

Viewpoints: Don't Put All of Your Eggs in One Basket

Asset Allocation & Investment Strategy

Barbara M. Reinhard, CFA

Chief Investment Strategist barbara.reinhard@credit-suisse.com

Jimmy M. James

jimmy.james@credit-suisse.com

Ryan P. Sullivan

ryan.sullivan@credit-suisse.com

"It is the part of a wise man to keep to himself today for tomorrow, and not venture all his eggs in one basket."

-Sancho Panza, dutiful squire to Don Quixote

"Don't put all of your eggs in one basket." This sage aphorism has been quoted for centuries, including in Cervantes's classic novel, *Don Quixote*. Since the market recovery from the financial crisis in March 2009, many investors have been searching for assets that have low correlations of returns to one another. But many asset classes have been moving in lockstep, to the downside in 2008 and interconnected through the recovery of asset prices. However, there is an interesting dynamic that has been playing out since the end of 2011: correlations of returns among the broad asset classes to the S&P 500 Index are starting to decline, in some cases, remarkably. In our view, this means that asset allocation is likely to be a far bigger determinant of investor returns than it has been in the recent past.

A Word on Correlation

Correlation is, in our opinion, one of the most misunderstood concepts in financial markets. To lay out the case, correlation is a statistical measure of how two variables move in relation to each other, and it describes the strength and direction of the relationship. A perfect positive correlation will have a reading of +1 and a perfect negative correlation will have a reading of -1.

Table 1: Three-Year Rolling Correlations of Twelve-Month Returns as of Dates Listed

S&P 500 Index Correlation to:	Dec-2008	Dec-2011	Apr-2013	Dec-11-Apr-13 Change
Russell 2000 Index	0.92	0.98	0.90	-0.09
MSCI EAFE Index	0.98	0.96	0.89	-0.08
MSCI Europe Index	0.99	0.96	0.88	-0.08
MSCI Japan Index	0.74	0.96	0.66	-0.29
MSCI Emerging Markets Index	0.89	0.88	0.75	-0.14
Barclays Municipal Bond Index	0.78	0.33	(0.52)	-0.85
Barclays High Yield Bond Index	0.96	0.82	0.61	-0.22
FTSE NAREIT Index	0.82	0.95	0.62	-0.33
Dow Jones Credit Suisse Core Hedge Fund Index*	0.96	0.97	0.79	-0.17
Dow Jones Credit Suisse Long/Short Equity Index*	0.96	0.94	0.88	-0.07
Dow Jones Credit Suisse Global Macro Index*	0.55	0.89	0.28	-0.61
Dow Jones Credit Suisse Event Driven Index*	0.98	0.92	0.76	-0.16

Data as of 4/30/2013, Hedge Fund Indices noted with "*" are as of 3/31/2013; most recent data available

Source: Bloomberg, Asset Allocation and Investment Strategy

Note: Hedge fund indices may not be investible as an index

Note: Correlation measures the degree and relationship between the returns of two assets on a scale of +1 to -1. A correlation of +1 indicates the returns of the two assets move in tandem. A correlation of -1 indicates the returns move in opposite directions.

Uncorrelated variables will have a reading of zero. In reality, perfectly uncorrelated variables are rare; in finance, most asset classes have some relationship to one another. While correlation is important, it is not the only statistical measure we use to evaluate an asset class or to formulate an asset allocation strategy.

Correlations of Returns Have Changed, in Some Cases, Meaningfully

To evaluate this trend of declining correlations of returns, we analyzed the correlations of several widely held asset classes versus the S&P 500 Index, our proxy for US equities. For each asset class, we calculated the rolling three-year correlations of returns to the 12-month returns of the S&P 500 Index. While three years is a relatively short time period, it captures the directional change at the margin of correlations of returns.

As seen in Table 1, many asset classes had very high correlations of returns in 2008, in part due to financial market leverage unwinding and the liquidity crunch during the crisis. What we found telling were the correlations from the end of 2011 to April 2013, where we have seen the relationships of asset classes that had been tightly correlated starting to drift lower. Within equities, the correlations of returns between the S&P 500 Index and European and Japanese equity indexes have started to decline. This trend makes regional allocations within portfolios more powerful drivers of total returns than if correlations were relatively high or climbing. Within fixed income, the correlations of returns of the S&P 500 Index to municipal bonds and, to a lesser extent, high yield have continued to decline steadily from the tightly correlated

environment of 2008, especially over the past year. As for hedge funds, the decline in correlations has been not only at the broad index level, but also within the key substrategies of Long/Short Equity, Global Macro, and Event Driven.

