

An Empirical Analysis of Fundamental Indexation

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Abstract

The Capital Asset Pricing Model (CAPM) and the case for efficient market equity pricing has been dealt a series of blows over the last twenty years. The recent emergence (Arnott, Hsu & Moore, 2005) of a set of strategies that purport to beat the capitalization weighted market portfolio suggested by the efficient market hypothesis, using price insensitive valuation techniques (book value, total employment, and trailing five year averages of gross cash flow, revenue, sales and dividends) raises yet another strong challenge to financial dogma. This paper examines whether ETFs that track these 'fundamental indexes' experience superior risk adjusted performance on the CAPM and Fama-French Three Factor model relative to capitalization weighting or other 'outperforming' indexation strategies. The paper finds that over the period of June 2006 to March 2008, of the twelve domestic fundamental ETFs examined, only the Earnings 500 ETF consistently performed above the benchmarks. While the performance of large-cap and total market fundamental ETFs lend some strength to the argument for fundamental indexation, they underwhelm given fundamental indexation's historical outperformance and undermine the claim that equity prices are, and will continue to be, significantly mistaken given the information inherent in firm fundamentals.

I. Introduction

As of February, 2008¹ there was \$11.742 trillion dollars invested in various mutual funds within the USA. Each fund manager has the same basic incentive: find the right mix of securities to maximize the fund's returns while minimizing its risks. Each of these funds is in turn judged against the risks and returns of similar benchmarks, which has led to these benchmarks being closely tracked, and having a tremendous impact on the composition of mutual fund portfolios. Most benchmarks are capitalization weighted indexes² such as the S&P 500 or Russell 1000. The reasoning behind capitalization weighting these indexes, and therefore the reasoning driving trillions of dollars of investment, relies upon modern portfolio theory (MPT). According to MPT the 'market portfolio', every risky asset held in proportion to its value (in this case proxied by capitalization³), will have the greatest mean-variance efficiency. What does this mean? All investors can theoretically find the lowest risk for any desired level of return by holding a combination of the market portfolio and a long or short position in the riskless asset. If however an alternatively weighted index systematically beats the market on a risk adjusted basis, it indicates the market is mispricing assets, creating the rarest and most sought after prize in finance - a significant arbitrage opportunity.

The theoretical foundation underlying the intuitive trade off between the risk and return of a security, the Capital Asset Pricing Model (CAPM), was first laid out in 1964 when William Sharpe published the concept that would eventually win him a Nobel Prize in economics. For the last forty years academia and financial practitioners alike have relied upon CAPM to model the return characteristics of portfolios as linear functions of measurable market related risk. The discovery in the late seventies and early eighties of

1 (Trends In Mutual Fund Investing August 2007, http://www.ici.org/statements/nr/trends_02_08.html)

2 These indexes are not strictly capitalization weighted. Many of them have selection rules designed to minimize transaction costs include provisions on liquidity, and additional thresholds to inclusion/exclusion.

3 A company's market capitalization is its total value as determined by the market, calculated by multiplying the number of outstanding shares by their current market price.

metrics (size, price-to-book ratio, dividend yield, etc.) which had historically outperformed CAPM, as well as papers challenging the efficient market hypothesis, led to the creation of small capitalization and ‘value’ funds (along with their corollaries the mid-cap, large-cap and ‘growth’ funds).

In 2005 Arnott, Hsu & Moore attempted to “[investigate] whether stock market indexes based on an array of cap-indifferent measure of company size are more mean-variance efficient than those based on market cap” (p. 11). Using six price insensitive metrics: book value, total employment, and trailing five year averages of cash flow, revenue, sales and gross dividends, they built domestic market indexes and compared their returns over the period of 1962 to 2004 to capitalization weighted indexes. They found that all six methods outperformed over that period, and since then work has been done to show that these results are robust in small and medium companies as well as across international markets. These results have been put into practice in the form of WisdomTree, a mutual fund company which manages 38 funds based on domestic and international dividend and earnings measurements.

This paper will attempt to determine whether an investor in fundamentally indexed ETFs can experience the promised superior risk-adjusted performance relative to traditional market funds, especially given the market’s knowledge of the historical biases that allowed fundamental indexing to outperforming in the first place. In doing so this paper will also compare fundamental indexation to other historically outperforming strategies, and look at how the changing market conditions surrounding the subprime mortgage crisis affect the performance of the fundamental funds.

II. Literature Review

The Capital Asset Pricing Model⁴ (CAPM) was first introduced by Sharpe (1964), and built upon by Lintner (1965), and Black (1972). It models the returns on a given risky asset or portfolio (calculated as the total return minus the return on a risk free asset) as a function of the asset's exposure to overall market returns (β , otherwise known as the market related risk) and its own idiosyncratic returns (α , returns that are firm or portfolio specific, not attributable to market or industry fluctuations). Because the market should take into account all publically available information α should essentially be a random, uncorrelated error term with an expected value of zero across a large portfolio or a long observation.

Despite (or because of) this, an extensive literature has emerged in search of a consistently positive α ; that is to say risk-adjusted returns consistently superior to the (capitalization weighted) market portfolio. Most failed to find any significant way to 'beat the market'. For example Bloomfield, Leftwich, & Long (1977) empirically assess "fine tuning" strategies designed to improve portfolio efficiency, but are unable to find a strategy where the benefits outweigh the expenses incurred in implementing it. This has continued to the present day while authors like Tabner (2007) continue to test alternative strategies. He looked at equal weighting as a diversification strategy against the otherwise poorly diversified FTSE 100 Index (the ten largest firms account for 51% of the holdings in the standard capitalization weighted portfolio), but found the equal weighted FTSE 100 underperforms on both risk and returns, even during large market shocks.

However these attempts have not been entirely fruitless. Literature on superior portfolios began to appear in the eighties. Banz (1981) suggests the CAPM is misspecified due to an inverse relationship he finds between market cap and return over the previous 40 years in the NYSE. Similarly Litzenberger and Ramaswamy (1982) found a positive

⁴ $r - R_f = \beta(R_m - R_f) + \alpha$

relationship between dividend yield and returns in the NYSE; neither relationship is linear or log-linear. Other studies⁵ also positively relate the ratio of book-value/market-value, leverage and earnings/price to returns. Fama and French (1991) attempt to quantify the effects of these different factors, believing that they represented additional risks as opposed to systematic mispricing. They found that the cross-section of average returns for a given level of market risk can be described through the introduction of just two other independent variables – size and book-to-market equity, resulting in the Fama-French Three Factor Model.^{6,7}

At about the same time Shiller (1981) challenged the efficient market pricing hypothesis.⁸ Comparing implied dividend beliefs (derived from the widely accepted discounted cash flow model) to realized dividends Shiller found that stock price movements were five to thirteen times larger than volatility in dividend payment could explain. Shiller goes on to point out that investors seemingly change their expectation for dividends by considerably more than actual observed dividend movements during even the great depression. Not once this century has dividend volatility justified these implied investor expectations.

Treynor (2005) and Hsu (2006) argue that the ‘noise’ in the stock market, the price deviations from true value, leads a cap-weighted portfolio to exert a drag on returns because

5 See Basu (1983), Bhandari (1988), Chan, Hamao, and Lakonishok (1991), Rosenberg, Reid, and Lanstein (1985), and Stattman (1980).

$$6 \quad r - R_f = \beta(R_m - R_f) + b_s(SMB) + b_v(HML) + \alpha$$

Where b_s & b_v are the exposure of an equity or portfolio to the small capitalization and high book/price ratio effects respectively. SMB is essentially long small capitalization and short large capitalization – it is the historical returns on three small capitalization equity portfolios (value, neutral and growth) minus the historical returns on three similar large capitalization equity portfolios. HML is similarly long high book/price equities and short low book/price equities – it is the historical returns on two high book/price ratio portfolios (large capitalization and small capitalization) minus the historical returns on two similar low book/price ratio stocks.

It is important to note that just as β represents exposure to market risk, b_s and b_v both represent additional risk factors according to Fama-French, thus accounting for their otherwise unexplained excess returns. This suggests somewhat counter intuitively that b_v , exposure to a high book/price ratio makes an equity more risky whereas conventional wisdom would indicate the opposite. This has led some to reject the risk rationalization that Fama-French make and accept that the Fama-French Model captures systematic mispricing as opposed to additional risk factors.

7 One particularly novel application of this approach is Luu and Kennedy (2006) who trained a neural network to predict company performance for 300 ASX listed companies over the period of 2000-2004 based on the Fama-French factors. Over long time periods they found that book/price, but not size, was significant in the neural network’s ability to correctly forecast returns.

8 Also see LeRoy and Porter (1981).

“it will make bigger bets on overpriced stocks and smaller bets on underpriced stocks” (p. 65). Hsu illustrates the effect through the use of a simple example: assume that the total market consists of only two companies with only one share each. Their fair values are both \$10 because they’ll both pay out \$1 per period (and the discount rate is 10%), but are both subject to a 20% pricing error such that one is priced at \$12 and one at \$8. Now if a cap-weighting strategy is in place returns will only be $60\% \cdot \frac{\$1}{\$12} + 40\% \cdot \frac{\$1}{\$8} = 10.00\%$, whereas had the two been equally weighted the returns would have been $50\% \cdot \frac{\$1}{\$12} + 50\% \cdot \frac{\$1}{\$8} = 10.42\%$, 0.42% higher. Hsu also points out that if price tends to revert to the mean (fair value) the excess return from equal weighting would be considerably higher.

Perold (2007) addresses and rejects Hsu’s model, illustrating his own conclusion through the similar model. He points out that if we do not, *ex ante*, know the fair value of the securities it would be just as likely in the case of the \$8 and \$12 security that the \$8 was overvalued and the \$12 was undervalued. With this assumption you find that the expected returns on an equal and cap weighted portfolio are identical. Though Perold’s example also assumes the price correction between periods, his results apply equally well to Hsu’s simple model. However Perold’s conclusion does not disprove Hsu’s point as he claims. Rather it illustrates the need for us to find a new metric by which one *can* estimate fair value more accurately than market price. Though Hsu does not refer directly to using other measures to *ex ante* find the ‘fair value’ in his model, he clearly refers to their existence when he says that price does a poor job of “reflect[ing] firm fundamentals” (p. 2).

