



# The Importance of Being Long-Term Revisited

By Austin Hawley, CFA  
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# The Importance of Being Long-Term Revisited

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In June 2009, we published *The Importance of Being Long-Term*, which attempted to provide some context and quantitative rigor in support of our five-year investment horizon. That paper used over one hundred years of stock market history to support our long-term outlook and highlight the folly of expecting anything “normal” over one-year horizons. However, in the three years since we published *The Importance of Being Long-Term*, equity markets have been extremely volatile and trailing five-year returns have been amongst the worst in history, calling our original conclusions into question.<sup>1</sup> **Despite the recent results, we continue to believe that five years is an appropriate horizon to evaluate our managers and analysts, striking a good balance between the uncertainties of equity investing and the limits of our clients’ patience.**

As we stated in 2009, taking the long view does not guarantee success. Over any time horizon, it is possible that broad market returns fall short of investor expectations. However, we believe that over investment horizons of five years or longer the combination of steady fundamental returns (dividends + earnings growth) and our ability to identify mispriced securities gives us favorable odds as we pursue the goals articulated in our mission statement:

**Committed** to the Graham-Buffett investment philosophy, with goals (over 5-year rolling periods) to outperform benchmarks and our peers, and achieve absolute returns sufficient for risk of asset class.

In our 2009 letter, we argued that five years was the minimum amount of time required for normal (5-15%) equity returns to be probable (>50% odds) and for the likelihood of negative returns to be remote (<10% odds). While the definition of “normal” is somewhat arbitrary, we believe it encompasses most reasonable estimates of required equity returns derived from finance theory, and we will continue to use it in this paper. *The Importance of Being Long-Term* focused on a statistical analysis of the one and

five-year return distributions. That analysis revealed significant differences in the propensity for surprises (events outside of +/- 1 standard deviation) when comparing the one and five-year return distributions, with the one year distribution characterized by more tail events and the five-year distribution featuring a significantly higher proportion of normal returns.

This paper takes a slightly different approach, examining the rolling time series of five-year returns.<sup>2</sup> The results of our portfolio managers and analysts are measured based on rolling five-year returns, and we believe an examination of the historical performance of a broad equity index using this methodology will provide a good indication of how market returns have evolved over time and what might be reasonably expected going forward. Rolling data have the advantage of providing many more data points in a sample, as well as providing an accurate depiction of the experience of an investor who contributed money at the beginning of each period. However, rolling data have the disadvantage of containing non-independent (overlapping) data points, making statistical analysis and conclusions challenging. So we will focus on some key observations about recent results, the historical likelihood of achieving certain return thresholds, and changes in common valuation metrics without commenting on the statistical properties of the return distributions.

## The Financial Crisis: When Five Years Wasn’t Enough

From the end of 2008 through May 2012, trailing five-year equity returns have been consistently subpar; total returns have not once achieved 5% and have been below 0% over 1/3 of the time. Put simply, the recent equity market returns have fallen far short of what most investors (ourselves included) consider adequate for the risks incurred. As we take a fresh look at history we must ask ourselves whether the recent period is anomalous or whether a longer time horizon is required for investors to comfortably endure equity market risk.

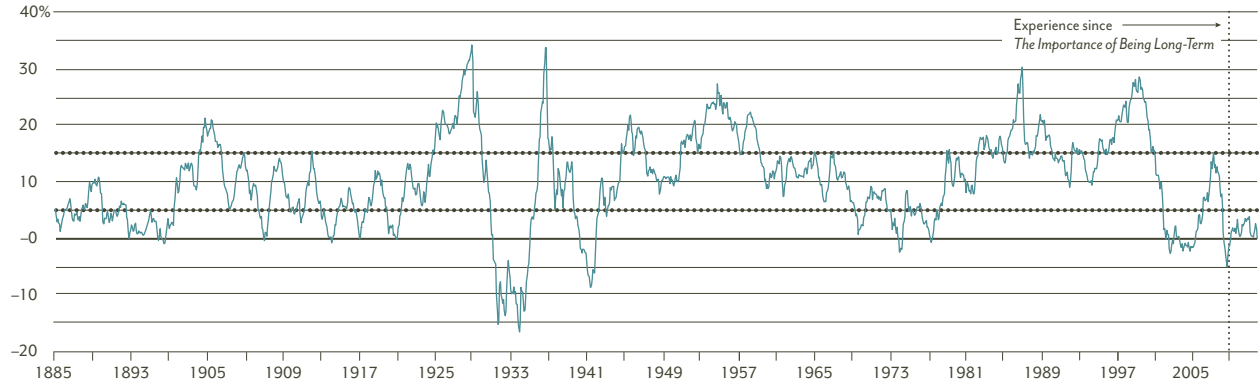
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<sup>1</sup> Throughout this paper “market returns” refers to annualized total returns (with dividends reinvested) for the S&P 500 Index, and predecessor common stock indices, using data from professor Robert Shiller’s website [www.econ.yale.edu/~shiller/data](http://www.econ.yale.edu/~shiller/data).