It Is Not Only at the Asset Class Level - Correlations among Sectors Have Changed, Too

A snapshot of S&P 500 Index sector correlations reveals a picture similar to our asset class analysis. All ten S&P 500 Index sectors have seen their correlations to the broad S&P 500 Index decrease since December 2008 (see Table 2). While the declines were across-the-board, the most pronounced drops have been in Utilities, Telecom, and Health Care. We think this is a result of investors' continuing to look to the equity market for supplemental income generation. Given ultra-low yields in fixed income investments, market participants have continued to favor sectors with high dividend yields such as Utilities (3.9% yield), Consumer Staples (2.8%), and Health Care (1.9%). This hunt for yield has caused the performance of these sectors to diverge from the broader market, taking on return patterns of their own, and, in turn, causing correlations to fall measurably.

Why Are Correlations Declining?

It is worth asking why correlations are falling to determine if the trend will continue and how we can benefit from it. In our opinion, there are three main reasons correlations are declining. The first reason is global central bank

Table 2: Three-Year Rolling Correlations of Twelve-Month Returns as of Dates Listed

S&P 500 Index Correlation to:	Dec-2008	Dec-2011	Apr-2013	Dec-11-Apr-13 Change
S&P 500 Index Utilities Sector	0.91	0.90	0.14	-0.76
S&P 500 Index Health Care Sector	0.93	0.94	0.53	-0.42
S&P 500 Index Consumer Staples Sector	0.86	0.98	0.67	-0.30
S&P 500 Index Technology Sector	0.92	0.94	0.69	-0.25
S&P 500 Index Financials Sector	0.92	0.95	0.75	-0.21
S&P 500 Index Energy Sector	0.77	0.87	0.74	-0.13
S&P 500 Index Industrials Sector	0.96	0.98	0.86	-0.12
S&P 500 Index Consumer Discretionary Sector	0.93	0.98	0.87	-0.12
S&P 500 Index Materials Sector	0.93	0.98	0.89	-0.09
S&P 500 Index Telecom Sector	0.94	0.80	0.73	-0.07

Data as of 4/30/2013

Source: Bloomberg, Asset Allocation and Investment Strategy

Note: Correlation measures the degree and relationship between the returns of two assets on a scale of +1 to -1. A correlation of +1 indicates the returns of the two assets move in tandem. A correlation of -1 indicates the returns move in opposite directions.

actions. Neal Soss, Credit Suisse Chief Economist, has pointed out that while central banks have been actively working to restore financial stability to the financial markets, in mid-2012, European Central Bank President, Mario Draghi reminded the world that true tail risk catastrophes come about less often on account of long-term insolvency than by virtue of short-term liquidity. That change of perspective, combined with unambiguous commitment to liquidity, has helped investors breathe a sigh of relief, which has helped fade the view of a hard landing in China, a Eurozone break-up, or the US fiscal cliff's derailing the economy. The second reason for falling correlations is global growth. Economic growth at the global level has been slowly recovering since the global recession; it has not been fast enough to lift all regions of the world to above-trend growth levels. The result has been a world that is growing at different speeds, allowing investors to make differentiated investment decisions. For example, the Eurozone, which is in recession, is estimated to register GDP growth of -0.5% and the US is chugging along at a 2% GDP in 2013. Finally, correlations are falling because investor sentiment remains skeptical. As the recovery in financial assets has unfolded, investor fund flows continue to chase fixed income. According to fund flow data aggregator EPFR,

from April 2012 to April 2013, global equities garnered \$64 billion in net new assets, while fixed income reaped \$437 billion. All the while, the S&P 500 Index was on its way to new highs. To us, it may be less that markets are seeking the attractiveness of fixed income than that markets reflect investors' general disbelief in equities. In short, investors have not exhibited the decided "animal spirits" and risk-taking that tend to move correlations tightly together in rising markets.

