White Paper

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Portfolio Benefits of The Currency Asset Class

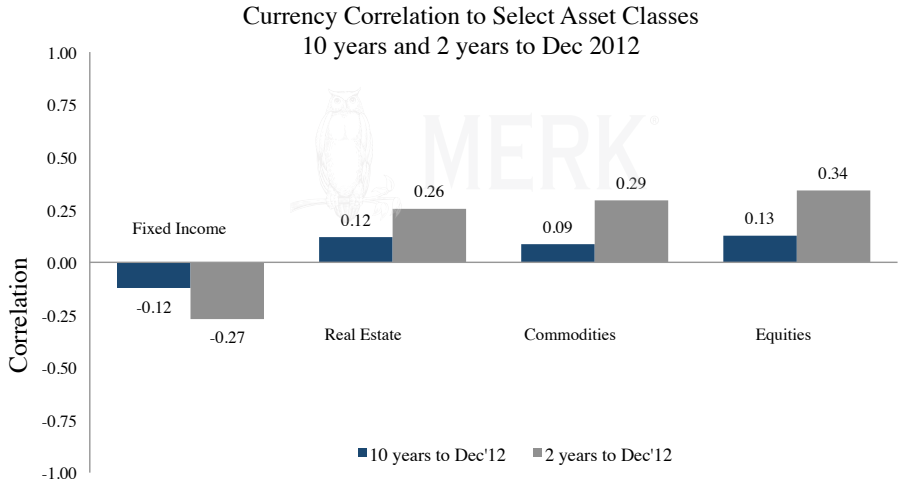
MERK FUNDS™
The Authority on Currencies™

Investors are actively seeking to add uncorrelated asset classes to their portfolios in an attempt to protect against downside risks. However, as many asset classes continue to have a tendency to move in the same direction simultaneously, it has become increasingly difficult to find assets that exhibit such return characteristics. The currency asset class may fill this void. Amongst its attributes, the currency asset class has historically displayed low correlations to traditional asset classes, such as equities and fixed income, and offers potential profit opportunities given its unique market structure. As such, the addition of a currency component may enhance the risk/return profile of a portfolio.

Besides, the current low yield environment has encouraged investors to "chase yield" by over-allocating their portfolios to stocks and by seeking bonds with longer dated maturities, thereby assuming a greater amount of risk for their return. In addition to its beneficial attribute as portfolio diversifier, currencies as a stand-alone investment class has a potentially favorable risk-return relationship that may act as a viable alternative to equity and especially fixed income investments.

Low Correlation to other Asset Classes

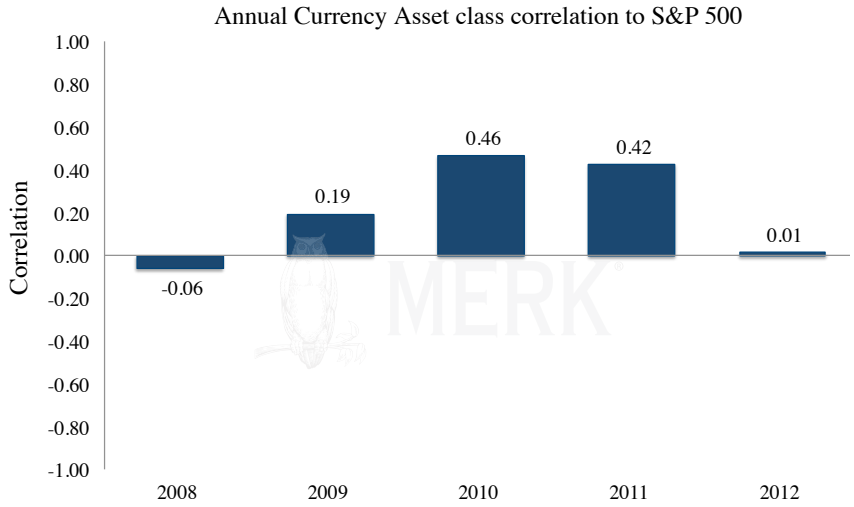
During the run-up to the credit crisis, asset classes became increasingly correlated, and that phenomenon has continued to this day. Most asset classes generally moved up in tandem approaching the credit crisis; most asset classes moved down together as the credit crisis unfolded; and, broadly speaking, most asset classes have continued to move in lock-step ever since. In such an environment, it may be more important than ever to add uncorrelated assets to portfolios. However, with so many asset classes moving in the same direction simultaneously, investors have limited options to protect against downside risk. It is within this context that the addition of the currency asset class may provide excellent potential. Currency investments have historically exhibited very low correlation to many other asset classes, as evidenced by the following chart.