<sup>2</sup> By “rolling” we mean that a new five-year total return is calculated each month looking back at the previous 60 months.

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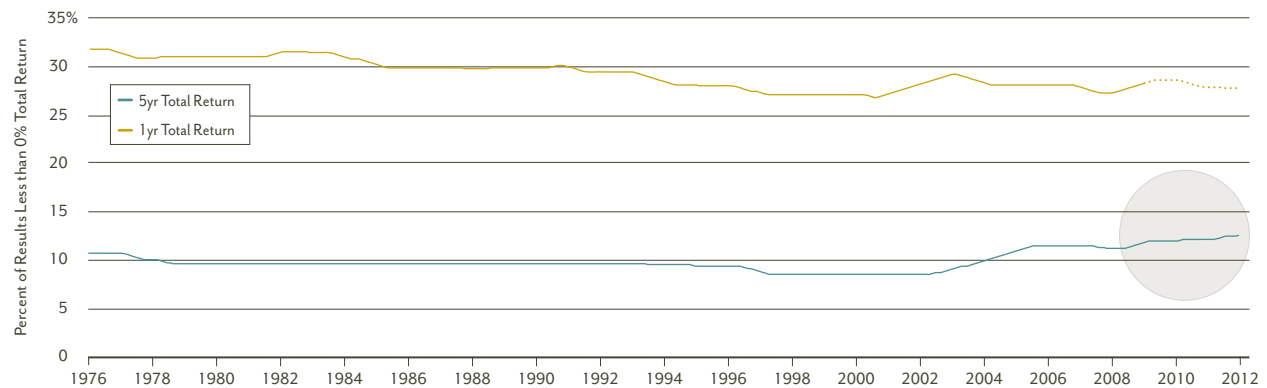
**CHART 1: ROLLING 5 YEAR TOTAL RETURNS**



The past few years have been one of only a handful of periods throughout the past century to include such a high concentration of negative returns. Indeed, Chart 1 reveals the extraordinary experience from 1942-2002, when negative five-year returns occurred in less than 2% of the rolling periods. Looking at the past one hundred years of history, negative returns have occurred 13% of the time, with the

frequency increasing from under 10% prior to 2004 (Chart 2). Over the entire sample, negative results occurred 10% of the time, consistent with our criterion of the probability of negative returns being remote. Outcomes over five years have been significantly more predictable than one-year periods, which saw negative total returns more than 25% of the time.

**CHART 2: % OF ROLLING PERIODS WITH TOTAL RETURNS LESS THAN ZERO (TRAILING 100 YRS)**



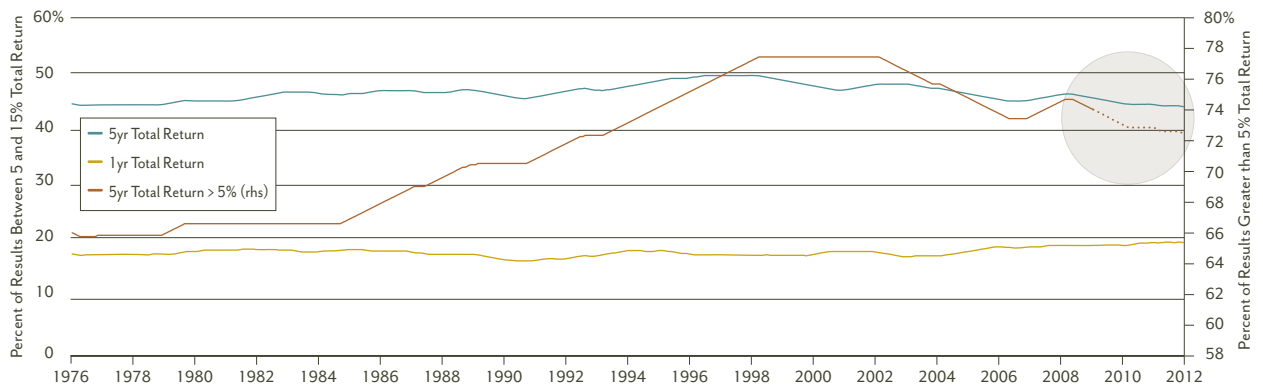
Source: [www.econ.vale.edu/~shiller/data](http://www.econ.vale.edu/~shiller/data). Diamond Hill analysis

