

# Research Affiliates' Fundamentals



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## A Crisis Review of Negative Alpha

The past 18 months have been a fabulous learning experience for us all. Perhaps nowhere was the lesson more poignant and revealing than in the pursuit of alpha. As we described in the March 2009 issue of *Fundamentals*,<sup>1</sup> 2008 was the worst year ever for active management, citing the poor performance of hedge funds and even long-only strategies relative to passive benchmarks. Virtually all who reached for alpha were bitten by its evil twin, downside surprise, often highly correlated with the opacity and complexity of the strategy.

But what about the alternative approach—avoiding negative alpha... how did it perform? Did a strictly followed regimen of purging portfolio slippage lead to materially better results during the crisis of 2008 and the fledgling recovery of 2009? The answer is emphatically “Yes!” The past 18 months also reveal just how damaging negative alpha can be within a single asset class like equities, where the capitalization-weighted construction methodology inherently ensures a return drag.

### Negative Alpha Refresher

Negative alpha is simply the slippage investors unnecessarily incur in the execution of their investment strategies. In institutional circles, it is often labeled implementation shortfall and it centers on allowing critical, returns-detracting mistakes. Three key contributors to negative alpha were reviewed in our October 2007 issue of *Fundamentals*:<sup>2</sup>

- **Equity Concentration.** Most investors hold and continue to hold portfolios that are far too reliant on a sizable equity risk premium. With 50% or 60% invested in higher risk stocks, equity declines can overwhelm bonds

and alternatives in this supposedly “balanced” construct. For this reason, the classic 60/40 mix has more than 0.97 correlation with the S&P 500 Index (for the time period January 1976 through June 2009). But, there are plenty of alternatives to mainstream stocks and bonds. Commodity futures, emerging market local currency bonds, bank loans, high-yield bonds, and REITs all have unique return drivers and will respond differently to various market environments. These investments can be volatile and speculative on their own, but when blended into a portfolio they have the potential to reduce the overall risk of the portfolio. They aren’t always inherently better than mainstream stocks and bonds. But, ignoring them leaves us with an inherently worse investment management opportunity set. Shouldn’t we employ these, selectively and opportunistically, in our asset allocation choices on a scale large enough to matter?

- **Failing to Rebalance.** Rebalancing is an underrated activity that forces investors to buy low and sell high. When mean reversion occurs, the portfolio is already positioned to take advantage.<sup>3</sup> Despite ample evidence of its effectiveness, many investors neglect this simple exercise. They fall prey to the “it’s different this time” mantra and so they “blink” when the time comes to sell their best performers and buy their worst. Most investors also fail to rebalance within their stock and bond holdings.

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- **Chasing Winners.** Significant temptation exists to invest in whatever has been “working” in the recent past. The gravitational pull of the peer group only exacerbates this trend. But past performance—in managers or asset classes—does not predict future results. The mean reversion that makes rebalancing profitable makes chasing winners unprofitable.

All three of these negative alpha sources are easy to address and eliminate; indeed, eliminating negative alpha is considerably easier than finding, isolating, and employing sources of positive alpha. Which brings us to the key question: Did avoiding these three sources of negative alpha help in the crisis of 2008 and the unfolding recovery of 2009?

## Negative Alpha in 2008/2009

In 2008 and the first six months of 2009, the classic 60% S&P 500 and 40% BarCap Aggregate Bond Index blend on a buy and hold basis (i.e., no rebalancing) returned a cumulative—19.7% (see Figure 1). Sure, bonds were positive but their lower volatility meant they provided only

a token cushion to the equity meltdown. A portfolio bent on eliminating negative alpha would have far less equity concentration, automatically rebalance, and avoid chasing the best performing asset classes.

