

# A Tale of Two Markets

Rapid, extreme, and historic – these three words sum up the swings in stock market performance in the 15-month period ending September 30, 2009. It took just nine months to wipe out more than 40% of the value of the stock market<sup>1</sup>, one of the biggest routings in history. Then the market bottomed in early March 2009, and in just six months rose by 47% in Figure 1. It was enough to leave even the most experienced investor shaking.

The driving force behind this whipsaw performance was investors' changing appetite for risk. The market turned seriously "risk averse" in June 2008 as investors offloaded stocks amid fear and uncertainty over the growing financial crisis and economic recession. In a classic flight to quality, yields on Treasury Bills fell steadily to razor thin levels. When the market began to recover in early March 2009, investors preferred riskier stocks to less risky stocks by a wide margin. The market changed course and became "risk seeking." As a result, portfolios that focused on higher quality, less volatile stocks tended to underperform their benchmarks just by being on the wrong side of the risk bet.

This paper examines how investors' appetite for risk changed dramatically not once, but twice, from June 30, 2008 to September 30, 2009, and which types of stocks performed best as a result.

**Russell 3000® Total Return Index**

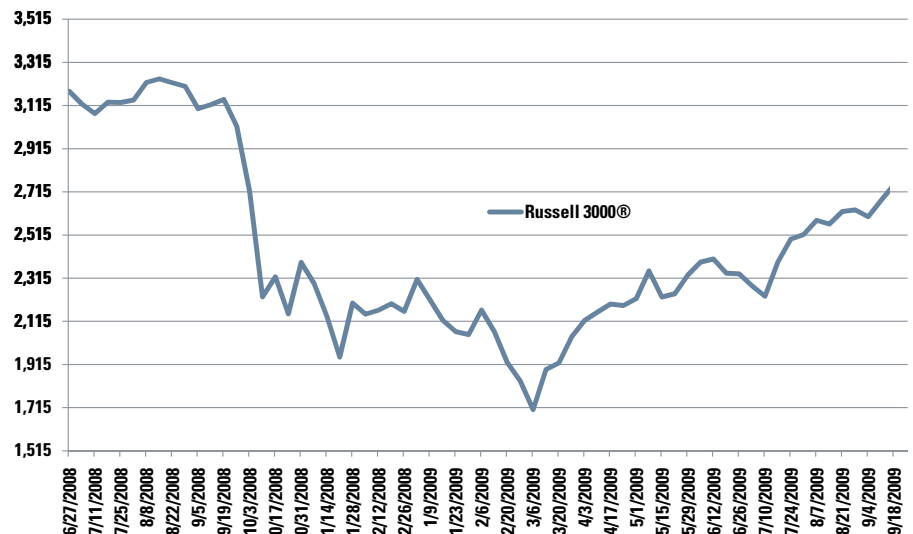


Figure 1  
Source: Bloomberg

## Investors' Risk Appetite Drives the Market

The fundamentals of investing begin with the premise that investors demand a premium for taking on risk. The more risk averse investors become, the more they will demand in compensation for bearing that risk. The expected risk premium is imbedded in the prices investors are willing to pay for an asset: rising prices (*albeit up to a point*) reflect an increasing tolerance for risk and falling prices, a decreasing tolerance for risk. Equity and fixed income markets, therefore, provide a convenient signal for investors' changing risk appetite.

Using the credit markets as an example, rising bond prices and a narrowing yield spread between corporate and Treasury bonds, as well as an increase in corporate issuances (reflecting greater demand), suggest risk appetites are increasing. In Figure 2, the red line is the difference between corporate bond yields and Treasury yields; as the spread narrows, risk tolerance increases, and vice versa.

In the equity markets, falling stock prices, increasing equity risk premiums, and good relative performance of high quality stocks over low quality stocks indicate risk appetites are decreasing. The blue line in Figure 2 is the ratio of high quality to low quality stock performance; the higher the ratio, the greater the preference for safety and the lower the tolerance for risk, and vice versa.

Clearly, the period from June 2008 to September 2009 (highlighted in light blue in Figure 2) – a period of just 15 months – included an extreme risk averse market (with both widening yield spread and greater relative performance of high quality to low quality stocks) followed by an extreme risk seeking market (narrowing yield spread and falling relative stock performance based on quality).

