EQUIUS PARTNERS
Adding Balance to Wealth[SM]

ASSET CLASS[SM]

An update of performance, trends, research & topics for long-term investors

September 2012

Asset Class Returns

August 31, 2012 (YTD)

	YTD 2012	Last 10 yrs.*	2011	2010	2009
Bonds (%)					
One-Year	0.8	2.6	0.6	1.2	1.9
Five-Year	4.2	4.5	4.5	5.3	4.2
Intermediate	3.6	6.4	9.4	6.9	-0.7
Long-Term	6.9	8.7	29.3	8.9	-12.1
U.S. stocks (%)					
Large Market	13.4	2.8	2.1	14.9	26.5
Large Value	13.7	4.6	-3.1	20.2	30.2
Small Market	11.2	6.7	-3.2	30.7	36.3
Small Micro	10.6	7.1	-3.3	31.3	28.1
Small Value	12.5	8.1	-7.6	30.9	33.6
Real Estate	16.8	10.1	9.0	28.7	28.2
International stocks (%)					
Large Market	7.0	4.9	-12.3	9.3	30.6
Large Value	4.4	7.6	-16.9	10.6	39.5
Small Market	7.1	11.0	-15.4	23.9	42.0
Small Value	7.4	11.9	-17.5	18.1	39.5
Emerg. Mkts.	5.9	14.2	-17.4	21.8	71.8

Descriptions of Indexes

One-Year bonds	DFA One-Year Fixed Income fund
Five-Year bonds	DFA Five-Year Global Fixed
Intermediate bonds	DFA Intermed. Gov't Bond fund
Long-Term bonds	Vanguard Long-term U.S.Treas.
U.S. Large Market	DFA U.S. Large Co. fund
U.S. Large Value	DFA Large Cap Value fund
U.S. Small Market	DFA U.S. Small Cap fund
U.S. Small Micro	DFA U.S. Micro Cap fund
U.S. Small Value	DFA U.S. Small Value fund
Real Estate	DFA Real Estate Securities fund
Int'l Large Market	DFA Large Cap Int'l fund
Int'l Large Value	DFA Int'l Value fund
Int'l Small Market	DFA Int'l Small Company fund
Int'l Small Value	DFA Int'l Small Cap Value fund
Emerging Markets	DFA Emerging Markets fund

"Last 10 yrs." returns are ended 12/31/11.

Equius Partners is an investment advisor registered with the Securities and Exchange Commission. Consider the investment objectives, risks, and charges and expenses of any mutual fund and read the prospectus carefully before investing. Indexes are not available for direct investment; therefore, their performance does not reflect the expenses associated with the management of an actual portfolio. **Past performance is not a guarantee of future results.**

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Beating the Market

Jeff Troutner, Equius Partners

As a long-term investor, you have three basic choices for the management of the stock portion of your portfolio:

- **The Market Option:** You can keep things really simple and invest in almost 3,300 different stocks by using one index fund that represents the total stock market. This is a decidedly "new school" approach even though it's been available to investors for more than 35 years. It's based on overwhelming evidence that markets work. About 20% of investors use this approach.
- **The Dimensional Beat-the-Market Option:** You can "tilt" your total market index strategy toward the higher-risk/higher-return dimensions of small company and value stocks by using index or asset class funds. Call this "new, new school." It, too, is based on the knowledge that markets work but are multidimensional. Only a small fraction of the 20% of new school investors take advantage of this approach, which has been fully available since about 1995.
- **The "I'm Special" Beat-the-Market Option:** You can pick from thousands of different proprietary stock picking or market timing schemes offered by a myriad of money managers, financial advisors, mutual fund companies, stockbrokers, insurance agents, and retirement fund consultants. This option is firmly cemented in 1930s-era research and a belief that markets don't work particularly well. It is favored by graduates of Ivy League schools who belong to polo clubs, wear Brooks Brothers suits, and drive Bentleys. Consequently, these establishment "old school" experts guide the investment policies of most college endowments, corporate retirement plans, and charitable trusts for the "uninformed" masses.