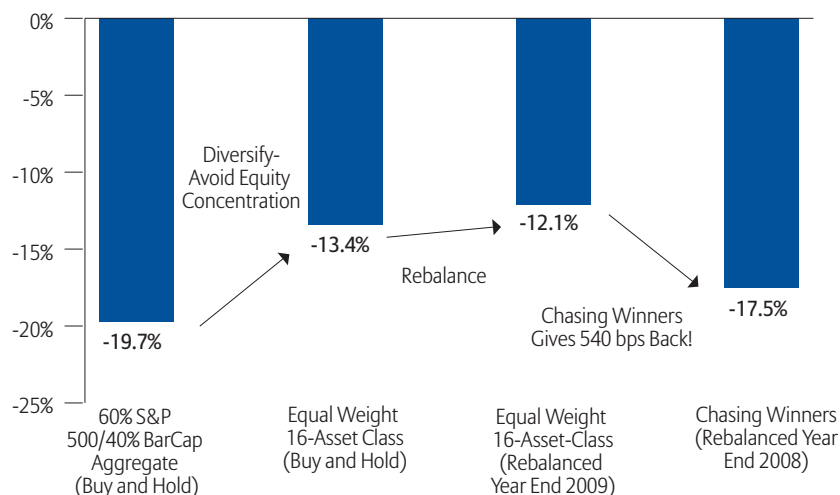
In contrast, the 16-asset-class portfolio described in previous issues of *Fundamentals*,<sup>4</sup> which has far less concentration to equities, fared considerably better generating a cumulative return of –13.4% on a buy and hold basis. This result is 630 bps better than the 60/40 portfolio return! An overreliance on equities was a sizeable form of negative alpha... despite the scale of the recovery since March!<sup>5</sup>

What about rebalancing? If we rebalanced once at calendar year-end 2008 (a common and simple rebalancing rule), the 16-asset-class portfolio’s return would have improved to –12.1%, a premium of 130 bps over the buy-and-hold portfolio. Past performance is no guarantee of future results. Of course, risky markets have rebounded since March, but don’t forget that in the first two months of 2009, the rebalancer’s staying power would have been severely tested as we went into Take No Prisoners Redux.

So far, the first two pillars of negative alpha “saved” investors 7.5%! At mid-year 2009, how many investors were down only 12% from year-end 2007? And these are simple ideas to embrace.

But the investor also needs to be disciplined to avoid chasing winners. How many of us, in managing our 401(k) assets, begin by asking a simple pair of questions: Which of the investments available to me have been awful over the past one, three, and five years? Are any of these now bargains? Intuitively, we know this is a good way to invest. But, most of us pursue the opposite—and flawed—approach: Which of the investments available to me have been wonderful over the past one, three, and five years? Are there reasons to buy more of these?

**Figure 1 | Eliminating Negative Alpha, January 2009–June 2009**



Sources: Research Affiliates, based on data from Morningstar Encorr. Past performance of the asset classes is no guarantee of future results. Index returns are unmanaged. Unless otherwise noted, index returns reflect the reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions, or other expenses of investing. One cannot invest directly in an index. If the 60/40 portfolio had been rebalanced as the 16-sector portfolio was rebalanced, the results of the 60/40 portfolio would have been marginally more favorable.

Suppose an investor addressed the first two sources of negative alpha—she adopted the 16-asset portfolio approach in the beginning of 2008 and rebalanced at year-end 2008. But, in an effort to boost returns, she eliminated the two worst performing assets over the previous five years in the 16-asset-class mix (short-term bonds and core bonds) and doubled up on the two best performing categories (emerging markets equities and global ex-U.S. stocks). Amazingly, this Chasing Winners portfolio would have lost 540 bps relative to our simple 16-asset-class portfolio with rebalancing. Almost the entire benefit of rebalancing and broad diversification would have been wiped out!