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While investors' experience over the past few years has been abnormal relative to expectations, a longer view of equity market history continues to show five-year returns of 5-15% nearly half of the time (Chart 3). This result is in contrast to volatile oneyear returns, which were between 5 and 15% less than 20% of the time. Poor recent returns, combined with the

change in the way we are presenting the historical data, have pushed the probability of normal returns below the 50% threshold across the entire sample. However, we continue to believe five years is an adequate duration for investors to have realistic expectations about absolute returns.

**CHART 3: % OF ROLLING PERIODS WITH TOTAL RETURNS BETWEEN 5 AND 15% (TRAILING 100 YRS)**



Source: [www.econ.yale.edu/~shiller/data](http://www.econ.yale.edu/~shiller/data), Diamond Hill analysis

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There are three factors that lead us to an optimistic conclusion about our ability to deliver adequate results over five-year periods despite the poor returns for equity indices over the past few years. First, over very long periods, deviations outside the normal return range are equally as likely to be positive as negative. Chart 3 shows that the probability of five-year returns being greater than 5% has been 2/3 or higher when looking at trailing one hundred year periods. Second, over periods of five years and longer, fundamentals (dividends and earnings growth) have been predictably normal, and the compounding of returns from fundamentals begins to outweigh the impact of speculative changes in the price to earnings multiple. Finally, we are active, intrinsic value based investors and do not invest in all of the companies underlying equity indices. At times, market capitalization weighted indices can become heavily skewed by large companies or sectors, with index results reflecting a minority of businesses. However, even during periods of extreme price to earnings multiples for capitalization weighted indices, a meaningful number of companies in those indices have traded at attractive valuations. Our strategies typically hold less than 5% of the companies in their respective benchmarks. In the following two sections, we will look in more detail at the fundamentals underlying index returns and the cross-section of individual company valuations.

## **Mind the Gap: Fundamental Return vs. Speculative Return**

*“In the short-run the market is a voting machine; in the long-run it is a weighing machine.”*

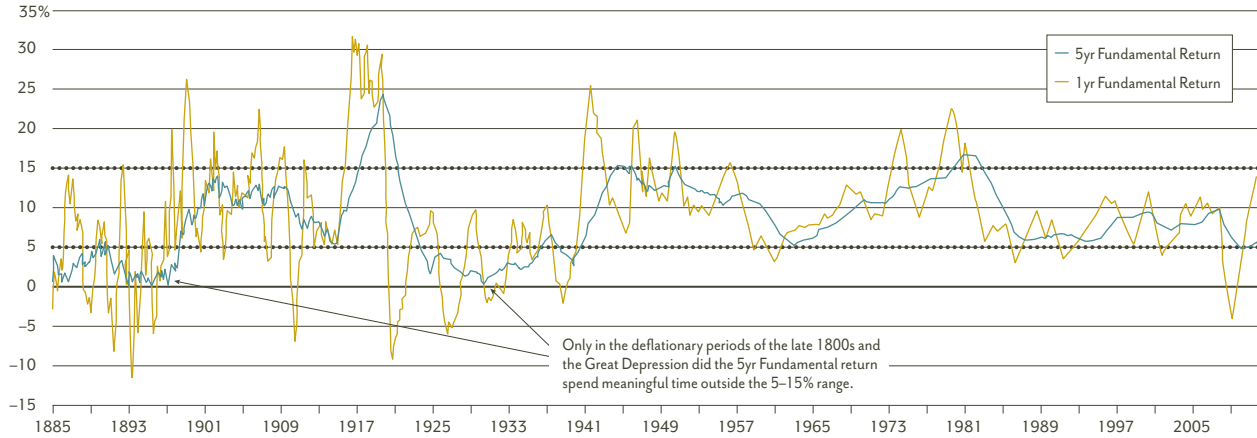
– Ben Graham

Total return is an objective measure of the change in wealth over a defined period. However, that return does not necessarily reflect the change in the intrinsic value of the businesses underlying the market. As we discussed in our 2009 paper, returns can be deconstructed into two components: a fundamental return and a speculative return. The fundamental return equals the dividend yield an investor receives plus any growth in normalized earnings power.<sup>3</sup> If the investor buys the equity index with a guarantee that the price to earnings multiple remain constant, this is the return the investor would receive. Changes in price to earnings multiples represent a speculative component in the total return calculation which can be heavily influenced by changes in investor sentiment.