Considering each, the big question is, what are the odds I will realize my investment objectives? This is a critical question because we're concerned with outcomes for long-term *investment* portfolios, not short-term *speculative* ones. In other words, we're not gambling in the short term for a jackpot, so we don't need to fight the same kind of odds. Before we dig into the numbers, let's examine a snapshot of the mutual fund industry today.

Table 1: Mutual Fund Statistics (12/31/2011)

By Approach	# Funds	Asset ($B)	% of Assets	Avg. Expense Ratio	Avg. Turnover
Index	704	1,344	21%	0.23%	16%
Active	4,375	5,111	79%	0.82%	53%

Source: University of Chicago's CRSP Survivor-Bias-Free Mutual Fund Database

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According to the data in Table 1, the 79% of actively managed mutual fund assets have expenses almost four times those of index funds and experience three times the portfolio turnover. Higher expenses alone decrease the likelihood of achieving better-than-market returns through active management.

The Market Return

Table 2 shows the total U.S. stock market return for various periods, starting in 1928. The longer term returns average around 9%. With inflation averaging 3%, the *real* expected return on stocks is 6%. This number can be thought of as the "risk premium" investors receive for owning stocks over risk-free assets (such as Treasury Bills).

Table 2: Annual Compound Return Ended 2011

Index	Since 1928	Since 1973	Since 1995	Last 10 Years
Total Stock Market	9.5%	10.0%	8.5%	3.8%

Source: Dimensional Index data, Dimensional Fund Advisors

The past 10 years saw big swings in market returns as well as a lower-than-average annual return. If ever there was a period when the securities research and forecasting skills of active managers could shine, it was this one. But as we'll see, active management failed miserably—again.

Investors can realize the market return, minus a very modest expense of 0.06%, by purchasing a total stock market index fund such as Vanguard's. This is the bar active managers must clear (minus much higher expenses) at a minimum. We'll see in a moment how well they've done. But first, let's review other dimensions of the market that reward investors with fairly consistent risk premiums.

The Multidimensional Market Return

High-speed computers, sophisticated and powerful software, contributions from major donors to finance and economics departments at key universities, and hungry grad students have been a godsend to the investment industry outside of Wall Street. In fact, a rather ironic funding of the Center for Research in Securities Prices (CRSP) at the University of Chicago by Merrill Lynch has done more than perhaps anything else over the past 50 years to expose the myths of old-school investing.

In previous *Asset Class* articles, I've outlined how Eugene Fama and Ken French developed their Three Factor Model of market risk dimensions, using CRSP stock data extending back to the 1920s. They found that diversified portfolios of small company and value stocks represent risk factors independent from the total market. In other words, investors can expect to receive higher returns from those asset classes over time, due to their higher risk. Table 3 summarizes this risk perspective, using returns for the total market, for U.S. large value, and for U.S. small value stocks since 1928.

Table 3: Annual Compound Returns Ended 2011

Index	Since 1928	Since 1973	Since 1995	Last 10 Years
Total Stock Market	9.5%	10.0%	8.5%	3.8%
U.S. Large Value Stocks	10.4%	12.2%	8.5%	2.0%
U.S. Small Value Stocks	12.9%	15.5%	13.4%	9.2%