Hsu, along with Arnott and Moore (2005) tested five price insensitive weighting measures (as outlined in the introduction), and found that all outperformed capitalization weighting domestically over forty years by between 1.66% and 2.56% per annum on average.

That performance is even more impressive once risk is taken into account according to the CAPM, with α 's between 1.98% and 2.63%. This suggests that all five metrics make better estimators of true value (and thus the mean-variance efficient portfolio) than market price does, even though it (or perhaps because – recall Shiller 1981) includes future return expectations not captured in past performance. Hsu and Campollo (2005) examine the extension of fundamental indexation onto both small and mid-sized equities, as well as into international markets and conclude that the benefits of fundamental indexation are robust across these categories. They also offer some conjecture, though the work has not yet been done to show, that fundamental indexation enjoys some other benefits over its cap weighted and value fund siblings. First, since large cap weighted rebalancing is entirely concentrated on the smallest, and thus often least liquid securities, that fundamental indexation actually may enjoy lower transaction costs; and secondly that fundamental indexes will include the most valuable 'growth' companies typically excluded from value funds.

Estrada (2006) however finds a case where fundamental indexation does not generally outperform. He constructs portfolios of markets, weighting 16 different country's equity markets according to a variety of strategies. While he finds the fundamental strategy (gross dividend weighting) outperforms capitalisation weighting by an average of 1.9%, he also finds that a simple equal weighting strategy (hardly an estimate of true value) outperforms by 2.4%, and that weighting by dividend yield, which by virtue of its price sensitivity is a value, as opposed to fundamental, strategy, outperforms cap weighting by 3.6%.

Siracusano (2007) is the first to look at the performance of WisdomTree indexes specifically, and finds positive alphas for the dividend indexes from January 1, 1980 to June 30, 2007 and for the earnings indexes from July 1, 2002 to June 30, 2007. However this

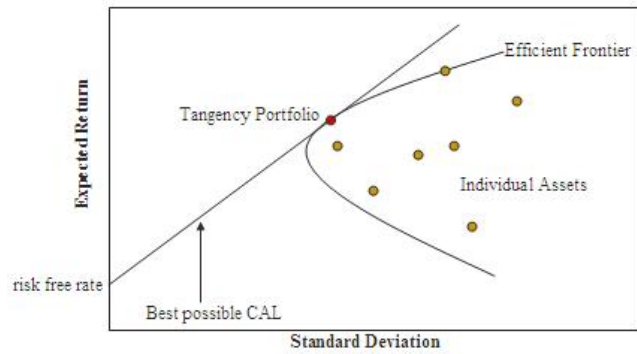
result is mostly based upon hypothetical back tested data covering periods before⁹ the concept of fundamental indexation had been introduced, which would not reflect the market's reaction to the discovery of fundamental indexation. Furthermore studying the indexes fails to capture the drag exerted by management fees, transaction costs, taxes and other expenses on the ETF performance, and therefore fails to capture net performance as experienced by an actual investor.

This paper will take up where Siracusano (2007) left off, examining the practical viability of fundamental indexation by looking at the performance of WisdomTree's fundamentally weighted ETFs from their inceptions through the beginning of 2008. In doing so this paper aims not only to extend our knowledge of fundamental indexation's performance into the latter half of 2007 and 2008 (and the credit crisis that has defined the period) and into the real world of ETFs, but to discover whether a strategy of fundamental indexing can be made to work now that the market has had time to react to the knowledge of, and thus correct, the historical biases that allowed fundamental indexes to succeed in the first place.

⁹ The dividend funds were not introduced until June 1, 2006, and the earnings funds were not introduced until February 1, 2007.

III. Theoretical Framework

Fundamental indexation derives itself from the Capital Allocation Line and the possible failure of the Efficient Market Hypothesis. Specifically it is that the efficient market hypothesis entails the



The Markowitz Frontier - Wikipedia

equivalence of the CAPM tangency portfolio and the capitalization weighted market portfolio; but, once the efficient market hypothesis is called into question, the possibility arises of constructing a more efficient tangency portfolio.

The efficient market hypothesis states that the price of an asset is an unbiased measure of its true value, reflecting all available information at a given moment. If capital markets are efficient and in equilibrium, then by definition the mean-variance efficient tangency portfolio must necessarily contain all *valuable* risky assets. This is because it is the only portfolio that allows investors onto the optimal Capital Allocation Line, where the best risk for return trade off is available. As all investors have the same goal – the best return for a given level of risk – the market portfolio is the only portfolio worth holding. Since *every* investor is attempting to invest in that portfolio, the total demand for, and value of, every asset is perfectly proportional to its share of the tangency portfolio. Any risky asset not contained within the market portfolio would experience no demand and be worthless; any asset making up 1/5th of the portfolio would have a true value equal to 1/5th of the entire market.¹⁰ Since the efficient market hypothesis implies that market value is the best estimator of ‘true value’, a portfolio containing every risky asset in proportion to its market value is the best estimator for the tangency portfolio that every investor seeks.

¹⁰ Please note that by ‘one asset’ I refer to the aggregate of all assets with the perfect correlation and the same return characteristics. Thus a single share of a company isn’t one asset, but a fraction of the asset with a fraction of the worth. If there are two hypothetical companies with perfectly equivalent returns and dividends they would be considered together as just one asset.

If, however, there is systematic mispricing given the available information, then it implies that the market portfolio is not the best proxy for the tangency portfolio. Therefore if there are strategies available that display greater mean-variance efficiency than the market portfolio (they produce a positive α), then the strategies must come closer to tangency portfolio, and therefore true value, than the market portfolio, and therefore market pricing. The indicated inefficiency is sufficient to refute the efficient market hypothesis and suggest arbitrage opportunities based on the successful strategies.

IV. Empirical Specification and Data Description

This paper is a review of fundamental indexation since the concept was introduced in 2005 –the rationale behind it and the performance comparison of various ETF styles linked to fundamental indexation. The calculations involved in evaluating and comparing the performance of these ETFs are relatively simple and carried out using Excel; all regressions are performed in Stata10 IC.

The ETF data sets I will be using are daily, end of day, ETF prices and dividends obtained from Yahoo! Finance¹¹, running from the inception of each ETF (the dividend WisdomTree ETFs began trading June 16th, 2006, and the earnings WisdomTree ETFs began trading on February 23rd, 2007) to March 19th, 2008. The ETFs selected are the various domestic WisdomTree dividend and earnings ETFs, with iShares small, medium and large ETF data running from June 16th, 2006, included as cap weighted benchmarks. iShares growth and value ETFs for each size category are also included as alternative mainstream strategies. iShares was selected to benchmark WisdomTree because of its similar position as a provider of indexed ETFs with high liquidity and management fees.

The CAPM provides the basic measure of how an ETF performs relative to the market on a risk adjusted basis. The CAPM α & β are calculated by taking the (robust) linear regression of the daily returns (continuously compounded) of an ETF in excess of the risk free rate on the daily returns of the market portfolio in excess of the risk free rate. β is the coefficient on the market returns, while α is the constant in the regression. For the regression I use the continuously compounded daily yield on the Vanguard Money Market Treasury Fund Rate as the risk free rate. This mirrors the risk free rate available to an average investor making short term investments. For the market portfolio I use the Wilshire 5000 Composite

¹¹ <http://finance.yahoo.com/>

Index, a cap weighted index of nearly all U.S. equities retrieved through the Wilshire Index Calculator¹².

The Fama-French Three Factor model provides insight into which parts of the fundamental funds' outperformance is attributable to their intrinsic size and value biases, and what new returns they bring to the table. E.g. is there some performance benefit to dividend weighting beyond the fact that dividend weighting produces a large value bias and a smaller small cap weighting bias? The Fama-French α can tell us. To calculate the Fama-French three factor β 's and α , the ETF returns are regressed on the three Fama-French factors: the return on the market in excess of the one month treasury bill yield, the return on a small-minus-big capitalization portfolio and the return on a high-minus-low book to market ratio portfolio. For these factors I use the Fama-French Factors [Daily] data posted Kenneth R. French's Data Library.¹³

Unfortunately the period in which fundamental ETFs have been available is relatively short. Therefore statistically significant results are in most cases impossible to find, and the results may be unrepresentative if market conditions over the last two years differ significantly from the norm. Luckily (for this paper, if not for the market) the period encompasses a variety of market conditions: the end of the long bull market and the onset of the subprime market crisis. Furthermore, since past studies suggest the only long periods of negative deviation from the otherwise robust outperformance occurred during the inflation of stock market bubbles, and that this was corrected during subsequent crashes, we can expect the fundamentals to have outperformed their cap-weighted brethren over this time period.

The second potential problem is that ETF prices can deviate from the underlying net asset value (NAV), which means that the ETF returns do not necessarily perfectly correlate with the returns of the underlying assets. However this deviation is typically slight as

¹² <http://www.wilshire.com/Indexes/calculator/>

¹³ http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

investors are quick to take advantage of any arbitrage opportunity. Furthermore the purpose of this study is to examine the *realizable* gains to an investor through fundamental indexation, net of any miscellaneous noise, drag or other transaction cost imposed by real conditions in the marketplace.