<sup>3</sup> Here we are using cyclically adjusted earnings as an estimate of normalized earnings power. Cyclically adjusted earnings are calculated by taking the average of the trailing 10 years of inflation adjusted earnings.

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**CHART 4: FUNDAMENTAL RETURN: DIVIDEND YLD + INFLATION + REAL EARNINGS GROWTH**



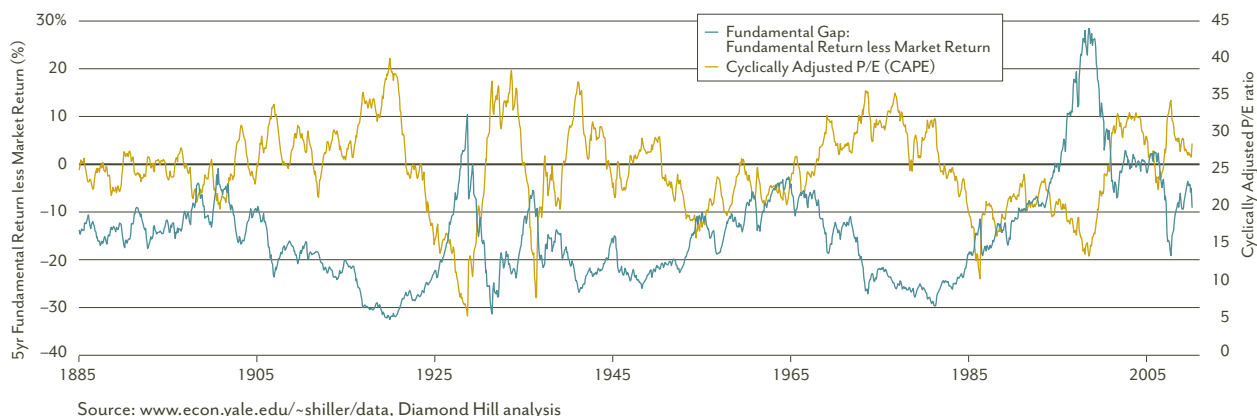
Source: [www.econ.yale.edu/~shiller/data](http://www.econ.yale.edu/~shiller/data), Diamond Hill analysis

A critical reason that we remain comfortable with our five-year investment horizon is the remarkable stability of long-term fundamental returns. Chart 4 shows the historical one and five-year fundamental returns. While one-year fundamental returns are considerably less volatile than stock prices, they still exhibit sizable swings, such as the 6% decline in 2008. Over five-year periods, however, fundamental returns have been consistently within our normal range and have never fallen below 0%.

One way to conceptualize the dynamic between fundamental returns and speculative returns is to look at the difference between the fundamental return and the market return, or what we will refer to as the “fundamental gap.” In periods when the fundamental return is outpacing market returns, the price to earnings multiple is typically declining, leading to more attractive valuations all else equal.

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**CHART 5: THE FUNDAMENTAL GAP: DIVIDENDS + GROWTH - MARKET RETURN**



	FUNDAMENTAL RETURN LESS MARKET TOTAL RETURN			CURRENT
	< -5%	B/W -5% & 5%	>5%	
<b>TOTAL RETURN - NEXT 5 YRS</b>	7.4%	10.0%	11.1%	5.4%
<b>AVERAGE CYCLICALLY ADJ PE</b>	20.5	15.6%	12.2%	20.0

Sources: www.econ.yale.edu/~shiller/data, Diamond Hill analysis

Chart 5 shows the fundamental gap over time on the left hand axis and the cyclically adjusted price to earnings ratio on the right hand axis. Historically, the shortfalls witnessed for much of the past ten years in market returns relative to fundamentals have resulted in attractive valuations and have been a precursor to more attractive returns (Table 1). However, the valuations of the late 1990s were so extreme that the cyclically adjusted price to earnings ratio has not yet declined to below average levels despite the combination of growing earnings and weak stock returns.<sup>4</sup> The persistently high cyclically adjusted price to earnings ratio suggests some caution when thinking about prospective returns, although the outlook is improved from the extreme valuation levels achieved during the 1997 – 2007 time period. Fortunately, we do not have to invest in the market index.