Source: Dimensional Index data, Dimensional Fund Advisors

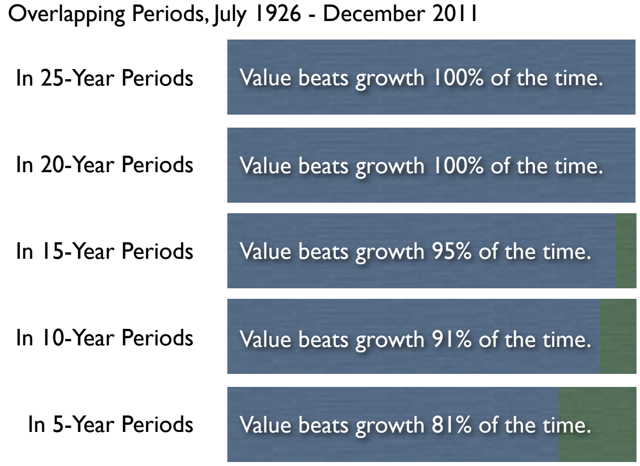
Total stock market return can be captured reliably from an index fund, but capturing the small cap and value risk premiums requires the fund manager to build the right "passive" security selection structure and then manage it effectively. For a number of reasons that we've covered often in the past, trying to capture these risk premiums with traditional indexes is difficult, particularly on the small cap side, where market impact (the additional cost of buying or selling less liquid securities) can be huge. Therefore, the choice of an index fund manager is quite important.

The premiums are not totally reliable over shorter time periods, as the data for U.S. large value stocks shown in Table 3 (yellow cells) indicates. Trying to capture these premiums through active management is a fool's game that is likely to diminish reliability even further. The lack of diversification, consistent structure, and disciplined application that characterize active management undermines most efforts.

Charts 1 and 2 show the persistence of the small cap and value risk premiums over various rolling periods.

Chart 1: U.S. Value vs. U.S. Growth

Overlapping Periods, July 1926 - December 2011



Periods based on rolling annualized returns. 727 total 25-year periods. 787 total 20-year periods. 847 total 15-year periods. 895 total 10-year periods. 967 total 5-year periods. Returns based on Fama/French Research Factors. Source: Dimensional Fund Advisors

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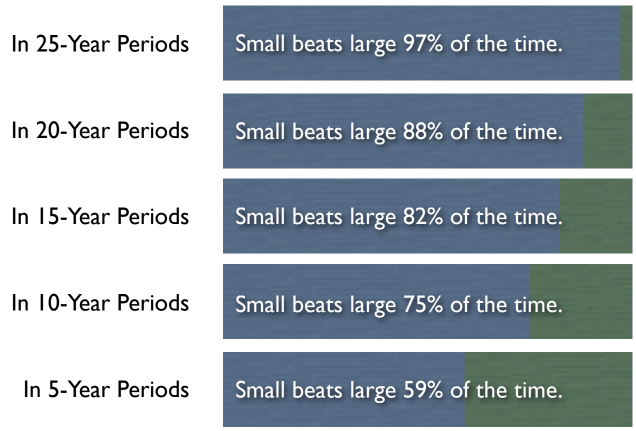
Chart 2: U.S. Small vs. U.S. Large

Overlapping Periods, July 1926 - December 2011



See explanation with Chart 1

The data indicate that tilting away from a total market portfolio to higher-risk small cap and value stocks produces higher expected returns over time, and the value risk premium is more reliable than the small cap risk premium. But these tilts add a degree of short-term uncertainty and risk that investors must accept if their long-term objective is to exceed the market return. These same relationships exist with small cap and value stocks in international markets.

Next, we'll look at the unique risks and portfolio uncertainty that active managers introduce to the equation.

Are They Really Special?

To critique the performance of active fund managers, we use the CRSP Survivorship-Bias-Free Mutual Fund Database. This eliminates the significant bias built into databases favored by active managers (such as the Morningstar Mutual Fund database) that omit closed or merged funds from the sample. Funds are closed or merged almost always because of poor performance relative to unmanaged benchmarks, and their omission from the database skews active performance upward. So the first thing to look for when evaluating active fund manager performance are fund survivor rates.

Table 4 shows mutual fund survivor rates over the past 10 years (2002 – 2011). As you can see, the record's not good. These poor survival rates introduce a significant and unique risk to active management, of which most fund investors are unaware. Shifting among active strategies (using funds, independent money managers, financial advisors, etc.) is already a common *voluntary* mistake investors make. Being forced to change by the closing or merging of a fund is just salt in the wound.