Conclusions

All in all, we see a process of renormalization of markets that has been playing out since the cataclysmic events of 2008. The key take-away from the decline of correlations is that asset allocation may play a more prominent role within a portfolio context. Thus, it will pay to review an asset allocation to make sure that asset class concentration has not crept into an investment portfolio with a higher-than-desired allocation due to the drift of strong returns. It also means that some asset classes may have better diversification qualities if risk assets come under pressure.

Recent Editions of Viewpoints

2013	
April-29	High Yield or Low Expectations?
•	The erosion of yield in investment portfolios has led investors to place more emphasis on high yield bonds to generate incomeIn our view, there are four broad points which are quite supportive for the high yield market going forward.
April-15	An In-Depth Look at Our US Equity Sector Allocation
A 11 4	The equity market gains have surprised even the most enthusiastic of investors this year, with returns of 8.4% year-to-date for the broadest measure, the MSCI All Country World Index. We continue to favor equities on strategic (6-12+month) and tactical (1-6 month) investment horizons Within the US, the dispersion of returns between the top and bottom performing sectors are widening, which can make for a better environment for active investment decisions.
April-1	The Great Rotation or the Great Frustration? Investors waiting for the great rotation out of fixed income into equities are going to have to wait a while longer – a long while, in our view. We do not anticipate large scale losses in fixed income due to rising rates this year, but we do expect returns to be very muted, in the low single digits, at best. On a strategic asset allocation (6-12+ month investment horizon) basis, we expect equities to outperform fixed income, and our favored region/country is the US.
Mar-12	How to Approach the Equity Market One way to soften the ups and downs of the equity market when considering an initial or new investment is to phase-in over a defined time period.
Feb-11	You Can't Climb Everest without Pausing
	Buying put-options to hedge downside exposure to the S&P 500 Index may be a cost-effective way to protect against short-term turbulence.
Jan-28	Morning in America We are focusing on the return to manufacturing through our US sector weights in portfolios, with a favorable view on the industrial sector and Master Limited Partnerships.
Jan-7	Beyond the Fiscal Cliff and Why So Many Investors Missed the 2012 Equity Rally Why did so many investors miss the equity market rally? The field of behavioral finance describes biases that explain this type of investor behavior. We believe that being aware of these can help investors look beyond them.
2012	J J
Dec-10	2013 Investment Outlook Our Top 2013 Investment Ideas are designed around our expectation that a low interest rate environment, sustained by moderate growth and inflation globally, will persist in 2013. In this context, we have focused on themes that benefit from a low yield environment, which include: Beyond Cash; Recovery Stocks; Dividends and Beyond; New Gas and Oil Sources; US Real Estate; and the New Hard Currencies.
Nov-7	An Obama Win - What Now? Equities tend to rise between Election - and Inauguration Day, and in the 5th year of a re-elected administration the U.S. equity market average an 8.0% return. We believe the drag from the impact of the fiscal cliff will be manageable.
Oct-23	Insights from the Credit Suisse Global Wealth Report
00.20	The 2012 Credit Suisse Global Wealth Report highlights timely themes in global wealth distribution including trends of household debt expansion in the emerging markets and global expectations for wealth creation over the next five years.
Oct-9	Thoughts from the Chicago Wealth Management Conference Credit Suisse Private Banking USA held its 6th annual Wealth Management Conference. We hosted a range of thought leaders to help clients navigate the most challenging issues currently facing private clients.
Sep-24	Making a Run for the Highs? The S&P 500 Index is approaching the fifth anniversary of its all-time high of 1,565. Despite healthy 2012 equity gains, we think by some measures markets are more attractive than they were five years ago.
Sep-10	The Central Bank's Conditional Love The ECB revealed additional details of its previously announced bond buying plan that significantly remove tail risk from
	markets. Sideline cash may be drawn into the market, which could add to the durability of the current risk-on rally.
Aug-27	U.S. Housing – Have We Reached the Bottom?
=	With macro events in Europe and the U.S. dominating newsflow, the trough in the U.S. housing market has gone somewhat unappreciated. A housing recovery has multiplier effects that drive consumption, job, and GDP growth.