### Negative Alpha within Equities

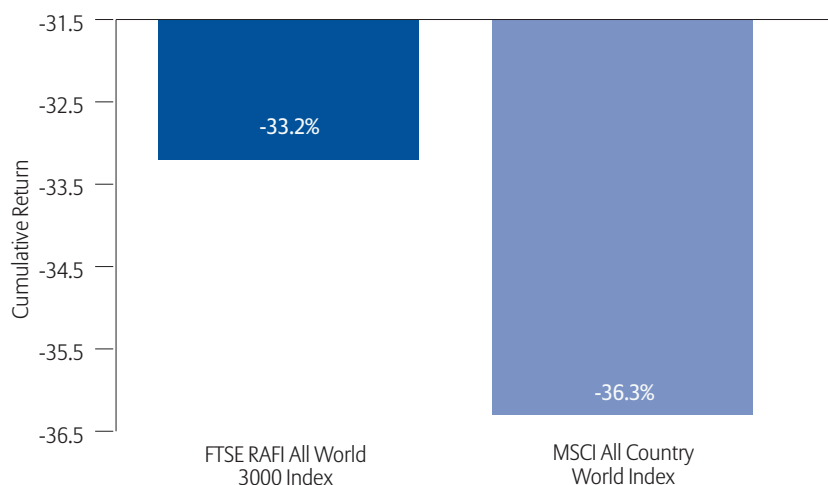
Index funds are a wonderful way to avoid the alpha-chasing game—a contest which assuredly produces more losers than winners. But the capitalization-weighted construction methodology has problems of its own, directly linked to the three sources we just described. It chases winners, allocating more money to any asset that’s soaring. It does not rebalance except at the bottom of the list where it replaces the worst performers with those that have appreciated enough to graduate to “large cap”: selling low and buying high! It, therefore, can produce a negative alpha<sup>6</sup> relative to its opportunity set. With no rebalancing mechanism, with a focus on whatever has risen most in price, cap-weighted indexes can become concentrated, forgoing the diversification that investors should seek in broad-based market proxies.

The Fundamental Index<sup>®</sup> strategy ties portfolio weights to the economic scale of the company rather than its price. With this anchor, it can effectively rebalance, avoid chasing winners, and bypass the effects of bubbles on portfolio weights. It contratrades against the market’s most extreme bets, whether those bets are

the tech bubble of 2000 or the finance anti-bubble of 2009. It provides a potential solution to the negative alpha embedded in traditional indexes. So how did avoiding the negative alpha of capitalization weighting in global equities play out in the past 18 months?

Figure 2 displays the cumulative returns of a Global All Country Fundamental Index (FTSE RAFI All World 3000 Index) versus a comparable cap-weighted index (MSCI All Country World Index). Although both indexes produced dreadful total returns consistent with the severity of the crisis, the Fundamental Index approach produced an excess return of 3.1%. In an environment that saw negative excess returns for many alpha seekers, a focus on negative alpha within equities was a rare and welcome source of positive value add during this stretch. Was this due to the much-vaunted value bias of the Fundamental Index portfolios? Not by any classical definition of value investing: the value indexes were savaged relative to the growth indexes, both in the United States and abroad, over this 18-month span.

**Figure 2 | Negative “Alpha” Existed in Weighter Equities During Crisis, January 2009–June 2009**



Sources: Research Affiliates, based on data from Bloomberg. Past performance of the indexes is no indication of their future results. Index returns are unmanaged. Unless otherwise noted, index returns reflect the reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions, or other expenses of investing. One cannot invest directly in an index.

## Conclusion

The great “alpha letdown” of 2008 seared a lasting memory into the psyches of all investors. The next decade may well see a resulting trend toward simplicity and transparency. In this back-

to-basics revolution, eliminating negative alpha should rise to the top of investors’ “to-do” lists, both at the total portfolio level and within equities, through better-structured passive and simple enhanced products.