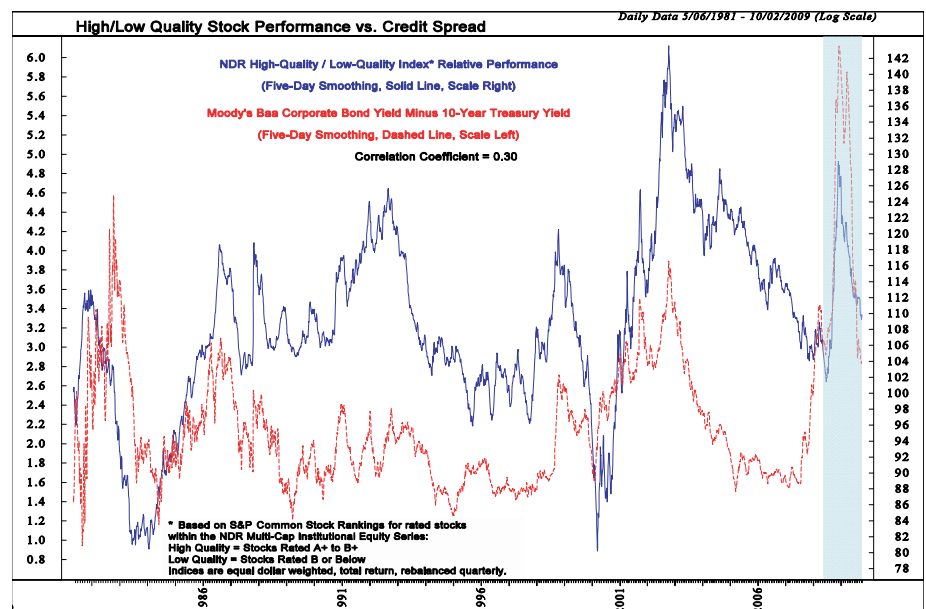


Figure 2

Source: Ned Davis Research, Inc.

Characteristics of Risk Averse and Risk Seeking Markets	
<p><b>Risk Averse</b></p> <ul style="list-style-type: none"> <li>• falling prices</li> <li>• widening yield spread</li> <li>• rising risk premiums</li> <li>• large stocks outperform small stocks</li> <li>• less volatile stocks outperform more volatile stocks</li> <li>• higher quality stocks outperform lower quality stocks</li> </ul>	<p><b>Risk Seeking</b></p> <ul style="list-style-type: none"> <li>• rising prices</li> <li>• narrowing yield spread</li> <li>• shrinking equity risk premiums</li> <li>• small stocks outperform large stocks</li> <li>• more volatile stocks outperform less volatile stocks</li> <li>• lower quality stocks outperform higher quality stocks</li> </ul>

Changing risk tolerances are also reflected in the dispersion in analysts' earnings estimates. Investors often rely on industry analysts for information on company earnings and valuation in order to assess a stock's prospects. When the economy is expanding, there typically is growing confidence in key drivers such as profits and employment, and even lower quality companies are able to generate profits. If analysts' earnings expectations fall within a narrow range, it suggests that there is some consensus and the perceived risk associated with the anticipated future income stream diminishes.

The opposite holds when the economy is contracting. In that situation, profits begin to shrink, and analysts have less confidence in projecting future earnings. If analysts' predictions fall within a wide range, it suggests a lack of agreement and thus greater uncertainty associated with the estimates. The dispersion in analysts' earnings estimates, therefore, is one way to gauge risk. Investors are risk averse when dispersions are wide and more risk tolerant when dispersions are narrow. Not surprisingly, there is greater dispersion in recessionary periods as investors avoid risk, as shown in Figure 3. In fact, the dispersion in analysts' earnings estimates was two-and-a-half times the norm during the current recession.

A similar relationship holds for the dispersion of valuations among stocks based on Book-to-Price, an important valuation measure that compares a company's book value to the price investors are willing to pay for it. Cheap stocks – those with high Book-to-Price – are often associated with higher levels of debt and less certainty regarding earnings streams. The difference between valuations for the cheapest companies and the average company reflects the risk appetite of market participants. When the difference in valuations widens, it suggests that investors are becoming more risk averse; conversely, as the difference narrows, it suggests investors are becoming more risk tolerant or risk seeking. Notice in Figure 3 how the dispersion in valuation reached an extreme level in late 2008 before eventually falling during 2009.

