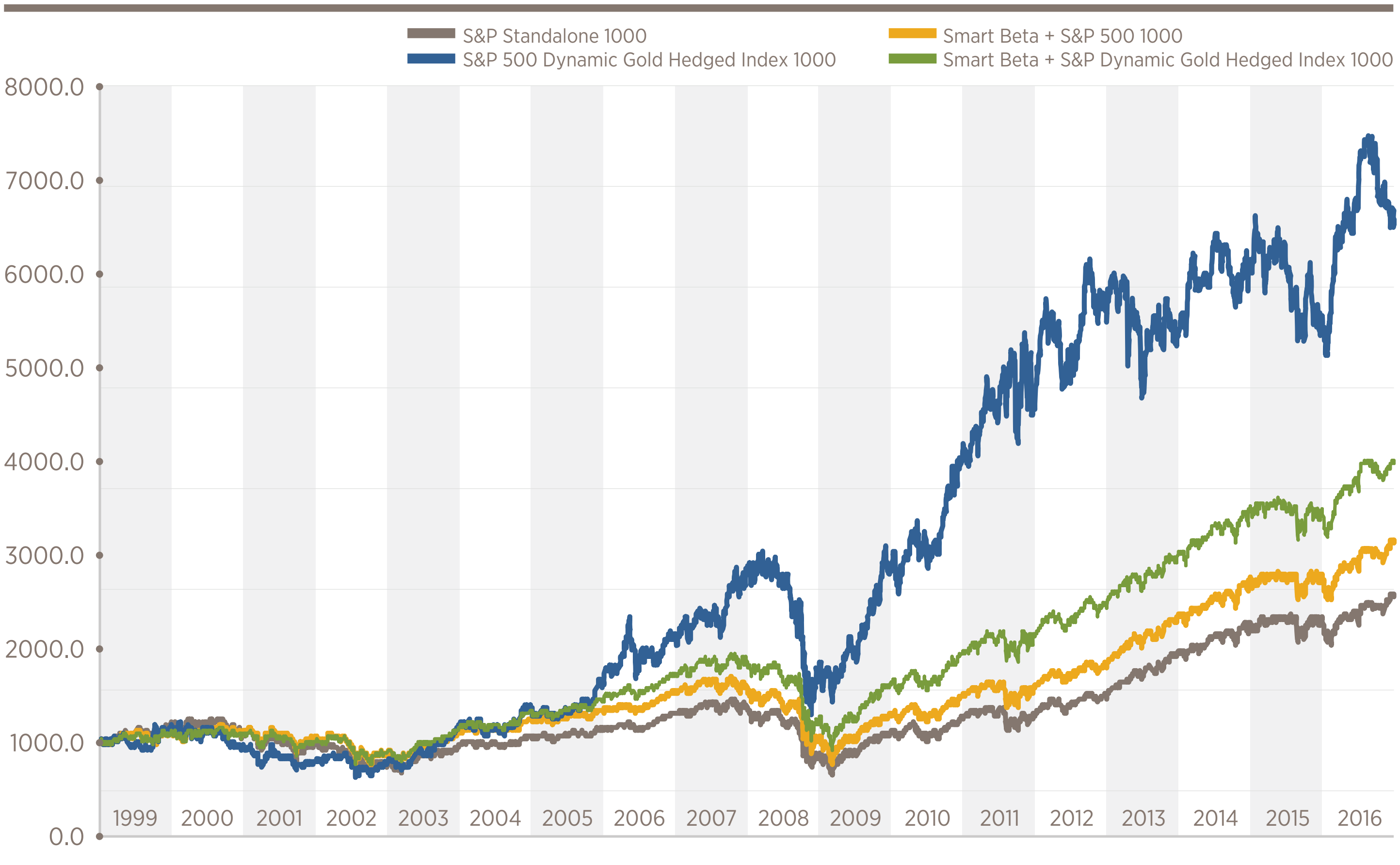
More and more, investors are using "smart beta" indexing to augment their core market cap–weighted equity portfolios. When speaking about smart beta, investors should also think about the return streams of products offering a gold overlay as they arguably have both the beta and the "smart" component. This is not to say that gold has a smart beta component to it, but a gold overlay may accomplish what investors seek from smart beta products – low correlation combined with positive historical returns. A common method of employing smart beta strategies is to equally weight products that track common equity factors such as growth, value, dividends, and minimum variance. A typical equally weighted portfolio that combines such common equity factors with the S&P 500 ultimately mimics the movement of the S&P 500. However, a gold overlay produces a totally different return stream, as a result of the lack of overlap. The portfolio benefits of incorporating a gold overlay strategy also persist through time. In years when investors need low correlation—such as the fallout from the tech bubble and the 2008 financial crisis—the S&P 500 Dynamic Gold Hedged Index outperformed the S&P 500, but it also outperformed during the subsequent rebound. This trend contrasts with the factor-based smart beta exposures noted below.

Index	1999–2002	2002–2007	2008	2009–2016
S&P 500 Total Return Index	-37.6%	82.9%	-37.0%	194.47%
Russell 1000 Growth Total Return	-55.5%	77.1%	-38.4%	223.46%
Russell 1000 Value Index Total Return	-14.7%	97.9%	-36.8%	176.72%
Dow Jones Select Dividend Index	35.6%	80.9%	-31.0%	192.66%
MSCI USA Minimum Volatility Daily Gross TR USD	-19.7%	75.7%	-25.7%	190.91%
S&P 500 Dynamic Gold Hedged Index	-29.9%	257.8%	-35.0%	258.92%

Source: Bloomberg.

[4] *Based on daily returns from 1/1/1999 - 12/31/2016. The Sharpe ratio has been calculated assuming a risk-free rate of zero.*

When a hypothetical strategy is constructed that equally weights the S&P 500 Dynamic Gold Hedged Index and each of the above four smart beta indices, representing growth, value, dividends, and low volatility factors,[5] the return stream tracks the S&P 500 Total Return, but with a higher absolute return and Sharp Ratio for the period of 1999 to the end of 2016. The same is true when measured against a similar hypothetical strategy that includes the S&P 500 Index in lieu of the S&P 500 Dynamic Gold Hedged Index.[6]



Conclusion

Investors who are thinking strategically about the benefits of "smart beta" might be surprised to find that gold hedged investing provides some of the same characteristics of "smart beta" but with potentially better long term historical performance. The predominant goal of incorporating smart beta with cap weighted equity allocations is often to diversify and enhance returns while reducing overall correlation. Empirical evidence suggests that a gold overlay may better accomplish these objectives than smart beta alone. Obtaining gold exposure no longer requires deallocating from existing exposure because gold futures do not require substantial up-front collateral Gold's idiosyncratic return drivers and lack of overlap with the S&P 500 are truly diversifying qualities, and obtaining gold's return streams does not require deallocating from existing assets. Combining a gold overlay with a portfolio of smart beta factors has the potential to produce a better risk-adjusted return over time.

[5] Hypothetical strategy assumes that indices are rebalanced to an equal weight on a daily basis.

[6] Absolute return for the hypothetical strategy that includes the S&P 500 Dynamic Gold Hedged Index over the period was 296%, versus 156% for the S&P 500 Total Return Index and 213% for the hypothetical strategy that includes the S&P 500 Total Return Index. The Sharpe ratio, assuming a zero risk free rate, was 0.42 for the hypothetical strategy that includes the S&P 500 Dynamic Gold Hedged Index, versus 0.27 for the S&P 500 TR and 0.36 for the hypothetical strategy that includes the S&P 500 Total Return Index.

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