

RESEARCH ARTICLE

REINVENTING DIVERSIFICATION FOR INDIVIDUAL INVESTORS

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..... Manuscript Info Abstract Traditionally, individual investors have diversified their portfolios Manuscript History using stocks and bonds. Stocks have been used to produce growth, Received: 26 July 2018 while bonds have been used to produce income and reduce risk. Final Accepted: 01 Septmeber 2018 However, today individual investors have other investment options Published: September 2018 that, until recently, were only available to large institutional investors. Included in these investment opportunities are absolute return strategies Keywords:which are now available to individual investors through mutual funds Absolute return, portfolio performance, and ETFs. By moving beyond the historic norm of stocks and bonds, individual investors. individual investors can now invest a portion of their bond allocation in absolute return strategies instead. As a result, over the long term, individual investors will achieve better performance while maintaining similar equity risk. Copyright, IJAR, 2018. All rights reserved.

Introduction

Individuals have become accustomed to diversifying their portfolio assets into three main categories: stocks, bonds, and cash. The stock portion of the portfolio is dedicated to ensuring long-term growth. Diversification of stocks has transitioned over the years from simply buying domestic large capitalization (cap) companies to buying domestic large caps, medium caps, small caps, international large and small caps, and emerging market stocks. Even style (growth versus value) diversification is practiced by many investors.

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While equities have provided good long-term growth, they are volatile, and although firm-specific risk can be eliminated via diversification, market risk cannot. To reduce market risk, investors have turned to bonds and cash. High quality bonds are much less volatile than stocks and the movement in bond prices is generally not linked to the movement in stock prices. In fact, they often move in opposite directions. As a result, in addition to producing portfolio income, many investors invest in bonds to reduce market risk and portfolio volatility. Cash is often used to provide the same type of stability and risk reduction. To diversify bond assets, investors follow the same diversification principles they follow with stocks and spread the exposure to many different individual bonds and bond types. Historically, bond diversification was limited to investment grade domestic bonds, but now bond diversification includes high yield, international, emerging market, and inflation protected bonds – to name a few.

While institutions have been investing in alternative asset classes and strategies for many years, many individual investors have not yet embraced alternatives as an essential diversification tool. One reason for this is the lack of accessibility, having become available only recently through mutual funds. Another reason is their complexity. When we speak of alternatives, we tend to lump all alternatives into a single category, but the movement of alternatives varies significantly. Many – like private equity, hedged equity, and real return strategies – offer different

sources of growth for the portfolio but do not reduce volatility. Other alternativeson the other hand, like absolute return strategies, dampen volatility.

Absolute return strategies strive to produce positive returns regardless of market conditions and are independent from traditional benchmark indices. Many managers of these strategies attempt to produce returns above a risk free rate. Because the movement of these strategies is not tied to the movement in stocks they can reduce market risk in a portfolio, similar to investing in bonds. And because their movement is also not tied to bonds, they can be added without increasing interest rate risk. This is not to say that investing in absolute return strategies is risk free. These strategies come with their own inherent risk, but the risk and return profiles are different from that of stocks and bonds.

What this research illustrates is that individual investors now have the tools to broaden diversification, as they have done with stocks and bonds over time, and replace a portion of their fixed income assets with absolute return strategies; thereby further reducing volatility and enhancing risk adjusted returns.

Literature Review

Modern portfolio theory (Markowitz, 1952) has been widely accepted for many years and, as a result, investors diversify portfolios to improve returns for a given level of risk. Markowitz did his research on domestic large cap stocks, but as time has passed investors have become more sophisticated and access to other types of equities has increased. Today, investors broaden their stock exposure beyond domestic large cap stocks to include mid-caps, small caps, international stocks, and emerging market stocks. The result is that, over time, investors have been able to expand the universe which increases the potential to find uncorrelated assets and improve the benefits of diversification (Booth &Fama, 1992). Although diversification eliminates firm-specific risk, it does not eliminate, nor reduce, systematic (market) risk (Raffestin, 2014).

To reduce equity market risk, investors have turned to bonds and cash. While cash is stable, it generally offers a low yield. Bonds provide higher yields than cash, but are not risk free. However, bonds are usually much less volatile than equities, and therefore act to reduce volatility in a portfolio that includes stocks. The trade-off being: as you increase the allocation to bonds, you reduce volatility but also reduce growth potential. Investors diversify bonds to reduce idiosyncratic risk, but like stocks, bonds are subject to systematic risk as well. The main being interest rate risk, which lowers the return on bonds when interest rates rise.

Unfortunately, the benefits from diversifying equity risk with bonds is variable. During periods when interest rates are rising and equity prices are falling (possibly in response to rising rates), stock and bond prices can be highly correlated. To diffuse volatility, investors can add exposure to alternative asset strategies that go beyond simply holding long positions in stocks and bonds. Research has shown that the addition of these alternative strategies improves diversification effects (Oderda, 2013).