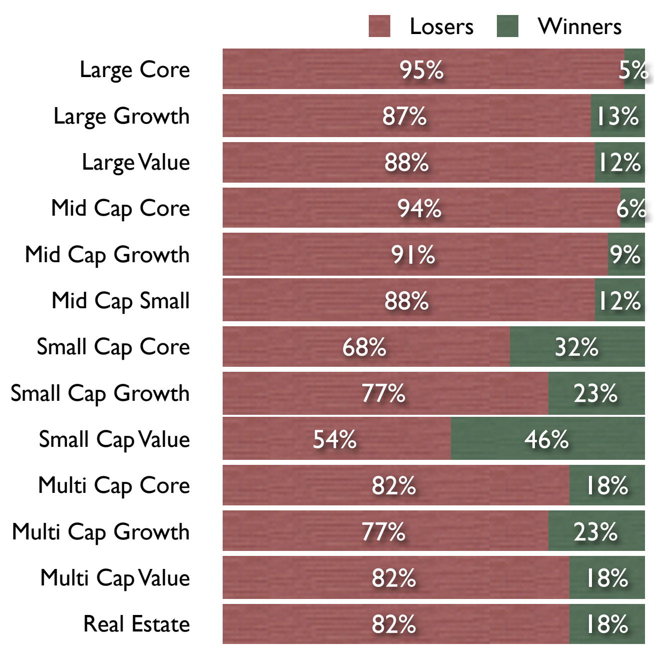
Now let's look at how the survivors performed by stock risk dimension over the period (Chart 3). In every category, the market won—decisively in most cases.

Table 4: 10-Year Survival Rates of U.S. Active Funds

By Category	# Funds at Start	# Funds That Survived	Survival Rate
Stocks			
Large Core	277	119	43%
Large Growth	334	123	37%
Large Value	125	56	45%
Mid Cap Core	63	37	59%
Mid Cap Growth	175	80	46%
Mid Cap Value	93	67	72%
Small Cap Core	103	63	61%
Small Cap Growth	171	85	50%
Small Cap Value	138	95	69%
Multi Cap Core	139	77	55%
Multi Cap Growth	186	71	38%
Multi Cap Value	266	147	55%
Real Estate	68	40	59%
Bonds			
Government	66	35	53%
Gov't Intermediate	88	48	55%
Gov't Short-term	51	29	57%
Corporate	160	80	50%
Corporate Intermediate	207	103	50%
Corporate Short-term	54	36	67%
High Yield	146	86	59%
TIPS	10	7	70%

Source: CRSP Survivor-Bias-Free Mutual Fund Database. "Core" represents funds that combine value and growth

Chart 3: Stock Fund Winners and Losers



Source: CRSP Survivor-Bias-Free Mutual Fund Database. "Core" represents funds that combine value and growth

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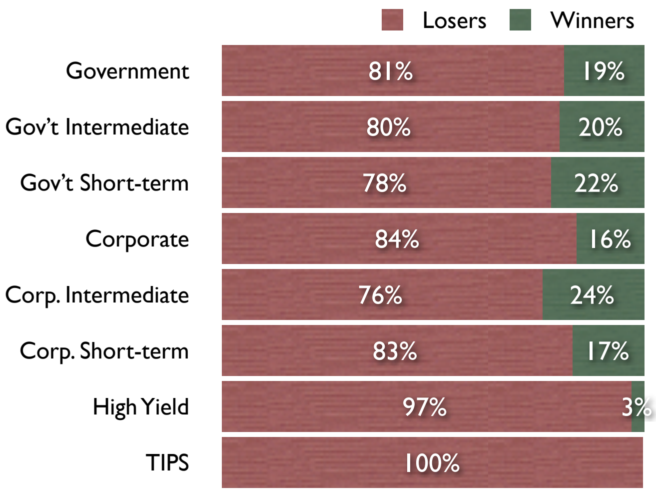
Not surprisingly, we see the same lack of active management talent with fixed income management. **It's clear that the odds of selecting a superior, market-beating stock or bond fund manager are very slim.**