## Seeing the Trees in the Forest

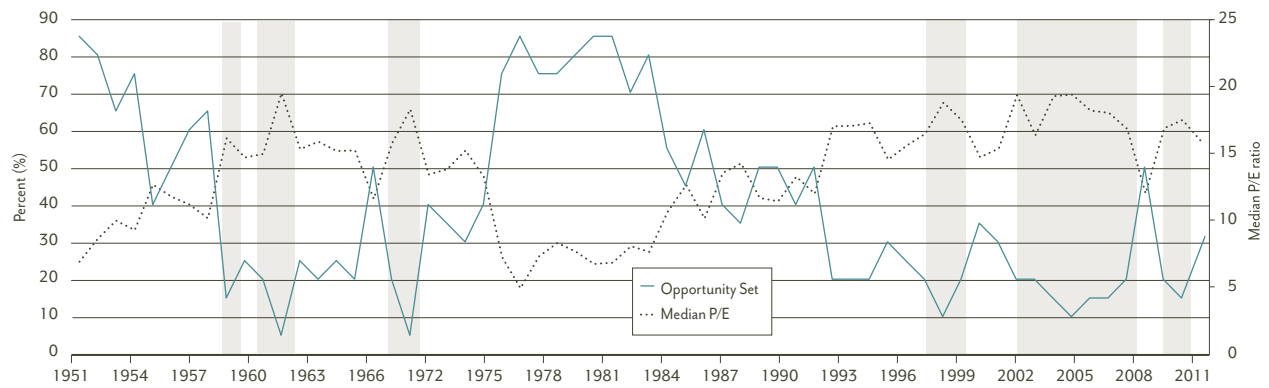
Our studies of historical market returns suggest that investors should expect the unexpected over short time periods and focus on the long-term for more predictable results. At times, however, high starting valuations relative to earnings have provided a stiff headwind to long-term investors, with the past few years being a notable example.<sup>5</sup>

<sup>4</sup> The average cyclically adjusted price to earnings ratio is 16.4 for the entire sample vs. 20 at the end of May, 2012.

<sup>5</sup> The cyclically adjusted price to earnings ratio for the S&P 500 Index was well above normal (>25x) during 2005-2007.

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**CHART 6: OPPORTUNITY SET: % OF MARKET <12X PRICE TO EARNINGS RATIO**



Source: [www.mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://www.mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html), Bloomberg, Diamond Hill analysis

It is important to note the cost that high price to earnings multiples impose on long-term investors, but valuation metrics for the market indices can sometimes mask significant disparities in valuations across companies in the indices. The end of the technology bubble in 1999 - 2000 provides a vivid example; the S&P 500 Index was valued at more than 25x trailing earnings<sup>6</sup>, while the price to earnings ratio of the median company was less than 15x and 1/3 of the market traded at less than 12x earnings (Chart 6). Active investors who sought safe harbor in the lowly valued portions of the market suffered significant relative underperformance in the short-term, but they earned excellent absolute and relative returns over the next five years. The tech bubble was an exceptional time, with valuation disparities as wide as they have ever been.

Looking back over history, we can see that most of the time there has been at least 20% of the market that was valued at nominally low multiples of earnings.

Chart 6 shows the percentage of the market trading below a 12x price to earnings multiple over the past sixty years. Not all earnings are of comparable quality, so all of this subset is not necessarily attractive, but the metric provides some indication of the spread of valuations in the market. There have been only six periods when less than 20% of the market was available for below 12x earnings. Those periods typically did not last more than two years and were often followed by periods of above average opportunity for value oriented investors.

<sup>6</sup> The S&P 500 Index was at over 40x the cyclically adjusted price to earnings ratio!



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Over short time horizons, active investors have sometimes been faced with uniformly high valuations and limited opportunity to differentiate themselves. Over periods of five years and longer, active investors have been rewarded for their ability to avoid large losses in overheated markets and focus their attention on the more fruitful investment prospects that often emerge in the aftermath of market corrections. We will not always be right in our timing or security selection, but we expect that by avoiding (or shorting) overvalued portions of the market, and purchasing undervalued companies when they become available, we can offset to some degree the negative impact of high beginning multiples of earnings that can result in poor long-term results for equity indices.