To be sure, alternative asset strategies vary significantly and should not be lumped together. Each strategy has its own merits and risks (Busack&Tille, 2011). Private equity, hedged equity, and long/short equity offer different sources or return, but load on equity risk. Real assets, or real return strategies, offer investors a better hedge against inflation than equities offer. These assets include real estate, commodities, natural resources, and infrastructure. As another "class," absolute return strategies attempt to provide positive returns regardless of the direction of the market. They have different return and risk profiles from traditional stocks and bonds and move independently. In addition, during periods when stocks and bonds are moving in tandem (i.e. stocks declining when interest rates are rising), absolute return strategies can provide the systematic risk buffer.

Historically, absolute return strategies were limited to institutional investors due to their illiquidity and the high minimum investment needed to participate in the private placement. As a result, only the largest investors have included these strategies an important part of their portfolio structure. However, many absolute return strategies have become available to individual investors through mutual funds and exchange-traded funds (ETFs). Now a much larger group of investors can invest, similar to the way stock and bond mutual funds expanded the ability of smaller investors to invest in the markets.

Most long-term investors will experience bullish and bearish market cycles. While growing assets is important during bullish cycles, protecting against loss is equally important in growing wealth during bearish cycles

(Lebowitz, 2016). Diversification gains are driven mainly by a well-balanced allocation over different uncorrelated asset classes (Jacobs, Muller, Webber, 2014).

Strategy Development and Data

To determine if replacing a portion of the fixed allocation with absolute return strategies improved overall portfolio performance, we compared the returns, standard deviations, and Sharpe ratios of a straight bond portfolio with that of a portfolio equally divided between bonds and absolute return strategies. The time period for the study was from January 1, 2000, through June 30, 2018.

To represent a broad based global bond allocation, we chose the Bloomberg Barclays Intermediate Global Total Return Index. This multi-currency index consists of government and corporate bonds with maturities ranging from 1 to 10 years, mortgage backed securities, and asset-backed securities from developed and emerging markets (Benchmark Glossary Index, n.d.).

To represent absolute return strategies, we chose three of the more commonabsolute return strategies offered via mutual funds and ETFs: market neutral, managed futures, and global macro strategies.

Market neutral strategies involve going both long and short the stock market at the same time, so your return is principally due to the manager's ability to buy stocks that will increase in value and short stocks that will lose value, not by the movement in the overall market.

Global macro strategies focus on global economies and profit by investing in financial instruments whose prices are most directly influenced by macro events. Accordingly, they participate in all major markets: bonds, currencies, commodities, and equities.

Managed futures describes the category of alternative assets that specialize in using the global futures and options markets for investing. In place of stocks and bonds, managers, or commodity trading advisors (CTA) invest in futures contracts.

The data for these three strategies came from the Credit Suisse database. The performance of these non-investable indices is asset-weighted. To be included in the database, a fund has to have a minimum of \$50 million in assets under management, a one-year track record, and current audited financial statements. Each index represents at least 85% of the assets under management in the respective strategy (Atilgan, Bali, Demirtas, 2013). The allocation was split equally among the three strategies.

As illustrated in Table 1, the correlation of these strategies to bonds and stocks is low.

	Market Neutral ¹	Global Macro ²	Managed Futures ³	Global Stocks ⁴	Global Bonds ⁵
Market Neutral ¹	1				
Global Macro ²	0.066	1			
Managed Futures ³	-0.014	0.486	1		
Global Stocks ⁴	0.279	0.278	-0.019	1	
Global Bonds ⁵	0.058	0.253	0.278	0.226	1

Table1:-Correlation Matrix (Jan 2000 – Jun 2018)

¹ Credit Suisse Equity Market Neutral Index

² Credit Suisse Global Macro Index

³ Credit Suisse Managed Futures Index

⁴ MSCI ACWI Index

⁵ Bloomberg Barclays Global Agg Corp Interm Total Return Index

Finally, to examine how the addition of absolute return strategies would affect a portfolio that included stocks, we compared the returns, standard deviations, and Sharpe ratios of a portfolio that had a 50% allocation to stocks and a 50% allocation to bonds with a portfolio that had a 50% allocation to stocks, a 25% allocation to bonds and a 25%

allocation to absolute return strategies. As before, the period under study was from January 1, 2000, through June 30, 2018.

To represent a broad based global equity allocation, we chose the MSCI All Country World Index. The MSCI ACWI includes large- and mid-cap stocks across 23 developed markets countries and 23 emerging markets countries. The index covers approximately 85% of the global investable equity opportunity set.(Benchmark Glossary Index, n.d.).