V. Results

Table 1: Risk and Return Characteristics						
	From Inception to 03/19/2008		From Inception to 07/19/2007		From 07/20/2007 to 03/19/2008	
Earnings Funds	Returns ¹⁴	Variance ¹⁵	Returns	Variance	Returns	Variance
Total Earnings Fund	-8.60%	0.01249%	17.59%	0.00531%	-24.39%	0.01670%
Earnings 500 Fund	-7.24%	0.01334%	18.40%	0.00563%	-22.69%	0.01788%
Midcap Earnings Fund	-17.33%	0.01563%	13.89%	0.00740%	-36.13%	0.02044%
SmallCap Earnings Fund	-26.29%	0.02131%	2.72%	0.00979%	-43.76%	0.02810%
Earnings Top 100 Fund	-10.68%	0.01958%	22.38%	0.00679%	-30.60%	0.02711%
Low P/E Fund ¹⁶	-12.32%	0.01790%	19.66%	0.00685%	-31.59%	0.02439%
Wilshire 5000	-9.58%	0.01382%	17.28%	0.00625%	-	-
Dividend Funds						
Total Dividend Fund	2.71%	0.00957%	19.11%	0.00374%	-23.94%	0.01889%
LargeCap Dividend Fund	2.85%	0.00997%	19.83%	0.00386%	-24.74%	0.01970%
MidCap Dividend Fund	-1.95%	0.01161%	16.27%	0.00487%	-31.55%	0.02235%
SmallCap Dividend Fund	-3.75%	0.01695%	13.43%	0.00759%	-31.66%	0.03197%
High Yielding Dividend Fund ¹⁶	-1.54%	0.01218%	17.59%	0.00374%	-32.62%	0.02566%
Top 100 Dividend Fund	2.23%	0.01147%	20.80%	0.00432%	-27.96%	0.02286%
iShares ETFs						
LargeCap 500	2.98%	0.00959%	20.24%	0.00431%	-25.07%	0.01797%
LargeCap 500 Growth	4.01%	0.00866%	19.92%	0.00420%	-21.84%	0.01573%
LargeCap 500 Value	1.84%	0.01098%	20.88%	0.00470%	-29.10%	0.02094%
MidCap 400	1.52%	0.01225%	20.35%	0.00717%	-29.08%	0.02028%
MidCap 400 Growth	3.25%	0.01274%	20.38%	0.00787%	-24.60%	0.02045%
MediumCap 400 Value	-0.62%	0.01178%	19.88%	0.00697%	-33.94%	0.01932%
SmallCap 600	-0.88%	0.01628%	19.24%	0.00967%	-33.58%	0.02675%
SmallCap 600 Growth	0.14%	0.01421%	18.77%	0.00898%	-30.15%	0.02248%
SmallCap 600 Value	-2.14%	0.01855%	19.29%	0.01068%	-36.96%	0.03104%
Wilshire 5000	3.71%	0.00986%	21.83%	0.00456%	-25.73%	0.01826%

Table 1 shows the basic return on all covered ETFs along with daily variance of returns in excess of the risk free rate, a measure of the riskiness of each asset. It is further broken down into two periods characterized by substantially different market performance which affected both risk and return: the bull market before the subprime credit crisis, in which the market was growing an average of 21.83% per annum, and the bear market caused by the fallout from the crisis, in which the market has been contracting by an average of 25.73% per annum.

For all three fund groups the top performers both in terms of return, and to a lesser extent, risk (the total market funds have slightly better risk characteristics as we would expect from better diversification), are the large cap funds. This is indicative of the period covered; both the historical outperformance of small-cap and value funds failed.

¹⁴ All rates assume dividend reinvestment. Rates are annualized and geometric for ease of comparison and calculation. Geometric rates slightly overstate returns (and understate losses); to translate a geometric rate into an arithmetic (actual) rate for any given period add one and take the resulting number's natural log.

¹⁵ The variance given is the variance on daily returns in excess of the risk free rate.

¹⁶ Low P/E and High Yielding Dividend are both value weighting strategies, and bear some exposure to equity price.

Figure 1: Dividend Performance Relative to the Market

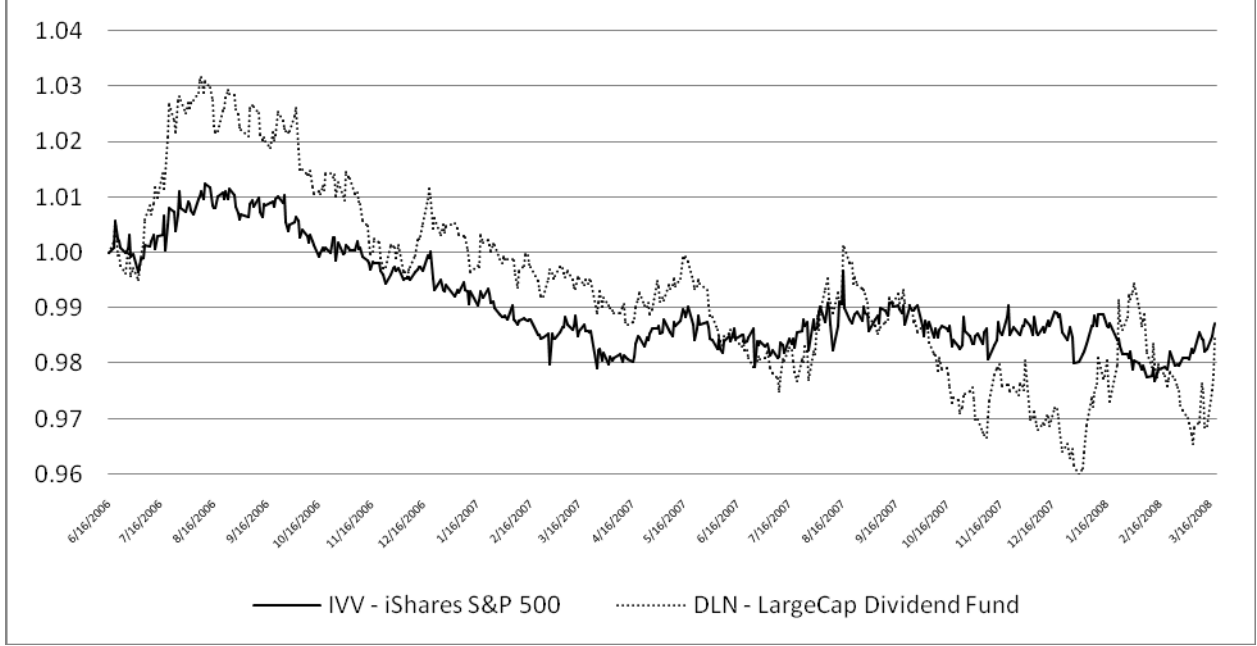
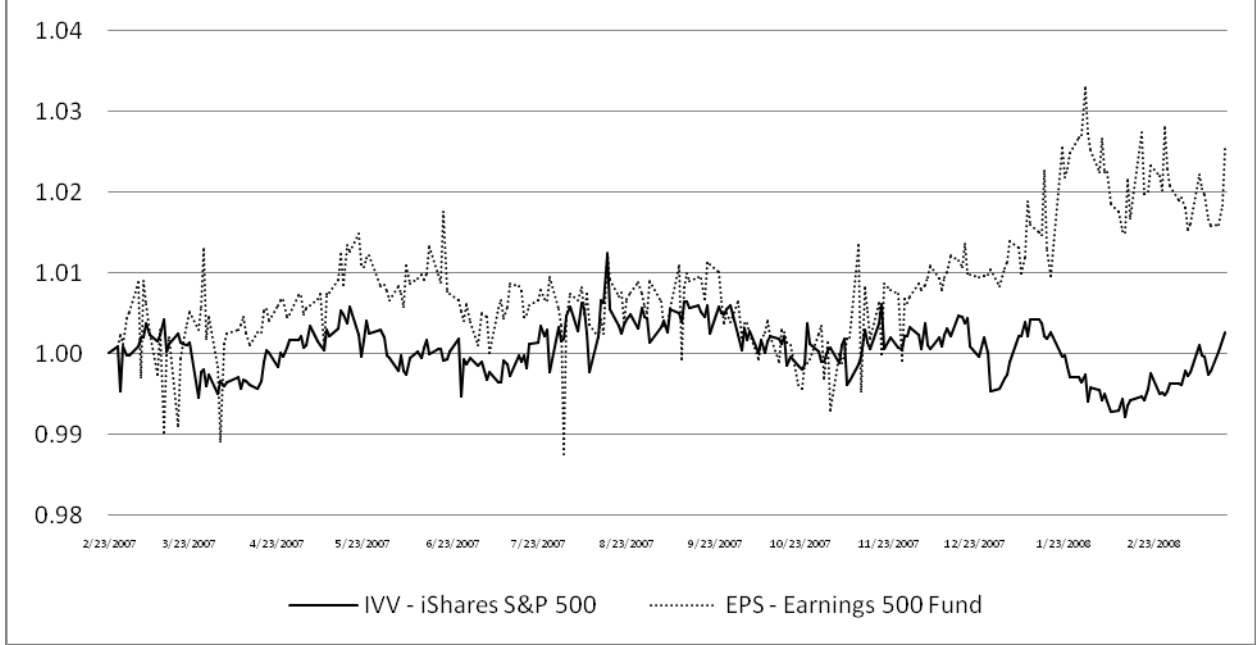


Figure 2: Earnings Performance Relative to the Market



Figures 1 & 2 show the top dividend and top earnings fund's performance relative to the total market index alongside the applicable cap weighted benchmark ETF's performance since their respective inceptions.

Fundamental funds, with a strong value bias and (by definition) less concentration in high capitalization companies mirrored the underperformance of these parts of the market. Oddly, while the size bias all but disappears in the first period for the capitalization weighted funds, the fundamental ETFs display a strong size bias in both periods. Growth's outperformance also disappears in the first period, leaving its overall outperformance entirely attributable to the second period. This is contrary to what one would expect – value funds should, if anything, underperform during the run up to a bust as enthusiastic but ultimately unrealized growth expectations overinflate growth fund's worth. Similarly, when the bust hits, the firm fundamentals underlying the 'value' designation should reduce risk. This is what was observed by Arnott et al. (2005) for the fundamental funds. Why is this? Well, perhaps those constructing the growth funds (explicitly including future expectations) anticipated a market contraction, and what we see may be the payoff of caution. Alternatively it may simply be that the market overbought into value and fundamentals because of the supposedly superior performance, inflating their value before the collapse.