Chart 4: Bond Fund Winners and Losers



Source: CRSP Survivor-Bias-Free Mutual Fund Database

Finally, let's look at how the winners do *after* they've been identified as the winners (after all, we can know which ones they are in advance only by using a crystal ball). For this exercise, we look at the number of funds in each category at the start of 2002, observe how many were still around five years later, identify the ones that beat their benchmarks over those five years, and check how well those fund managers did against their benchmarks for the next five years (ended 2011). Table 5 shows the results for U.S. stock funds.

Table 5: Persistence of "Winners" (U.S. Stock Funds)

By Category	# Funds at Start in 2002	# Funds That Survived to 2006	% of Winners that Became Losers Over the Next Five Years
Large Core	277	167 (60%)	83%
Large Growth	334	197 (59%)	77%
Large Value	125	86 (69%)	50%
Mid Cap Core	63	50 (79%)	100%
Mid Cap Growth	175	126 (72%)	71%
Mid Cap Value	93	82 (88%)	60%
Small Cap Core	103	82 (80%)	62%
Small Cap Growth	171	121 (71%)	72%
Small Cap Value	138	120 (87%)	26%
Multi Cap Core	139	104 (75%)	70%
Multi Cap Growth	186	108 (58%)	81%
Multi Cap Value	266	202 (76%)	55%
Real Estate	68	52 (76%)	64%

Source: CRSP Survivor-Bias-Free Mutual Fund Database

Conclusion

For some investors, the goal of capturing the total stock market return for a designated portion of their total portfolio is sufficient to meet their long-term objectives. These investors can be highly confident that as long as markets work (i.e., they price stocks efficiently enough that the "I'm special" cohort can't consistently outperform them), they can meet their goals with a low-cost and highly diversified index fund.

For other investors who need or want a higher return than the overall market will provide, the choice between the other two options is easy. A well-structured, indexed portfolio tilted to the other risk dimensions of the market—small cap and value stocks—can deliver higher expected returns much more reliably than can active management.

The choice of index funds (more appropriately, asset class funds) to build a multidimensional portfolio is important, however. We've covered this topic in past *Asset Class* articles and won't repeat the analysis here. The main point is that the conventional index benchmarks on which most index funds are based have not done a good job of capturing small cap and value return premiums. All the great research coming out of the University of Chicago's Booth School of Business and other prominent academic finance and economics departments would be wasted if firms like Dimensional Fund Advisors didn't exist and investors didn't have access to tools designed specifically to exploit the research.

It remains a profound mystery to me that active management as a long-term investment strategy survives, especially in light of the high costs, low fund survivor rates, low success rates of the surviving funds, and the lack of persistence on the part of the surviving "winners" to beat the market in the future. That 80% of the investing public allows their most serious assets to be managed this way is simply mind-boggling.

Active management is clearly a triumph of hope over experience. New tools such as the CRSP Survivorship-Bias-Free Mutual Fund Database can do only so much to shed light on this issue. Until the investment industry becomes more professional and evidence-based and the media puts itself on the side of investors instead of the industry, little will change to improve outcomes for the majority of long-term investors.

For purposes of this article, "winners" are active fund managers who beat the market return and "losers" are those who failed. We're sure they're <u>all</u> winners in other aspects of their lives.

Past performance is no guarantee of future results. Indexes are not available for investment. Index returns assume reinvestment of all distributions and, unlike mutual funds, do not reflect fees or expenses. Diversification does not eliminate the risk of market loss. This information is for educational purposes only and should not be considered investment advice or an offer of any security for sale.