Empirical Results

Table 2 displays the total annualized return, the standard deviation, and the Sharpe ratio for the portfolio consisting of a 50% allocation to absolute return strategies, composed of market neutral, managed futures, and global macro strategies equally divided, and a 50% allocation to global bonds and a portfolio consisting of a 100% allocation to global bonds.

	Total Annualized Return	Standard Deviation	Sharpe Ratio
50% Absolute Return Strategies/ 50% Bonds	4.44	4.98	0.59
100% Bonds	3.53	6.35	0.34

Table2:-Performance of All Bond versus Bond and Absolute Return Strategies (Jan 2000 - Jun 2018)

As the Table illustrates, the addition of absolute return strategies to an all bond portfolio improved all statistics: the return, the standard deviation, and the Sharpe ratio, considerably. To note, for mutual fund investors some of the return premium would be lost due to higher fees. When comparing fund expense ratios for absolute return strategy funds versus various bond funds (e.g. government bond funds, emerging market bond funds, high yield funds, floating rate debt funds, etc.), the absolute return strategy fund expense ratios tended to be higher. While expense ratios vary considerably, investors should expect to pay about 0.50% more for absolute return strategy funds versus bond funds. As a result, the return premium would still exist, but it would decrease by approximately 0.25 basis points.

To be clear, as with any asset class or strategy, there are periods when the diversification benefits wane. Table 3 highlights the return differential when the study period is divided into shorter intervals.

	Total Return Annualized Since Jan 2000	Total Return Annualized Trailing 3 Years	Total Return Annualized Trailing 5 Years	Total Return Annualized Trailing 10 Years
50% Absolute Return				
Strategies / 50% Bonds	4.44	1.38	1.25	1.11
100% Bonds	3.53	1.80	0.03	1.34

Table3:-Return of All Bond versus Bond and Absolute Return Strategies for shorter intervals

As Table 3 shows, there are shorter periods when returns suffered because of the broader diversification. This is no different than the effect of diversification from other asset classes and strategies, such as bonds (Ilmanen, 2003), real estate (Reynolds, 2015) and international stocks (Cloutier, 2018). There are periods when performance will lag. However, Table 4 highlights that in every interval analyzed, volatility was reduced. And after all, diversification is primarily a tool for risk management, not return enhancement.

Table4:-Volatility of All Bond Portfolio versus Bond and Absolute Return Strategies Portfolio for Shorter Intervals				
	Standard	Standard Deviation	Standard Deviation	Standard Deviation
	Jan 2000	Trailing 3 Vears	Trailing 5 Vears	Trailing 10 Vears
50% Absolute Return		5 I cuis	e i cuis	10 1 cuis
Strategies / 50% Bonds	4.98	3.74	3.36	4.82
100% Bonds	6.35	5.15	4.79	5.94

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Finally, Table 5 highlights the performance differential if the portfolio included stocks. The portfolio allocations were split so that 50% of the exposure was devoted to stocks. For the portfolio containing absolute return strategies that meant the remaining 50% was equally divided between bonds and absolute return strategies. For the portfolio without absolute return strategies that meant the remaining 50% was allocated entirely to bonds.

Table5:-Performance of Stock and Bond	l versus Stock, Bond and Absolute Ro	eturn Strategies (Jan 2000 – Jun 2018)
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	Total Annualized Return	Standard Deviation	Sharpe Ratio
50% Stock/25% Absolute Return Strategies /25% Bonds	3.63	8.66	0.29
50% Stocks/50% Bonds	3.20	8.89	0.24

As you would expect, given the previous data, for a portfolio that was equally divided between stocks and fixed income assets, the allocation that included absolute return strategies as part of the fixed income allocation provided a better Sharpe ratio, due to producing a higher return and a lower standard deviation through the study period. Again, for mutual fund investors, since absolute return funds generally have higher expense ratios than bonds funds, the return on the portfolio containing absolute return strategies should be reduced. In this case, since absolute return strategies comprise only 25% of the total portfolio, the return benefit should be reduced by approximately 0.125 basis points, which decreases the gain, but does not eliminate it.

Discussion

Historically, individual investors have diversified their portfolios between two major asset class categories: stocks and bonds. Stocks have been used to produce growth, while bonds have been used to produce income and reduce equity risk. However, over time the investment industry has changed and many opportunities that were only available to institutional investors are now available to individual investors through mutual funds or ETFs.

Today, through funds, individuals can invest in a number of absolute return strategies that were, until recently, the purview of large institutional investors. The research has shown that investing a portion of the fixed income allocation in absolute return strategies, instead of traditional bonds, can improve portfolio performance. Absolute return strategies add diversity, reduce equity risk, and add an additional source of return that has low correlation to bonds and stocks.

Conclusions

While better diversification does not guarantee greater returns, the research proves that individual investors can improve diversification, reduce risk, and improve risk adjusted returns over the longer term by adding absolute return strategies to the fixed income allocation of their portfolio.

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