Table 2: CAPM Regression Results												
	All: From Inception to 03/19/2008				From Inception to 07/19/2007				From 07/20/2007 to 03/19/2008			
Earnings Funds	Returns	CAPM β^{17}	CAPM α	Robust SE	Returns	CAPM β	CAPM α	Robust SE	Returns	CAPM β	CAPM α	Robust SE
Total Earnings Fund	-8.60%	0.772	-2.11%	10.04%	17.65%	0.657	4.75%	13.45%	-24.39%	0.794	-4.71%	14.39%
Earnings 500 Fund	-7.24%	0.912	1.18%	6.67%	18.46%	0.802	3.75%	9.92%	-22.69%	0.934	1.12%	8.75%
Midcap Earnings Fund	-17.33%	0.848	-9.78%	11.68%	13.96%	0.727	0.18%	16.00%	-36.13%	0.871	-14.17%	16.18%
SmallCap Earnings Fund	-26.29%	1.051	-15.94%	12.03%	2.78%	1.081	-15.43%	12.46%	-43.76%	1.044	-16.67%	17.98%
Earnings Top 100 Fund	-10.68%	1.071	-0.06%	9.38%	22.45%	0.937	6.04%	9.20%	-30.60%	1.097	-1.94%	14.05%
Low P/E Fund	-12.32%	0.899	-4.08%	12.86%	19.73%	0.922	3.50%	9.83%	-31.59%	0.892	-9.01%	20.18%
Wilshire 5000	-9.58%	-	-	-	17.28%	-	-	-	-	-	-	-
Dividend Funds												
Total Dividend Fund	2.71%	0.942	-1.01%	3.42%	19.11%	0.843	0.01%	3.31%	-23.94%	0.983	1.30%	7.01%
LargeCap Dividend Fund	2.85%	0.974	-0.86%	2.95%	19.83%	0.875	0.15%	2.99%	-24.74%	1.015	1.47%	5.90%
MidCap Dividend Fund	-1.95%	0.998	-5.66%	5.04%	16.27%	0.944	-4.61%	4.35%	-31.55%	1.020	-5.18%	11.49%
SmallCap Dividend Fund	-3.75%	1.150	-7.38%	7.45%	13.43%	1.140	-10.86%	6.17%	-31.68%	1.157	-1.26%	16.94%
High Yielding Dividend Fund	-1.54%	1.016	-5.22%	5.35%	17.59%	0.826	-1.26%	3.87%	-32.62%	1.092	-4.09%	12.35%
Top 100 Dividend Fund	2.23%	0.994	-1.45%	4.97%	20.80%	0.865	1.32%	4.80%	-27.96%	1.046	-0.80%	10.70%
iShares ETFs												
LargeCap 500	2.98%	0.967	-0.73%	2.28%	20.24%	0.936	-0.47%	2.81%	-25.07%	0.980	0.11%	4.11%
LargeCap 500 Growth	4.01%	0.910	0.27%	2.64%	19.92%	0.930	-0.69%	2.57%	-21.84%	0.903	1.05%	5.72%
LargeCap 500 Value	1.84%	1.029	-1.83%	2.77%	20.88%	0.980	-0.59%	2.79%	-29.10%	1.048	-1.89%	5.74%
MidCap 400	1.52%	1.063	-2.13%	3.97%	20.35%	1.171	-4.40%	4.76%	-29.08%	1.020	-2.73%	6.98%
MidCap 400 Growth	3.25%	1.061	-0.40%	4.84%	20.38%	1.213	-5.09%	5.28%	-24.60%	1.000	1.19%	9.13%
MediumCap 400 Value	-0.62%	1.035	-4.28%	4.15%	19.88%	1.158	-4.64%	4.63%	-33.94%	0.985	-8.63%	7.97%
SmallCap 600	-0.88%	1.201	-4.44%	5.40%	19.24%	1.359	-8.75%	5.43%	-33.58%	1.138	-3.70%	10.85%
SmallCap 600 Growth	0.14%	1.135	-3.46%	4.62%	18.77%	1.312	-8.39%	5.15%	-30.15%	1.065	-2.43%	8.17%
SmallCap 600 Value	-2.14%	1.282	-5.64%	5.79%	19.29%	1.282	-5.64%	5.79%	-36.96%	1.221	-4.64%	12.13%
Wilshire 5000	3.71%	-	-	-	21.83%	-	-	-	-25.73%	-	-	-

Table 2 looks at the CAPM performance of the fundamental fund. Many of the results we observed in **Table 1** hold true for the risk adjusted alphas. While most fundamental funds have failed to outperform their capitalization weighted peers, the large-cap funds which represent a much larger portion of the market's value, manage to beat the large-cap cap-weighted fund's α both before and during the subprime crisis. For the large-cap dividend fund this occurs despite poorer overall returns, reflecting the dividend fund's changing risk profile. The Earnings 500 Fund's outperformance of both the market and the benchmark ETF (**Figure 2**) is unique – to date it is the only fundamentally indexed ETF to consistently beat market returns not only in absolute terms (which the total earnings fund has also proven itself capable of) but in risk adjusted terms, with a consistently positive CAPM α .

Contrary to previous findings, but consistent with its value bias, the earnings fundamental funds tended to do significantly better in the first period than in the second. Unfortunately the dividend funds fail to produce a clear pattern period to period, with both large and small-cap funds improving their risk adjusted returns along with the capitalization weighted group, but with the mid-cap, high yielding, and top 100 funds losing ground.

The market risk (β) is distributed much as we would expect, with larger funds displaying less and smaller funds displaying more. It is however notable that the total funds display the least market risk by far – by a portion of the market chosen through capitalization but weighted through the fundamentals bears far more market risk than one including the entire market and weighted through the fundamentals. Market risk characteristics change substantially with the subprime crisis. While much of the change to market risk was small, we do see larger capitalization fundamental funds gaining additional exposure to the market, which may indicate they played a greater role in the market downturn.

Table 3: Fama-French Regression Results

All: From Inception to 01/31/2008									
Earnings Funds	Returns	β^{18}	Small/Big	\dagger	High/Low	\dagger	α	\dagger	
Total Earnings Fund	-5.32%	0.8014	-0.2073	-1.60	0.2089	1.37	-3.57%	-0.33	
Earnings 500 Fund	-1.65%	0.8958	0.0699	1.00	0.1926	1.96	1.93%	0.26	
Midcap Earnings Fund	-12.32%	0.8527	0.1552	1.02	-0.0838	-0.27	-10.59%	-0.8	
SmallCap Earnings Fund	-21.94%	1.0164	0.8809	5.40	0.3737	1.34	-6.84%	-0.56	
Earnings Top 100 Fund	-0.79%	1.0650	0.0471	0.54	0.5998	5.09	-2.74%	-0.55	
Low P/E Fund	-2.90%	1.0383	-0.2883	-1.76	0.0611	0.20	-3.73%	-0.35	
Dividend Funds									
Total Dividend Fund	6.72%	0.9647	-0.0438	-0.91	0.4635	6.26	-2.16%	-0.67	
LargeCap Dividend Fund	7.29%	0.9904	-0.1359	-3.49	0.3442	5.25	-2.51%	-0.89	
MidCap Dividend Fund	2.29%	0.9638	0.3792	7.35	0.7002	5.69	-3.63%	-0.77	
SmallCap Dividend Fund	-0.88%	1.0472	1.0288	12.85	0.9402	7.44	-2.95%	-0.55	
High Yielding Dividend Fund	5.28%	1.0017	0.0203	0.27	0.7931	5.13	-2.74%	-0.55	
Top 100 Dividend Fund	7.19%	1.0111	-0.0317	-0.54	0.7015	5.61	-1.37%	-0.3	
iShares ETFs									
LargeCap 500	6.41%	0.9874	-0.1405	-4.66	0.0334	0.73	-4.03%	-1.65	
LargeCap 500 Growth	6.67%	0.9293	-0.1817	-7.96	-0.3525	-8.93	-4.50%	-1.99	
LargeCap 500 Value	6.36%	1.0478	-0.0429	-1.20	0.3954	7.22	-3.08%	-1.18	
MidCap 400	5.34%	1.0281	0.3521	8.75	0.0330	0.61	-2.45%	-0.68	
MidCap 400 Growth	7.06%	0.9969	0.3445	7.39	-0.3197	-3.92	-1.33%	-0.32	
MediumCap 400 Value	3.25%	1.0061	0.4532	10.55	0.3723	5.77	-3.13%	-0.87	
SmallCap 600	2.32%	1.1102	0.8286	21.29	0.2404	3.44	-2.69%	-0.76	
SmallCap 600 Growth	3.88%	1.0542	0.7037	22.33	-0.0335	-0.80	-2.13%	-0.7	
SmallCap 600 Value	0.84%	1.1788	0.9701	22.19	0.5514	6.22	-3.06%	-0.86	

Before the Subprime Crisis: From Inception to 07/19/2007									
Earnings Funds	Returns	β	Small/Big	\dagger	High/Low	\dagger	α	\dagger	
Total Earnings Fund	17.65%	0.6360	0.2628	1.36	0.0351	0.11	5.71%	0.39	
Earnings 500 Fund	18.46%	0.8118	-0.0771	-0.55	0.0297	0.14	0.67%	0.06	
Midcap Earnings Fund	13.96%	0.7102	0.3400	1.64	-0.0960	-0.31	0.55%	0.03	
SmallCap Earnings Fund	2.78%	1.0097	0.8580	4.61	0.2481	1.24	-7.68%	-0.68	
Earnings Top 100 Fund	22.45%	0.9385	-0.0149	-0.11	0.3591	1.95	-5.17%	-1.44	
Low P/E Fund	19.73%	0.9417	-0.2452	-2.05	0.1422	0.70	-0.70%	-0.08	
Dividend Funds									
Total Dividend Fund	19.11%	0.9128	-0.1462	-2.10	0.2080	2.59	-3.49%	-1.07	
LargeCap Dividend Fund	19.83%	0.9709	-0.2550	-7.94	0.1122	2.01	-3.92%	-1.59	
MidCap Dividend Fund	16.27%	0.9015	0.2156	4.30	0.2795	2.92	-5.40%	-1.25	
SmallCap Dividend Fund	13.43%	0.9163	0.8519	11.43	0.5474	5.33	-7.53%	-1.64	
High Yielding Dividend Fund	17.59%	0.9091	-0.1670	-3.84	0.2997	3.78	-5.17%	-1.44	
Top 100 Dividend Fund	20.80%	0.9598	-0.1274	-2.34	0.5060	5.80	-3.21%	-0.76	
iShares ETFs									
LargeCap 500	20.24%	1.0104	-0.2249	-7.32	0.0033	0.06	-3.95%	-1.53	
LargeCap 500 Growth	19.92%	0.9766	-0.2346	-7.38	-0.2813	-6.00	-3.11%	-1.29	
LargeCap 500 Value	20.88%	1.0542	-0.1627	-5.67	0.1841	3.92	-4.33%	-1.74	
MidCap 400	20.35%	1.0414	0.4491	9.61	0.1015	1.32	-3.01%	-0.76	
MidCap 400 Growth	20.38%	1.0573	0.4614	8.38	-0.1174	-1.25	-2.81%	-0.65	
MediumCap 400 Value	19.88%	1.0383	0.4800	10.57	0.3030	4.00	-3.74%	-0.98	
SmallCap 600	19.24%	1.1257	0.7487	15.30	0.0727	1.01	-4.92%	-1.4	
SmallCap 600 Growth	18.77%	1.0827	0.7030	14.83	-0.0271	-0.44	-4.50%	-1.36	
SmallCap 600 Value	19.29%	1.1803	0.8533	19.23	0.2279	3.23	-5.93%	-1.8	