## Cycles, Competition, and the Really Long-Term

Recent five-year market returns have clearly been below investor expectations, but perhaps more importantly a younger generation of analysts has no memory of an equity market that has delivered long-term value. I took my first job in the investment management industry in July of 1999, near the peak of the tech bubble. In the thirteen years since I started, equity investors have seen the bursting of the tech bubble, the inflating and deflating of the housing bubble, and the near collapse of the global financial system in 2008 - 2009. From the beginning of July 1999 to the beginning of

June 2012, the S&P 500 Index has returned an annualized 1.4%. The equity market I have known has been characterized by excess, volatility, and, more recently, global macro-economic turmoil.

In such an environment, the notion of buying an ownership stake in an undervalued business for the long-term probably seems quaint, and perhaps out of touch. Many have probably concluded that the best returns in this uncertain investment setting are earned in market neutral trading strategies or more macro-oriented investments. In fact, there is some evidence that increasing amounts of capital have been directed towards these types of investment strategies, with hedge fund assets growing rapidly over the past decade and pension funds recently increasing allocations to “absolute return” strategies.<sup>7</sup> We suspect there are some very talented managers focused on market neutral and macro strategies, but investors in these types of funds pay a steep price to conform to the environment that has existed in the recent past, with fee structures that can consume a large portion of managers’ excess returns. In addition, we wonder whether the influx of money and intellectual capital won’t greatly diminish the return opportunities that have existed, at least on paper, in recent years. With an army of analysts motivated by short-term performance fees, any information asymmetries are unlikely to persist for very long.<sup>8</sup>

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<sup>7</sup> According to a study from Barclays Capital North American, pension funds have increased allocations to hedge funds by \$250 billion since 2009, more than any other asset class.

<sup>8</sup> An Empirical Research report in June 2012 estimated that hedge funds now employ twice the number of analysts as long-only managers.

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Our strategies do not aim to achieve a specific result in the near term or utilize hedging strategies to nullify the effects of market volatility and macro uncertainty. We take a long-term view of performance and focus our research efforts on understanding and valuing businesses. Our philosophy and process have not changed since Diamond Hill was started in 2000, and we believe it will remain relevant and successful regardless of how the investment landscape changes in the future. In fact, we believe that taking a long-term view is perhaps our greatest competitive advantage. While the perception of near-term profit opportunities often attracts significant amounts of capital, and erodes excess returns, there are far fewer investors willing to deploy capital based on an investment horizon of five years or more. At many institutions the career risk associated with being wrong in the short run is simply too great for analysts to consider investment opportunities that may play out over years

instead of quarters. At Diamond Hill we have thoughtfully built our performance measurement and incentive systems so that our portfolio managers and analysts are rewarded for prudently pursuing long-term results even if it means being out of step with conventional thinking in the near term.

Over the long history of stock market investing there have been many cycles of equities falling in and out of favor, as well as many changes in the nature of competition. Through it all, the fundamentals that support intrinsic values – dividends and earnings growth – have produced steady results for investors with a time horizon of five years or more. At times, excessive valuations have provided headwinds, but for active investors, a five-year horizon has provided ample opportunity to add value for clients.

The views expressed are those of the portfolio manager as of July 25, 2012, are subject to change, and may differ from the views of other portfolio managers of the firm as a whole. These opinions are not intended to be a forecast of future events, a guarantee of future results, or investment advice.



*“Our studies of historical market returns suggest that investors should expect the unexpected over short time periods and focus on the long-term for more predictable results.”*

– **Austin Hawley, CFA**

Research Analyst, Assistant Sector Leader & Co-Director of Research

#### ABOUT THE AUTHOR

Austin serves as Co-Director of Research, Co-Portfolio Manager, Research Analyst, and Assistant Sector Leader for Diamond Hill Capital Management, Inc. He joined Diamond Hill in 2008. From 2004 to 2008, Austin was an Equity Analyst at Putnam Investments. From 1999 to 2002, Austin was an Investment Associate at Putnam Investments. Austin has a Bachelor of Arts in History from Dartmouth College

(cum laude), a Master of Business Administration from Dartmouth College (with distinction) and holds the CFA designation. .

A handwritten signature in black ink that reads "Austin".

Austin Hawley, CFA  
Diamond Hill Capital Management, Inc.