Important Legal Information

This material is for informational purposes only and is not intended to be an offer or solicitation to purchase or sell any security or to employ a specific investment strategy. It is intended solely for the information of those to whom it is distributed by Credit Suisse Securities (USA) LLC ("CSSU"). No part of this material may be reproduced or retransmitted in any manner without the prior written permission of CSSU. CSSU does not represent, warrant or guarantee that this material is accurate, complete or suitable for any purpose and it should not be used as a basis for investment decisions. This material may not be used or relied upon for any purpose other than as specifically contemplated by a written agreement with Credit Suisse Securities (USA) LLC (CSSU). This material has been prepared by the Asset Allocation & Investment Strategy team of the Private Banking USA business of CSSU and not by the CSSU research department.. It is intended only to provide observations and views of the Investment Strategy & Advisory Group, which may be different from, or inconsistent with, the observations and views of CSSU research department analysts, CSSU traders or sales personnel, or the proprietary positions of CSSU. Observations and views expressed herein are as of the date of writing and may be changed by the Asset Allocation & Investment Strategy team at any time without notice. Past performance is not an indication or guarantee of future performance, and no representation or warranty, expressed or implied, is made regarding future performance. Information and opinions expressed by us have been obtained from sources believed to be reliable. CSSU makes no representation as to their accuracy or completeness and CSSU accepts no liability for losses arising from the use of the material presented. This material does not purport to contain all of the information that you may wish to consider, it does not take into account your individual situation or circumstances, and, in fact, provides only a limited view of a particular market. It is not to be relied upon or used in substitution for the exercise of independent judgment. CSSU may, from time to time, participate or invest in transactions with issuers of securities that participate in the markets referred to herein, perform services for or solicit business from such issuers, and/or have a position or effect transactions in the securities or derivatives thereof. The most recent CSSU research on any company mentioned is available to online subscribers at www.credit-suisse.com/pbclientview. CSSU does not provide, and nothing contained herein should be construed as, tax, accounting or legal advice. Prior to investing, you should consult your accounting, tax and legal advisors to understand the implications of such investment specific to your personal financial situation. U.S. customers wishing to effect a transaction should do so only by contacting their relationship manager at CSSU. This material is directed exclusively for the high net worth individuals and institutions who are clients of CSSU; clients should seek the advice of their independent financial advisors as they deem necessary or appropriate prior to taking any investment decision based on this report or for any necessary explanation of its

For the definition of certain benchmark indices referenced herein, please refer to: https://www.credit-suisse.com/us/privatebanking/en/glossary_indices.jsp

This material may be distributed in Mexico by Banco Credit Suisse (México), S.A., for information purposes only, this may not be construed as an offer or an invitation to enter into any transaction or purchase any security or investment product that may not be undertaken under Mexican applicable regulation.

Unless otherwise specified, the term "Credit Suisse" is the global marketing brand name for the investment banking, asset management and private banking services offered by Credit Suisse Group subsidiaries and affiliates worldwide. Unless otherwise specified, the term "Credit Suisse Private Banking" generally refers to the combined capabilities of Credit Suisse Group subsidiaries and affiliates that provide private banking services to high net worth clients worldwide. The term "Private Banking USA" generally refers to the private banking business within Credit Suisse Securities (USA) LLC ("CSSU"). Each legal entity in Credit Suisse Group is subject to distinct regulatory requirements and certain products and services may not be available in all jurisdictions or to all client types. There is no intention to offer products and services in countries or jurisdictions where such offer would be unlawful under the relevant domestic law.

The Private Banking USA business in CSSU is a regulated broker dealer and investment advisor. It is not a chartered bank, trust company or depository institution. It is not authorized to accept deposits or provide corporate trust services and it is not licensed or regulated by any state or federal banking authority.

Internal Revenue Service Circular 230 Disclosure: As provided for in Treasury regulations, advice (if any) relating to federal taxes that is contained in this communication (including attachments) is not intended or written to be used, and cannot be used, for the purpose of (1) avoiding penalties under the Internal Revenue Code or (2) promoting, marketing or recommending to another party any plan or arrangement addressed herein.

©2013 Credit Suisse Securities (USA) LLC. All rights reserved1