During the Subprime Crisis: From 07/19/2007 to 01/31/2008									
Earnings Funds	Returns	β	Small/Big	\dagger	High/Low	\dagger	α	\dagger	
Total Earnings Fund	-19.53%	0.8415	-0.3593	-2.21	0.3241	1.94	-6.32%	-0.41	
Earnings 500 Fund	-16.70%	0.9224	0.1104	1.36	0.1971	1.79	2.98%	0.3	
Midcap Earnings Fund	-31.99%	0.8884	0.1073	0.58	-0.0500	-0.14	-15.59%	-0.8	
SmallCap Earnings Fund	-40.44%	1.0192	0.8774	4.37	0.3933	1.22	-6.82%	-0.34	
Earnings Top 100 Fund	-18.18%	1.1031	0.0572	0.54	0.6342	4.85	11.53%	0.9	
Low P/E Fund*	-19.83%	1.0643	-0.2857	-1.47	0.0533	0.15	-3.60%	-0.21	
Dividend Funds									
Total Dividend Fund	-18.35%	0.9949	0.0575	0.89	0.5314	5.47	5.64%	0.83	
LargeCap Dividend Fund	-18.07%	1.0066	-0.0343	-0.54	0.4028	4.65	3.68%	0.55	
MidCap Dividend Fund	-25.98%	1.0002	0.5060	5.90	0.8401	4.93	7.02%	0.63	
SmallCap Dividend Fund	-29.81%	1.1253	1.2887	10.38	0.9775	5.94	17.33%	1.42	
High Yielding Dividend Fund*	-19.61%	1.0546	0.1873	1.42	0.9440	4.20	11.53%	0.9	
Top 100 Dividend Fund	-20.33%	1.0433	0.0925	1.00	0.7236	3.97	7.12%	0.63	
iShares ETFs									
LargeCap 500	-21.56%	0.9845	-0.0401	-0.74	-0.0157	-0.25	-4.62%	-0.84	
LargeCap 500 Growth	-20.12%	0.9131	-0.1111	-3.08	-0.4375	-8.09	-9.93%	-2.04	
LargeCap 500 Value	-23.00%	1.0511	0.0376	0.62	0.4593	6.06	1.22%	0.2	
MidCap 400	-25.02%	1.0121	0.2044	3.07	0.0984	1.41	-3.18%	-0.44	
MidCap 400 Growth	-19.87%	0.9601	0.1783	2.33	-0.3061	-2.80	-3.62%	-0.41	
MediumCap 400 Value	-30.37%	0.9828	0.3235	4.16	0.5016	5.49	-3.54%	-0.45	
SmallCap 600	-31.89%	1.1063	0.8531	10.78	0.3223	2.81	2.57%	0.32	
SmallCap 600 Growth	-26.24%	1.0411	0.6731	10.95	-0.0062	-0.10	1.16%	0.18	
SmallCap 600 Value	-36.46%	1.1805	0.9881	12.16	0.7219	5.38	5.42%	0.65	

Arnott et al.'s paper is somewhat dismissive of the Fama-French approach, stating that they "were not seeking Fama-French 'alpha'." Still they note the average -0.1% α of

fundamental funds is superior to that found in all other funds capable of beating cap-weighting. However the Fama-French Three Factor model is relevant in providing insight into what drove returns for the various funds. By looking at the Small/Big and High/Low we can see which part of successes (or failures) are attributable to strategies already common in the market, (small cap and value respectively) and to what degree fundamental indexation creates its own unique return, captured in α .

Our basic expectations are met – fund's exposure to small/big is inversely proportional to capitation and value characteristics. The fundamental funds have a value bias, and the dividend funds' value bias is much stronger. While the cap-weighted funds' exposure to the market changes very little over this period, we now see all fundamental funds, value and earnings, moving far more in step with the market after the market begins its decline. We also see that funds with value exposure find it to be a much bigger driver. These can both be explained if value funds came to disproportionately drive the market during the crisis. Firms with exposure to value would mirror this drive, increasing correlation with market movements while any previous correlation with the market would show now as increased correlation with value movements.

Once again only the Earnings 500 Fund shows a consistent premium to the market with a positive α in both periods, though all larger-cap earnings funds outperformed before the crisis. The dividend funds are more consistent intra-period, though remarkably less so between periods (and therefore in changing market environments). They uniformly underperformed not only the market, but the cap-weighted funds in the first period. However in the second they all have large, positive alphas. This would seem to indicate, consistent with our expectations, that dividend funds do apparently do a very good job of managing risks in times of economic downturn. Keep in mind that with Fama-French this is despite, not because of, the dividend funds' strong value bias.

VI. Conclusion

This paper has evaluated the performance of fundamental indexation since its introduction into the financial world. Though the market clearly has not yet eliminated the phenomena of fundamental outperformance, the benefits of fundamental indexation to investors is hardly as cut and dry as the existing literature would have you believe. Outperformance, where it existed, was often sporadic across capitalizations and not robust across differing market conditions. The fundamental's claim second essential claim, to be a safe haven in times of trouble, is far from clear, though the dividend funds' large Fama-French alphas since the market began its downturn support this claim.

The one exception to the general uncertainty displayed above is the performance of the Earnings 500 fund (**Table 4**). While not the top performer in every period, it consistently outperformed the market, the appropriate benchmark capitalization weighted fund, and the leading alternative fund, the iShare 500 Growth Fund. It did so not only the basis of simple returns, but with the market risk adjusted the CAPM premium and with the value and size adjusted the Fama-French premium.

Table 4: The Earnings 500 Fund									
<i>P1: 02/23/2007-07/19/2007</i> <i>P2: 07/20/2007-03/19/2008</i>	Return			CAPM α			Fama-French α		
	Total	P1	P2	Total	P1	P2	Total	P1	P2
Earnings 500	-7.24%	18.46%	-22.69%	1.18%	3.75%	1.12%	1.93%	0.67%	2.98%
iShares 500	-13.51%	12.16%	-28.94%	-0.73%	-0.74%	0.11%	-4.03%	-7.27%	-4.62%
iShares 500 Growth	-10.81%	13.98%	-25.71%	0.27%	1.65%	1.05%	-4.50%	-6.24%	-9.93%
Wilshire	-9.58%	17.28%	-25.73%	-	-	-	-	-	-
Biggest Premium (Above)	6.27%	6.31%	6.25%	1.91%	4.49%	1.01%	6.43%	7.94%	12.92%
Smallest Premium (Above)	2.34%	1.18%	3.01%	0.91%	2.10%	0.07%	5.96%	6.91%	7.60%

This paper should neither be taken as a condemnation, nor as an endorsement of fundamental indexation. Above all I urge caution – time is the only true test of fundamental indexation's tenacity. Until fundamentally indexed ETFs have been in existence for a period considerably longer than two years it will remain difficult to pass a definitive judgement on

their capability to deliver performance. Finally, it is worth noting that in financial markets, a free lunch exists only so long as no one eats it. If and when outperforming the market through fundamental indexation becomes big business, equilibrium will re-establish itself and you'll be left with just another index.

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Appendix A – CAPM Regression Results

Over the Whole Period: Inception through 03/19/2008

Dividend Funds	Returns	CAPM β	Robust SE	t	P>t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Dividend Fund	2.71%	0.942	0.0198	47.54	0	0.903	0.981	-1.01%	3.42%	0.29	0.76	-7.73%	5.72%
LargeCap Dividend Fund	2.85%	0.974	0.0154	63.08	0	0.943	1.004	-0.86%	2.95%	0.29	0.77	-6.66%	4.93%
MidCap Dividend Fund	-1.95%	0.998	0.0268	37.3	0	0.946	1.051	-5.66%	5.04%	1.12	0.26	15.57%	4.26%
SmallCap Dividend Fund	-3.75%	1.150	0.0381	30.2	0	1.076	1.225	-7.38%	7.45%	0.99	0.32	22.02%	7.26%
High Yielding Dividend Fund*	-1.54%	1.016	0.0328	30.9	0	0.951	1.080	-5.22%	5.35%	0.98	0.32	15.73%	5.28%
Top 100 Dividend Fund	2.23%	0.994	0.0266	37.4	0	0.942	1.046	-1.45%	4.97%	0.29	0.77	11.22%	8.32%
Earnings Funds	Returns	CAPM β	Robust SE	t	P>t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Earnings Fund	-8.60%	0.772	0.0491	15.7	1	0.675	0.869	-2.11%	10.04%	0.21	0.83	21.88%	17.66%
Earnings 500 Fund	-7.24%	0.912	0.0246	37.0	3	0.863	0.960	1.18%	6.67%	0.18	0.86	11.94%	14.30%
Midcap Earnings Fund	17.33%	0.848	0.0463	18.3	0	0.757	0.939	-9.78%	11.68%	0.84	0.40	32.78%	13.22%
SmallCap Earnings Fund	26.29%	1.051	0.0492	21.3	5	0.954	1.148	15.94%	12.03%	1.33	0.18	39.62%	7.74%
Earnings Top 100 Fund	10.68%	1.071	0.0385	27.8	1	0.995	1.147	-0.06%	9.38%	0.01	0.99	18.53%	18.40%
Low P/E Fund*	12.32%	0.899	0.0764	11.7	7	0.748	1.049	-4.08%	12.86%	0.32	0.75	29.40%	21.24%
iShares ETFs	Returns	CAPM β	Robust SE	t	P>t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
LargeCap 500	2.98%	0.967	0.0111	87.1	5	0.945	0.989	-0.73%	2.28%	0.32	0.75	-5.21%	3.75%
LargeCap 500 Growth	4.01%	0.910	0.0137	66.2	3	0.883	0.937	0.27%	2.64%	0.1	0.91	-4.92%	5.45%
LargeCap 500 Value	1.84%	1.029	0.0125	82.3	9	1.004	1.054	-1.83%	2.77%	0.66	0.51	-7.27%	3.62%
MidCap 400	1.52%	1.063	0.0189	56.3	0	1.026	1.100	-2.13%	3.97%	0.53	0.59	-9.93%	5.68%
MidCap 400 Growth	3.25%	1.061	0.0241	44.0	3	1.013	1.108	-0.40%	4.84%	0.08	0.93	-9.91%	9.12%
MediumCap 400 Value	-0.62%	1.035	0.0203	51.1	1	0.996	1.075	-4.28%	4.15%	1.03	0.30	12.44%	3.87%
SmallCap 600	-0.88%	1.201	0.0269	44.6	9	1.149	1.254	-4.44%	5.40%	0.82	0.41	15.05%	6.18%
SmallCap 600 Growth	0.14%	1.135	0.0254	44.6	8	1.086	1.185	-3.46%	4.62%	0.75	0.45	12.54%	5.63%
SmallCap 600 Value	-2.14%	1.282	0.0279	45.8	8	1.227	1.336	-5.64%	5.79%	0.97	0.33	17.02%	5.75%