Data Source: Merk Investments, Bloomberg
All calculations based on daily data (from 12/31/2007 to 12/31/2012)
The following indices are used as proxies for the respective asset classes:

Currency:	Deutsche Bank Currency Returns Index
Equities:	S&P 500 Index
Real Estate:	NAREIT Index
Commodities:	Deutsche Bank Commodities Index

Moreover, whereas many other asset classes have become increasingly correlated, the currency asset class has maintained its low correlation over recent periods, highlighted by the two-year data in the chart above, and the annual correlation to equities in the following chart.



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In particular for 2012, the correlation to equities has decreased dramatically which highlights the current relevance of currencies in portfolio construction decisions. To a large extent, the currency asset class exhibits very low correlations to other asset classes because currency returns tend to be driven by factors different from those that drive returns of traditional asset classes.

The effect of many non-profit seeking entities in the currency space may enhance the uncorrelated attribute of the asset class. For example, multi-national corporations might contract to buy or sell certain currencies for the primary reason of hedging against currency risk on future earnings or procurement expenses; governments and central banks are active in managing foreign currency reserves; even tourists are active currency market participants – when tourists spend money on souvenirs, food or any travel related expense in a foreign currency they influence the price of that currency, even if they are unaware of it. Such non-profit seekers can have substantial influence on currency price movements and valuations. The effect of these entities' actions can cause currency prices to move in directions that are largely uncorrelated with most other asset classes.

Additionally, many currency investment strategies are aimed at profiting from trends that are completely unrelated to other asset classes, and therefore also generate return series that are uncorrelated to other asset class returns. An often overlooked attribute of the currency asset class is that when an investor purchases one currency, the investor is also, by implication, selling another currency, as currencies always trade in pairs. In fact, many profit seeking investment strategies aim to take advantage of perceived valuation differentials across currency pairs. As an example, an investor may aim to profit from apparent price disparities between the Australian dollar (AUD) and the New Zealand dollar (NZD). The return series generated from such a currency pair is likely to differ from, and be uncorrelated to, returns of the broad stock market, or most asset classes in general.

Unique Profit Opportunities

The unique structure of the currency market may lead to inherent inefficiencies, and possible profit opportunities as a result. In the stock market, the vast majority of market participants invest for the specific motivation of making positive investment returns. By contrast, and as discussed above, in the currency space, many entities do not have the primary motivation of seeking profits from currency price movements. Importantly, a substantial propor-

tion of currency market turnover is derived from these non-profit seeking entities. Academic research concludes that profit seeking participants comprise only a small fraction of total currency market turnover; non-profit seeking participants generate the vast majority of total currency turnover.[1]

As a result, while the currency market exhibits many prerequisites economists consider vital for an "efficient market" (i.e. the most liquid market in the world and extremely low transaction costs), the sizeable presence of non-profit seekers may actually create many inefficiencies. The foundation of the classical efficient market hypothesis (EMH) assumes that market participants are risk neutral and behave rationally to maximize expected utility. Expected utility is derived from expected return and expected risk. However, as described above, many currency market participants do not act rationally (as it relates economically to the EMH), in that they are not transacting to seek a profit. These market participants may not even consider the expected return of currency transactions. As a result, inefficiencies may be prevalent in the currency market.