## Endnotes

1. “2008—The Worst Year Ever For Active Management?” *Fundamentals*, March 2009 ([http://researchaffiliates.com/ideas/pdf/Fundamentals\\_200903.pdf](http://researchaffiliates.com/ideas/pdf/Fundamentals_200903.pdf))
2. “Avoiding Negative Alpha,” *Fundamentals*, October 2007 ([http://researchaffiliates.com/ideas/pdf/Fundamentals\\_200710.pdf](http://researchaffiliates.com/ideas/pdf/Fundamentals_200710.pdf))
3. Some have questioned whether mean reversion still holds in a new world order. We believe it does, so long as one has the right mean. For more, see Robert Arnott, “Reversion to the Mean, But What Mean?” *Financial Times*, June 28, 2009 ([http://www.ft.com/cms/s/0/e28ff392-6279-11de-b1c9-00144feabdc0,dwp\\_uuid=ff795148-f1db-11dc-9b45-0000779fd2ac.html](http://www.ft.com/cms/s/0/e28ff392-6279-11de-b1c9-00144feabdc0,dwp_uuid=ff795148-f1db-11dc-9b45-0000779fd2ac.html))
4. The 16 asset classes include mainstream stocks and bonds, alternative bonds, and real return assets. The Equally weighted portfolio is comprised of the following indexes: ML US Corporate & Government 1-3 Year; LB US Aggregate Bond TR; LB US Treasury Long TR; LB US Long Credit TR; LB US Corporate High Yield TR; Credit Suisse Leveraged Loan; JPM EMBI + Composite TR; JPM ELMI + Composite; ML Convertible Bonds All Qualities; LB Global Inflation Linked US TIPS TR; FTSE NAREIT All REITs TR; DJ AIG Commodity TR; S&P 500 TR; MSCI Emerging Markets TR; MSCI EAFE TR; Russell 2000 TR.
5. We would note further that this 630 bps premium occurred despite a huge ramp up in correlations in the 16-asset-class portfolio as well as three, four, and six sigma downside returns in some of the niche asset classes.
6. To be sure, we’re using “alpha” in an unconventional way. Classical CAPM alpha is always measured against the cap-weighted market. So, a market-value-weighted index fund cannot have a meaningful alpha, positive or negative. But, an index fund can have an alpha relative to its opportunity set. Capitalization weighting always overweights companies that are above their eventual fair value relative to their fair value weight, and underweights the undervalued companies relative to their fair value weight. Any weighting scheme (e.g., the Fundamental Index concept) that doesn’t link the weight to the error in the price need not suffer that drag. Equal weighting and fundamental weighting represent an opportunity set that capitalization weighting usually lags.

Investments in commodities may be affected by overall market movements, changes in interest rates, and other factors such as weather, disease, embargoes and international economic and political developments. An investment in commodities may not be suitable for all investors. Investing in non-U.S. securities entails additional risks, including political and economic risk and the risk of currency fluctuations; these risks may be enhanced in emerging markets. Each sector of the bond market entails risk. Shareholders of a municipal bond fund will, at times, incur a tax liability, as income from these funds may be subject to state and local taxes and, where applicable, the alternative minimum tax. The guarantee on Treasuries, TIPS and Government Bonds is to the timely repayment of principal and interest. Shares of mutual funds that invest in them are not guaranteed. Mortgage-backed securities are subject to prepayment risk. With Corporate bonds there is no assurance that issuers will meet their obligations. High-yield bonds typically have a lower credit rating than other bonds. Lower rated bonds generally involve a greater risk to principal than higher rated bonds. In an environment where interest rates may trend upward, rising rates will negatively impact most bond funds, and fixed income securities held by a fund are likely to decrease in value.

Alpha measures a portfolio’s risk-adjusted performance, which is the difference between a portfolio’s actual and expected returns, given the level of market risk as measured by beta.

The FTSE RAFI All World 3000 Index is a broad unmanaged benchmark which measures the top 3000 companies, in developed and emerging markets, using four fundamental factors: dividends, cash flow, sales, and book value. The Morgan Stanley Capital International All Country World Index (“MSCI ACWI”) is a widely recognized, unmanaged index of issuers located in countries throughout the world, representing both developed and emerging markets. The Standard & Poor’s 500 Stock Price Index is an unmanaged market index generally considered representative of the stock market as a whole. The Barclays Capital Aggregate Bond Index is an unmanaged index of domestically issued investment grade, U.S. dollar-denominated fixed income securities having a maturity greater than one year.

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