The Dividend and iShares ETF data covers 06/19/2006 to 03/19/2008 (441 Observations) while the Earnings ETF data covers 02/27/2007 to 03/19/2008 (269 observations)

Before the Subprime Crisis: Inception through 07/19/2007

Dividend Funds	Returns	CAPM β	Robust SE	t	P>t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Dividend Fund	19.11%	0.843	0.0309	27.2	7	0.782	0.904	0.01%	3.31%	0	0.99	-6.50%	6.53%
LargeCap Dividend Fund	19.83%	0.875	0.0232	37.7	4	0.829	0.920	0.15%	2.99%	0.05	0.96	-5.73%	6.03%
MidCap Dividend Fund	16.27%	0.944	0.0301	31.4	0	0.884	1.003	-4.61%	4.35%	1.06	0.29	13.17%	3.95%
SmallCap Dividend Fund	13.43%	1.140	0.0443	25.7	2	1.053	1.228	10.86%	6.17%	1.76	0.07	23.01%	1.28%
High Yielding Dividend Fund*	17.59%	0.826	0.0281	29.3	7	0.771	0.881	-1.26%	3.87%	0.33	0.74	-8.88%	6.35%
Top 100 Dividend Fund	20.80%	0.865	0.0402	21.5	1	0.786	0.944	1.32%	4.80%	0.27	0.78	-8.13%	10.76%
Earnings Funds	Returns	CAPM β	Robust SE	t	P>t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Earnings Fund	17.65%	0.657	0.1378	4.77	0	0.384	0.930	4.75%	13.45%	0.35	0.72	21.94%	31.43%
Earnings 500 Fund	18.46%	0.802	0.0549	14.6	2	0.693	0.911	3.75%	9.92%	0.38	0.70	15.93%	23.42%
Midcap Earnings Fund	13.96%	0.727	0.0863	8.42	0	0.555	0.898	0.18%	16.00%	0.01	0.99	31.57%	31.93%
SmallCap Earnings Fund	2.78%	1.081	0.0611	17.7	0	0.960	1.202	15.43%	12.46%	1.24	0.21	40.17%	9.30%
Earnings Top 100 Fund	22.45%	0.937	0.0515	18.2	1	0.835	1.039	6.04%	9.20%	0.66	0.51	12.23%	24.30%
Low P/E Fund*	19.73%	0.922	0.0615	15.0	1	0.800	1.044	3.50%	9.83%	0.36	0.72	16.00%	23.00%

iShares ETFs	Return s	CAPM β	Robust SE	t	P> t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
LargeCap 500	20.24 %	0.936	0.0275	34.07	0	0.882	0.990	-0.47%	2.81%	0.17	0.868	-6.01%	5.07%
LargeCap 500 Growth	19.92 %	0.930	0.0233	39.9	0	0.884	0.976	-0.69%	2.57%	0.27	0.79	-5.74%	4.37%
LargeCap 500 Value	20.88 %	0.980	0.0187	52.47	0	0.944	1.017	-0.59%	2.79%	0.21	0.831	-6.08%	4.89%
MidCap 400	20.35 %	1.171	0.0328	35.74	0	1.106	1.235	-4.40%	4.76%	0.92	0.356	13.77%	4.97%
MidCap 400 Growth	20.38 %	1.213	0.0377	32.19	0	1.139	1.287	-5.09%	5.28%	0.96	0.336	15.48%	5.30%
MediumCap 400 Value	19.88 %	1.158	0.0339	34.12	0	1.091	1.225	-4.64%	4.63%	-1	0.316	13.75%	4.47%
SmallCap 600	19.23 %	1.359	0.0404	33.65	0	1.280	1.439	-8.75%	5.43%	1.61	0.108	19.43%	1.93%
SmallCap 600 Growth	18.77 %	1.312	0.0382	34.34	0	1.236	1.387	-8.39%	5.15%	1.63	0.104	18.53%	1.75%
SmallCap 600 Value	19.29 %	1.282	0.0279	45.88	0	1.227	1.336	-5.64%	5.79%	0.97	0.331	17.02%	5.75%

The Dividend and iShares ETF data covers 06/16/2006 to 07/19/2007 (273 Observations) while the Earnings ETF data covers 02/23/2007 to 07/19/2007 (101 observations)

During the Subprime Crisis: 07/20/2007 through 03/19/2008

Dividend Funds	Returns	CAP M β	Robus t SE	t	P> t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Dividend Fund	23.94%	0.983	0.0243	40.5	0	0.93	1.03	1.30%	7.01%	0.19	0.85	12.54%	15.14%
LargeCap Dividend Fund	24.74%	1.015	0.0184	1	0	0.97	1.05	1.47%	5.90%	0.25	0.80	10.18%	13.13%
MidCap Dividend Fund	31.55%	1.020	0.0362	2	0	0.94	1.09	-5.18%	11.49%	0.45	0.65	27.87%	17.51%
SmallCap Dividend Fund	31.68%	1.157	0.0508	8	0	1.05	1.25	-1.26%	16.94%	0.94	0.94	34.71%	32.20%
High Yielding Dividend Fund*	32.62%	1.092	0.0422	8	0	1.00	1.17	12.35%	12.35%	0.33	0.74	28.48%	20.30%
Top 100 Dividend Fund	27.96%	1.046	0.0345	3	0	0.97	1.11	-4.09%	10.70%	0.07	0.94	21.92%	20.32%
Earnings Funds	Returns	CAP M β	Robus t SE	t	P> t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
Total Earnings Fund	24.39%	0.794	0.0504	5	0	0.69	0.89	-4.71%	14.39%	0.33	0.74	33.12%	23.71%
Earnings 500 Fund	22.69%	0.934	0.0274	9	0	0.88	0.98	1.12%	8.75%	0.13	0.89	16.16%	18.40%
Midcap Earnings Fund	36.13%	0.871	0.0533	6	0	0.76	0.97	14.17%	16.18%	0.88	0.38	46.12%	17.78%
SmallCap Earnings Fund	43.76%	1.044	0.0586	1	0	0.92	1.16	16.67%	17.98%	0.93	0.35	52.17%	18.83%
Earnings Top 100 Fund	30.60%	1.097	0.0442	3	0	1.01	1.18	-1.94%	14.05%	0.14	0.89	29.68%	25.81%
Low P/E Fund*	31.59%	0.892	0.0920	9.7	0	0.71	1.07	-9.01%	20.18%	0.45	0.65	48.86%	30.83%
iShares ETFs	Returns	CAP M β	Robus t SE	t	P> t	95% Low	95% High	CAPM α	Robust SE	t	P>t	95% Low	95% High
LargeCap 500	25.07%	0.980	0.0117	5	0	0.95	1.00	0.11%	4.11%	0.03	0.97	-7.99%	8.21%
LargeCap 500 Growth	21.84%	0.903	0.0168	1	0	0.86	0.93	1.05%	5.72%	0.18	0.85	10.25%	12.35%
LargeCap 500 Value	29.10%	1.048	0.0156	4	0	1.01	1.07	-1.89%	5.74%	0.33	0.74	13.23%	9.45%
MidCap 400	29.08%	1.020	0.0216	7	0	0.97	1.06	-2.73%	6.98%	0.39	0.69	16.50%	11.05%
MidCap 400 Growth	24.60%	1.000	0.0285	7	0	0.94	1.05	1.19%	9.13%	0.13	0.89	16.84%	19.21%
MediumCap 400 Value	33.94%	0.985	0.0239	4	0	0.93	1.03	-8.63%	7.97%	1.08	0.28	24.36%	7.11%
SmallCap 600	33.58%	1.138	0.0329	2	0	1.07	1.20	-3.70%	10.85%	0.34	0.73	25.11%	17.71%
SmallCap 600 Growth	30.15%	1.065	0.0284	3	0	1.00	1.12	-2.43%	8.17%	-0.3	0.76	18.56%	13.69%
SmallCap 600 Value	36.96%	1.221	0.0349	35	0	1.15	1.29	-4.64%	12.13%	0.38	0.70	28.58%	19.31%