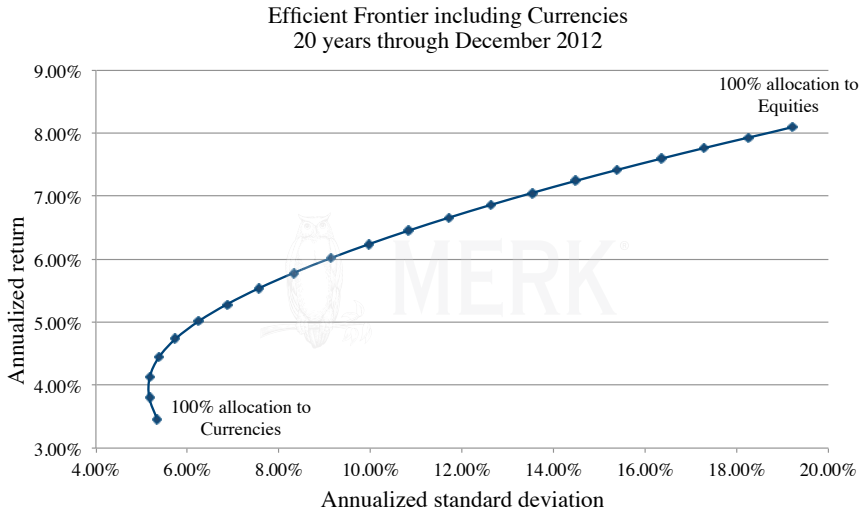
Furthermore, the currency market provides a fertile ground for expressing views on what we term "the mania of policy makers." Today's financial markets may be primarily driven by policy makers and their policies rather than by underlying fundamentals. This dynamic may be most observable in the currency markets. In other words, policy announcements, namely in the realm of monetary policy, may translate most directly into movement in the currency market, and more indirectly into the equity and fixed income markets. Whether or not you agree with the policy decisions of any given country, policy directions and shifts in policy may be predictable. The academic ideologies of policy makers and the data that they look at to determine policy may be relatively well understood provided the proper due diligence and framework. Like the poker expression: "play the players, not the cards," anticipating the next move of policy makers may provide an opportunity to generate excess returns through active management in the currency space.

The market inefficiencies unique to the currency space, combined with macroeconomic trends and global dynamics, may lead to profit opportunities unobtainable in traditional markets. As such, a professionally managed basket of currencies may provide investors with positive absolute returns over time, while providing valuable diversification benefits.

Portfolio Benefits

Due to the uncorrelated nature of the currency asset class, and its upside profit potential, the addition of a currency component into a portfolio may enhance the risk/return profile. We can exemplify this point by using annualized equity returns for the past 20 years (represented by the S&P 500 Index) and annualized currency returns for the same time period (represented by the Deutsche Bank Currency Returns Index [DBCR Index][2]), and constructing hypothetical portfolios with a range of allocations to each. Given the low correlation between currencies and equities, a portfolio comprised of the two improves the risk/return profile, as indicated by the efficient frontier shown in the chart below.[3]

1 *Sager, M. & Taylor, M. (2005) "Under the Microscope: The Structure of the Foreign Exchange Market"*
2 *The DBCR Index replicates the three most widely employed currency strategies – carry trade, momentum and valuation – and wraps them into a single non discretionary, rule based index.*
3 *For sake of simplicity, we limit ourselves to positive weights for each asset class comprising example portfolios throughout this report.*