Appendix B – Fama-French Regression Results

Over the Whole Period: Inception through 01/31/2008

Earnings Funds	Returns	Variance	β	Robust SE	t	P>	Low 95%	High 95%	Small/Big	Robust SE	t	P>	Low 95%	High 95%	High/Low	Robust SE	t	P>	Low 95%	High 95%	α	Robust SE	t	P>	95% Low	95% High	
Total Earnings Fund	-5.32%	0.01166%	0.8014	0.0552	14.51	0.0%	0.6925	0.9102	-0.2073	0.1292	-1.60	11.0%	-0.4618	0.0473	0.2089	0.1521	1.37	17.1%	-0.0909	0.5086	-3.57%	10.68%	-0.33	73.9%	-24.61%	17.47%	
Earnings 500 Fund	-1.65%	0.01180%	0.8958	0.0315	28.41	0.0%	0.8337	0.9579	0.0699	0.0701	1.00	32.0%	-0.0683	0.2080	0.1926	0.0981	1.96	5.1%	-0.0007	0.3859	1.93%	7.31%	0.26	79.2%	-12.47%	16.32%	
Midcap Earnings Fund	-12.32%	0.01467%	0.8527	0.0554	15.39	0.0%	0.7435	0.9619	0.1552	0.1528	1.02	31.1%	-0.1458	0.4561	-0.0838	0.3060	-0.27	78.4%	-0.6866	0.5190	-10.59%	13.16%	-0.80	42.2%	-36.52%	15.34%	
SmallCap Earnings Fund	-21.94%	0.02002%	1.0164	0.0510	19.93	0.0%	0.9159	1.1168	0.8809	0.1632	5.40	0.0%	0.5593	1.2025	0.3737	0.2788	1.34	18.1%	-0.1755	0.9230	-6.84%	12.27%	-0.56	57.8%	-31.01%	17.34%	
Earnings Top 100 Fund	-0.79%	0.01720%	1.0650	0.0403	26.44	0.0%	0.9857	1.1444	0.0471	0.0872	0.54	59.0%	-0.1247	0.2188	0.5998	0.1177	5.09	0.0%	0.3679	0.8318	-2.74%	4.94%	-0.55	58.0%	-12.46%	6.98%	
Low P/E Fund	-2.90%	0.01701%	1.0383	0.0505	20.55	0.0%	0.9388	1.1379	-0.2883	0.1636	-1.76	7.9%	-0.6106	0.0341	0.0611	0.3073	0.20	84.2%	-0.5443	0.6666	-3.73%	10.60%	-0.35	72.5%	-24.62%	17.16%	
Dividend Funds																											
Total Dividend Fund	6.72%	0.00844%	0.9647	0.0188	51.30	0.0%	0.9277	1.0016	-0.0438	0.0480	-0.91	36.2%	-0.1381	0.0505	0.4635	0.0740	6.26	0.0%	0.3179	0.6090	-2.16%	3.21%	-0.67	50.2%	-8.47%	4.15%	
LargeCap Dividend Fund	7.29%	0.00853%	0.9904	0.0148	66.90	0.0%	0.9613	1.0195	-0.1359	0.0390	-3.49	0.1%	-0.2125	-0.0593	0.3442	0.0656	5.25	0.0%	0.2153	0.4730	-2.51%	2.81%	-0.89	37.4%	-8.04%	3.03%	
MidCap Dividend Fund	2.29%	0.01042%	0.9438	0.0263	36.58	0.0%	0.9120	1.0156	0.3792	0.0516	7.35	0.0%	0.2778	0.4806	0.7002	0.1231	5.69	0.0%	0.4583	0.9422	-3.63%	4.71%	-0.77	44.2%	-12.89%	5.64%	
SmallCap Dividend Fund	-0.88%	0.01568%	1.0472	0.0337	31.12	0.0%	0.9811	1.1134	1.0288	0.0801	12.85	0.0%	0.8714	1.1863	0.9402	0.1263	7.44	0.0%	0.6918	1.1886	-2.95%	5.39%	-0.55	58.4%	-13.54%	7.63%	
High Yielding Dividend Fund	5.28%	0.01016%	1.0017	0.0345	29.01	0.0%	0.9338	1.0696	0.0203	0.0764	0.27	79.1%	-0.1300	0.1705	0.7931	0.1547	5.13	0.0%	0.4891	1.0972	-2.74%	4.94%	-0.55	58.0%	-12.46%	6.98%	
Top 100 Dividend Fund	7.19%	0.01002%	1.0111	0.0252	40.08	0.0%	0.9616	1.0607	-0.0317	0.0591	-0.54	59.2%	-0.1478	0.0845	0.7015	0.1250	5.61	0.0%	0.4558	0.9473	-1.37%	4.53%	-0.30	76.3%	-10.28%	7.54%	
iShares ETFs																											
LargeCap 500	6.41%	0.00839%	0.9874	0.0141	70.13	0.0%	0.9598	1.0151	-0.1405	0.0301	-4.66	0.0%	-0.1997	-0.0812	0.0334	0.0456	0.73	46.5%	-0.0563	0.1230	-4.03%	2.44%	-1.65	9.9%	-8.83%	0.76%	
LargeCap 500 Growth	6.67%	0.00760%	0.9293	0.0145	64.26	0.0%	0.9009	0.9578	-0.1817	0.0228	-7.96	0.0%	-0.2266	-0.1368	-0.3525	0.0395	-8.93	0.0%	-0.4301	-0.2749	-4.50%	2.27%	-1.99	4.8%	-8.95%	-0.05%	
LargeCap 500 Value	6.36%	0.00963%	1.0478	0.0141	74.48	0.0%	1.0201	1.0754	-0.0429	0.0356	-1.20	22.9%	-0.1129	0.0271	0.3954	0.0547	7.22	0.0%	0.2878	0.5030	-3.08%	2.61%	-1.18	23.9%	-8.22%	2.06%	
MidCap 400	5.34%	0.01024%	1.0281	0.0199	51.76	0.0%	0.9890	1.0671	0.3521	0.0403	8.75	0.0%	0.2730	0.4313	0.0330	0.0537	0.61	53.9%	-0.0726	0.1386	-2.45%	3.60%	-0.68	49.7%	-9.52%	4.63%	
MidCap 400 Growth	7.04%	0.01024%	0.9969	0.0225	44.35	0.0%	0.9527	1.0411	0.3445	0.0466	7.39	0.0%	0.2529	0.4361	-0.3197	0.0815	-3.92	0.0%	-0.4798	-0.1595	-1.33%	4.13%	-0.32	74.8%	-9.44%	6.79%	
MediumCap 400 Value	3.25%	0.01081%	1.0061	0.0183	54.98	0.0%	0.9701	1.0420	0.4532	0.0429	10.55	0.0%	0.3688	0.5376	0.3723	0.0646	5.77	0.0%	0.2454	0.4993	-1.13%	3.62%	-0.87	38.7%	-10.24%	3.98%	
SmallCap 600	2.32%	0.01475%	1.1102	0.0198	56.08	0.0%	1.0713	1.1492	0.8286	0.0389	21.29	0.0%	0.7520	0.9051	0.2404	0.0700	3.44	0.1%	0.1029	0.3779	-2.69%	3.55%	-0.76	44.8%	-9.67%	4.28%	
SmallCap 600 Growth	3.88%	0.01290%	1.0542	0.0197	53.58	0.0%	1.0155	1.0929	0.7037	0.0315	22.33	0.0%	0.6418	0.7657	-0.0335	0.0421	-0.80	42.6%	-0.1162	0.0492	-2.13%	3.05%	-0.70	48.5%	-8.12%	3.86%	
SmallCap 600 Value	0.84%	0.01698%	1.1788	0.0183	64.49	0.0%	1.1429	1.2148	0.9701	0.0437	22.19	0.0%	0.8841	1.0561	0.5514	0.0887	6.22	0.0%	0.3771	0.7257	-3.04%	3.58%	-0.86	39.2%	-10.09%	3.97%	

Before the Subprime Crisis: Inception through 07/19/2007

Earnings Funds	Returns	Variance	β	Robust SE	t	P>	Low 95%	High 95%	Small/Big	Robust SE	t	P>	Low 95%	High 95%	High/Low	Robust SE	t	P>	Low 95%	High 95%	α	Robust SE	t	P>	95% Low	95% High	
Total Earnings Fund	17.65%	0.00531%	0.6360	0.1443	4.41	0.0%	0.3496	0.9224	0.2628	0.1939	1.36	17.8%	-0.1220	0.6477	0.0351	0.3170	0.11	91.2%	-0.5941	0.6643	5.71%	14.65%	0.39	69.8%	-23.36%	34.77%	
Earnings 500 Fund	18.46%	0.00563%	0.8118	0.0561	14.47	0.0%	0.7005	0.9232	-0.0771	0.1414	-0.55	58.7%	-0.3577	0.2035	0.0297	0.2153	0.14	89.1%	-0.3977	0.4571	0.67%	10.93%	0.06	95.1%	-21.01%	22.36%	
Midcap Earnings Fund	13.96%	0.00740%	0.7102	0.0862	8.24	0.0%	0.5391	0.8814	0.3400	0.2068	1.64	10.3%	-0.0704	0.7505	-0.0960	0.3126	-0.31	75.9%	-0.7164	0.5243	0.55%	15.79%	0.03	97.2%	-30.79%	31.90%	
SmallCap Earnings Fund	2.78%	0.00979%	1.0097	0.0523	19.29	0.0%	0.9059	1.1136	0.8580	0.1861	4.61	0.0%	0.4887	1.2273	0.2481	0.1995	1.24	21.7%	-0.1480	0.6441	-7.68%	11.25%	-0.68	49.7%	-30.01%	14.65%	
Earnings Top 100 Fund	22.45%	0.00679%	0.9385	0.0489	19.18	0.0%	0.8413	1.0356	-0.0149	0.1303	-0.11	90.9%	-0.2735	0.2438	0.3591	0.1845	1.95	5.5%	-0.0072	0.7254	-5.17%	3.58%	-1.44	15.0%	-12.22%	1.89%	
Low P/E Fund	19.73%	0.00685%	0.9417	0.0642	14.67	0.0%	0.8143	1.0691	-0.2452	0.1196	-2.05	4.3%	-0.4825	-0.0078	0.1422	0.2036	0.70	48.7%	-0.2620	0.5464	-0.70%	9.28%	-0.08	94.0%	-19.12%	17.72%	
Dividend Funds																											
Total Dividend Fund	19.11%	0.00374%	0.9128	0.0286	31.87	0.0%	0.8564	0.9692	-0.1462	0.0697	-2.10	3.7%	-0.2835	-0.0089	0.2080	0.0804	2.59	1.0%	0.0497	0.3663	-3.49%	3.26%	-1.07	28.7%	-9.91%	2.94%	
LargeCap Dividend Fund	19.83%	0.00386%	0.9709	0.0181	53.60	0.0%	0.9352	1.0065	-0.2550	0.0321	-7.94	0.0%	-0.3182	-0.1918	0.1122	0.0559	2.01	4.6%	0.0022	0.2223	-3.92%	2.47%	-1.59	11.4%	-8.78%	0.94%	
MidCap Dividend Fund	16.27%	0.00487%	0.9015	0.0285	31.60	0.0%	0.8454	0.9577	0.2156	0.0501	4.30	0.0%	0.1170	0.3143	0.2795	0.0957	2.92	0.4%	0.0909	0.4680	-5.40%	4.32%	-1.25	21.2%	-13.90%	3.10%	
SmallCap Dividend Fund	13.43%	0.00759%	0.9163	0.0347	26.41	0.0%	0.8480	0.9846	0.8519	0.0745	11.43	0.0%	0.7052	0.9987	0.5474	0.1028	5.33	0.0%	0.3450	0.7497	-7.53%	4.59%	-1.64	10.2%	-16.58%	1.51%	
High Yielding Dividend Fund	17.59%	0.00374%	0.9091	0.0261	34.84	0.0%	0.8577	0.9605	-0.1670	0.0435	-3.84	0.0%	-0.2527	-0.0814	0.2997	0.0793	3.78	0.0%	0.1436	0.4557	-5.17%	3.58%	-1.44	15.0%	-12.22%	1.89%	
Top 100 Dividend Fund	20.80%	0.00432%	0.9598	0.0340	28.25	0.0%	0.8930	1.0267	-0.1274	0.0545	-2.34	2.0%	-0.2348	-0.0200	0.5060	0.0872	5.80	0.0%	0.3343	0.6777	-3.21%	4.24%	-0.76	45.0%	-11.57%	5.15%	
iShares ETFs																											
LargeCap 500	20.24%	0.00431%	1.0104	0.0266	38.03	0.0%	0.9581	1.0627	-0.2249	0.0307	-7.32	0.0%	-0.2853	-0.1644	0.0033	0.0535	0.06	95.1%	-0.1020	0.1085	-3.95%	2.58%	-1.53	12.7%	-9.03%	1.13%	
LargeCap 500 Growth	19.92%	0.00420%	0.9766	0.0260	37.55	0.0%	0.9254	1.0278	-0.2346	0.0318	-7.38	0.0%	-0.2972	-0.1720	-0.2813	0.0469	-6.00	0.0%	-0.3736	-0.1889	-3.11%	2.41%	-1.29	19.8%	-7.85%	1.64%	
LargeCap 500 Value	20.88%	0.00470%	1.0542	0.0161	65.66	0.0%	1.0226	1.0858	-0.1627	0.0287	-5.67	0.0%	-0.2193	-0.1062	0.1841	0.0470	3.92	0.0%	0.0916	0.2766	-4.3						

During the Subprime Crisis: 07/20/2007 through 01/31/2008

Earnings Funds	Returns	Variance	β	Robust SE	t	P>	Low 95%	High 95%	Small/Big	Robust SE	t	P>	Low 95%	High 95%	High/Low	Robust SE	t	P>	Low 95%	High 95%	α	Robust SE	t	P>	95% Low	95% High
Total Earnings Fund	-19.53%	0.01633%	0.8415	0.0542	15.53	0.0%	0.7343	0.9488	-0.3593	0.1622	-2.21	2.9%	-0.6803	-0.0383	0.3241	0.1672	1.94	5.5%	-0.0067	0.6548	-6.32%	15.53%	-0.41	68.5%	-37.05%	24.41%
Earnings 500 Fund	-16.70%	0.01633%	0.9224	0.0369	24.97	0.0%	0.8493	0.9954	0.1104	0.0814	1.36	17.7%	-0.0506	0.2714	0.1971	0.1104	1.79	7.6%	-0.0212	0.4155	2.98%	10.08%	0.30	76.8%	-16.96%	22.92%
Midcap Earnings Fund	-31.99%	0.01997%	0.8884	0.0671	13.23	0.0%	0.7556	1.0212	0.1073	0.1833	0.58	56.0%	-0.2554	0.4699	-0.0500	0.3531	-0.14	88.8%	-0.7484	0.6484	-15.59%	19.51%	-0.80	42.6%	-54.18%	23.00%
SmallCap Earnings Fund	-40.44%	0.02755%	1.0192	0.0651	15.66	0.0%	0.8905	1.1480	0.8774	0.2009	4.37	0.0%	0.4800	1.2749	0.3933	0.3226	1.22	22.5%	-0.2448	1.0315	-6.82%	19.78%	-0.34	73.1%	-45.94%	32.30%
Earnings Top 100 Fund	-18.18%	0.02487%	1.1031	0.0472	23.35	0.0%	1.0097	1.1965	0.0572	0.1065	0.54	59.2%	-0.1534	0.2679	0.6342	0.1307	4.85	0.0%	0.3756	0.8927	11.53%	12.76%	0.90	36.8%	-13.72%	36.78%
Low P/E Fund	-19.83%	0.02450%	1.0643	0.0631	16.86	0.0%	0.9394	1.1892	-0.2857	0.1938	-1.47	14.3%	-0.6691	0.0977	0.0533	0.3495	0.15	87.9%	-0.6380	0.7446	-3.60%	17.38%	-0.21	83.6%	-37.98%	30.77%
Dividend Funds																										
Total Dividend Fund	-18.35%	0.01780%	0.9949	0.0228	43.73	0.0%	0.9499	1.0399	0.0575	0.0644	0.89	37.4%	-0.0699	0.1849	0.5314	0.0972	5.47	0.0%	0.3391	0.7237	5.64%	6.79%	0.63	40.7%	-7.78%	19.06%
LargeCap Dividend Fund	-18.07%	0.01784%	1.0066	0.0193	52.09	0.0%	0.9683	1.0448	-0.0343	0.0640	-0.54	59.3%	-0.1610	0.0924	0.4028	0.0866	4.65	0.0%	0.2314	0.5743	3.68%	6.70%	0.55	58.4%	-9.58%	16.95%
MidCap Dividend Fund	-25.98%	0.02147%	1.0002	0.0359	27.86	0.0%	0.9292	1.0713	0.5060	0.0858	5.90	0.0%	0.3362	0.6758	0.8401	0.1705	4.93	0.0%	0.5027	1.1774	7.02%	11.20%	0.63	53.2%	-15.13%	29.17%
SmallCap Dividend Fund	-29.81%	0.03186%	1.1253	0.0432	26.02	0.0%	1.0397	1.2108	1.2887	0.1241	10.38	0.0%	1.0432	1.5342	0.9775	0.1645	5.94	0.0%	0.6521	1.3029	17.33%	12.24%	1.42	15.9%	-6.89%	41.54%
High Yielding Dividend Fund	-19.61%	0.02300%	1.0546	0.0432	24.41	0.0%	0.9691	1.1400	0.1873	0.1321	1.42	15.9%	-0.0740	0.4485	0.9440	0.2246	4.20	0.0%	0.4996	1.3883	11.53%	12.76%	0.90	36.8%	-13.72%	36.78%
Top 100 Dividend Fund	-20.33%	0.02136%	1.0433	0.0334	31.20	0.0%	0.9771	1.1094	0.0925	0.0925	1.00	31.9%	-0.0905	0.2754	0.7236	0.1822	3.97	0.0%	0.3631	1.0842	7.12%	11.25%	0.63	52.8%	-15.14%	29.37%
iShares ETFs																										
LargeCap 500	-21.56%	0.01647%	0.9845	0.0161	61.19	0.0%	0.9527	1.0163	-0.0401	0.0542	-0.74	46.1%	-0.1473	0.0672	-0.0157	0.0629	-0.25	80.4%	-0.1400	0.1087	-4.62%	5.47%	-0.84	40.1%	-15.45%	6.21%
LargeCap 500 Growth	-20.12%	0.01430%	0.9131	0.0154	59.32	0.0%	0.8826	0.9435	-0.1111	0.0361	-3.08	0.3%	-0.1826	-0.0397	-0.4375	0.0541	-8.09	0.0%	-0.5444	-0.3306	-9.93%	4.87%	-2.04	4.3%	-19.56%	-0.30%
LargeCap 500 Value	-23.00%	0.01940%	1.0511	0.0191	54.89	0.0%	1.0132	1.0890	0.0376	0.0608	0.62	53.8%	-0.0827	0.1578	0.4593	0.0757	6.06	0.0%	0.3095	0.6092	1.22%	6.11%	0.20	84.2%	-10.87%	13.31%
MidCap 400	-25.02%	0.01836%	1.0121	0.0233	43.48	0.0%	0.9661	1.0581	0.2044	0.0667	3.07	0.3%	0.0725	0.3362	0.0984	0.0700	1.41	16.2%	-0.0401	0.2369	-3.18%	7.27%	-0.44	66.2%	-17.56%	11.19%
MidCap 400 Growth	-19.87%	0.01698%	0.9601	0.0285	33.63	0.0%	0.9036	1.0165	0.1783	0.0765	2.33	2.1%	0.0270	0.3296	-0.3061	0.1093	-2.80	0.6%	-0.5223	-0.0898	-3.62%	8.80%	-0.41	68.1%	-21.03%	13.78%
MediumCap 400 Value	-30.37%	0.01832%	0.9828	0.0221	44.41	0.0%	0.9390	1.0266	0.3235	0.0778	4.16	0.0%	0.1695	0.4775	0.5016	0.0913	5.49	0.0%	0.3210	0.6823	-3.54%	7.89%	-0.45	65.4%	-19.15%	12.07%
SmallCap 600	-31.89%	0.02473%	1.1063	0.0260	42.49	0.0%	1.0548	1.1578	0.8531	0.0792	10.78	0.0%	0.6965	1.0097	0.3223	0.1146	2.81	0.6%	0.0956	0.5491	2.57%	8.11%	0.32	75.1%	-13.46%	18.61%
SmallCap 600 Growth	-26.24%	0.02062%	1.0411	0.0233	44.68	0.0%	0.9950	1.0872	0.6731	0.0615	10.95	0.0%	0.5514	0.7947	-0.0062	0.0645	-0.10	92.4%	-0.1339	0.1215	1.16%	6.50%	0.18	85.9%	-11.70%	14.02%
SmallCap 600 Value	-36.46%	0.02942%	1.1805	0.0245	48.24	0.0%	1.1321	1.2289	0.9881	0.0812	12.16	0.0%	0.8274	1.1488	0.7219	0.1342	5.38	0.0%	0.4565	0.9873	5.42%	8.32%	0.65	51.6%	-11.05%	21.88%