Data Source: Merk Investments, Bloomberg
All calculations based on daily data (from 12/31/1992 to 12/31/2012)
The following indices are used as proxies for the respective asset classes:
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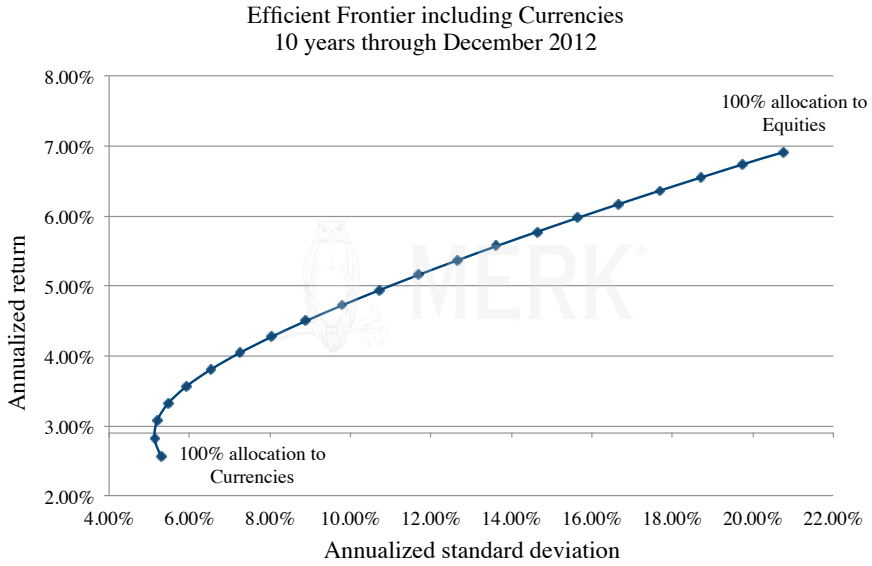
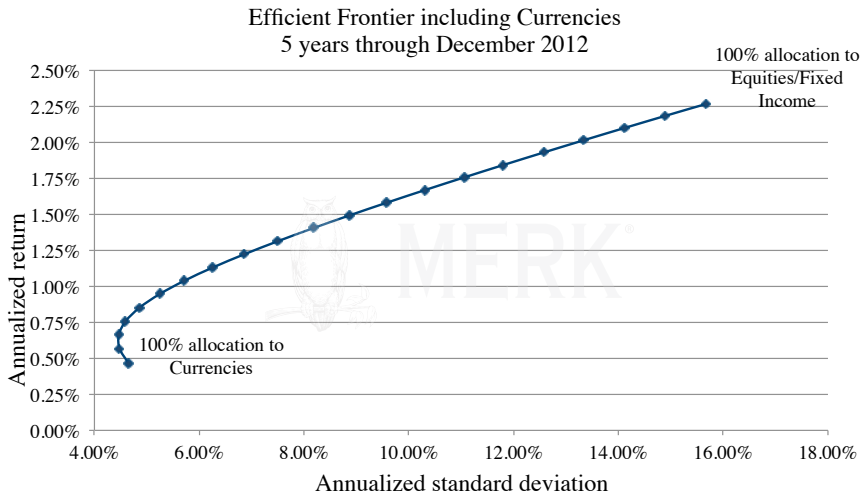
Equities: S&P 500 Index

Over the past 10 years, returns were materially affected by the global credit crisis, which not only exhibited a period of depressed market returns but also increased levels of co-variance across many asset classes. As a consequence, some riskier asset classes actually declined in value, resulting in lower returns for higher levels of risk. In previous years, the resulting impact in the 10-year risk/return relationship was visible in the below chart with a significantly shortened efficient frontier. While conditions in equity markets have improved, we observed that currencies maintained their property as valuable portfolio diversifiers, helping to improve the risk/return profile of various hypothetical portfolios. The following chart displays these hypothetical portfolio returns for the same range of equity/currency allocations as above, for the past 10 years.

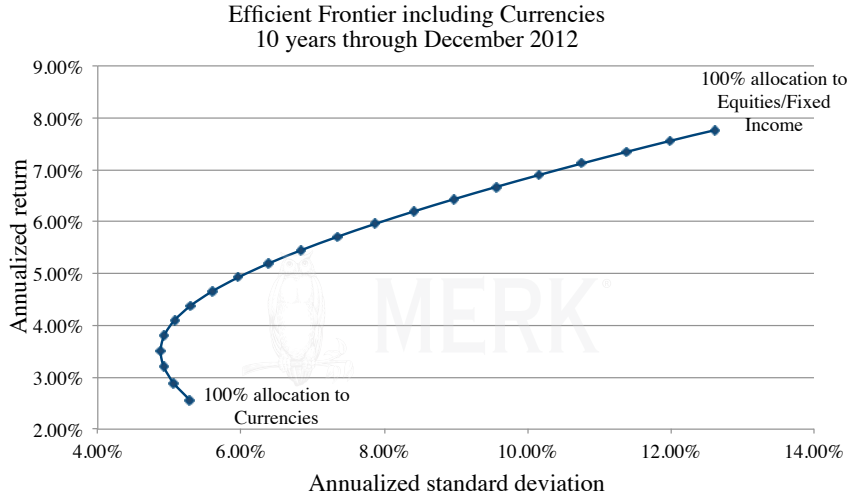


Data Source: Merk Investments, Bloomberg
All calculations based on daily data (from 12/31/2002 to 12/31/2012)
The following indices are used as proxies for the respective asset classes:
Currency: Deutsche Bank Currency Returns Index
Equities: S&P 500 Index

Maybe more useful for investors is to assess the benefits the currency asset class may offer when combining it with a portfolio comprising both equities and fixed income. The following efficient frontiers highlight the potential diversification benefits the currency asset class may provide, using the previous five years and ten years of data, respectively. These efficient frontiers use the Dow Jones Moderate U.S. Portfolio Index as a proxy for a portfolio compromised of equities and fixed income, as well as a cash component. These efficient frontiers graphcially display the diversification attribute of the currency asset class across two different timeframes.



Data Source: Merk Investments, Bloomberg
All calculations based on daily data (from 12/31/2007 to 12/31/2012)
The following indices are used as proxies for the respective asset classes:
Currency: Deutsche Bank Currency Returns Index
Equities / Fixed Income: Dow Jones U.S. Moderate Index



Data Source: Merk Investments, Bloomberg
All calculations based on daily data (from 12/31/2002 to 12/31/2012)
The following indices are used as proxies for the respective asset classes:
Currency: Deutsche Bank Currency Returns Index
Equities / Fixed Income: Dow Jones U.S. Moderate Index

In an environment with increased correlations across most asset classes, portfolio diversification is of the utmost importance. The currency asset class may be attractive in this respect, as it exhibits very low correlations to many asset classes. Moreover, the unique attributes of the currency asset class may lead to inherent inefficiencies and profit opportunities. As such, currencies may provide investors with valuable portfolio diversification benefits, possibly providing superior risk/return characteristics to an overall portfolio.

* * *

The Merk Funds ("Funds") may be appropriate for you if you are pursuing a long-term goal with a currency component to your portfolio; are willing to tolerate the risks associated with investments in foreign currencies; or are looking for a way to potentially mitigate downside risk in or profit from a secular bear market. For more information on the Funds and to download a prospectus, please visit www.merkfunds.com.

Investors should consider the investment objectives, risks and charges and expenses of the Funds carefully before investing. This and other information is in the prospectus, a copy of which may be obtained by visiting the Funds' website at www.merkfunds.com or calling 866-MERK FUND. Please read the prospectus carefully before you invest.

Since the Funds primarily invest in foreign currencies, changes in currency exchange rates affect the value of what the Funds own and the price of the Funds' shares. Investing in foreign instruments bears a greater risk than investing in domestic instruments for reasons such as volatility of currency exchange rates and, in some cases, limited geographic focus, political and economic instability, emerging market risk, and relatively illiquid markets. The Funds are subject to interest rate risk, which is the risk that debt securities in the Funds' portfolio will decline in value because of increases in market interest rates. The Funds may also invest in derivative securities, such as forward contracts, which can be volatile and involve various types and degrees of risk. If the U.S. dollar fluctuates in value against currencies the Funds are exposed to, your investment may also fluctuate in value. The Merk Currency Enhanced U.S. Equity Fund may invest in exchange traded funds ("ETFs"). Like stocks, ETFs are subject to fluctuations in market value, may trade at prices above or below net asset value and are subject to direct, as well as indirect fees and expenses. As a non-diversified fund, the Merk Hard Currency Fund will be subject to more investment risk and potential for volatility than a diversified fund because its portfolio may, at times, focus on a limited number of issuers.

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