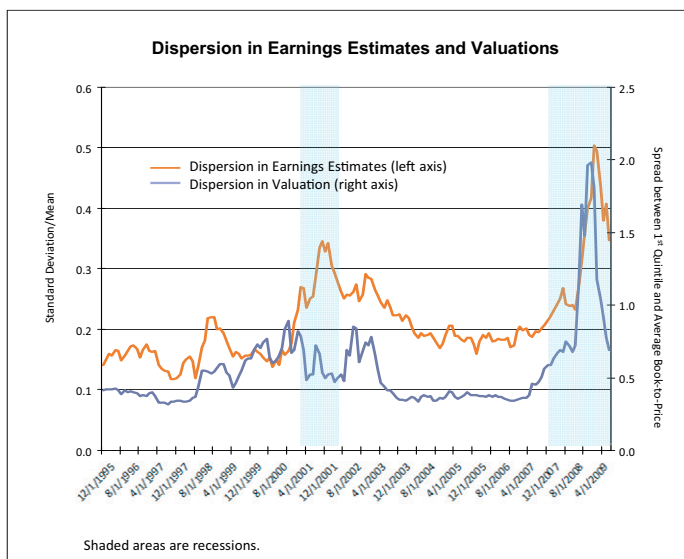


Figure 3

### Performance During Two Markets

Quintile performance for the Russell 3000® Index measured by six different stock characteristics shows which types of stocks outperformed and which ones underperformed in the recent risk averse and risk seeking markets.

These measures include:

- Volatility (Beta)
- Size (Market Capitalization)
- Quality (Piotroski<sup>2</sup> Score)
- Estimate Change (Change in Fiscal Year Analyst Estimates)
- Valuation (Book/Price)
- Momentum (One-Year<sup>3</sup>)

Figure 4 shows the difference in performance between the first and fifth quintiles of the Russell 3000® by each measure during both recent markets. Although stocks fell across the board during the risk averse market, generally larger, higher quality stocks with price momentum fared better than most. In sharp contrast, during the subsequent risk seeking market, the dispersion among stocks for every stock measure was striking: cheap, low quality, small-cap stocks went through the roof, turning in triple digit returns, while their more expensive, high quality, large-cap counterparts lagged significantly. Clearly, large changes in investors' appetite for risk cause large changes in returns.

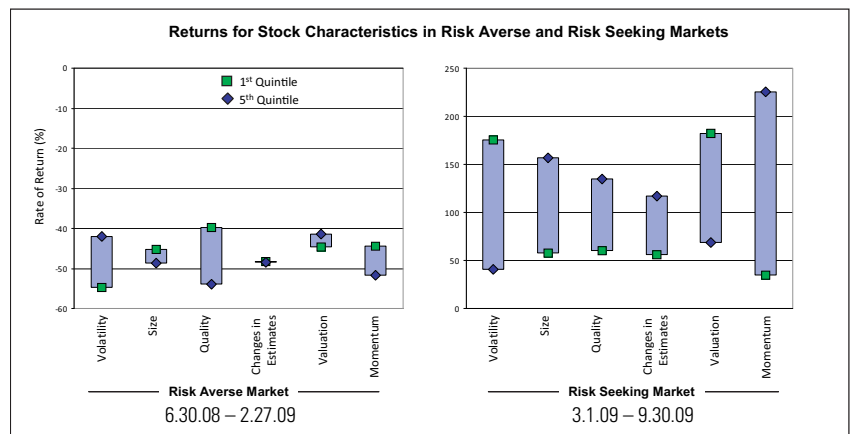


Figure 4

### Volatility

Beta, a measure of a stock's or portfolio's sensitivity to returns in the market, is a popular proxy for risk.<sup>4</sup> The higher a stock's beta, the greater the price volatility relative to the market, and vice versa. High beta stocks generally underperform in extreme risk averse markets and outperform in extreme risk seeking markets (Figure 5).

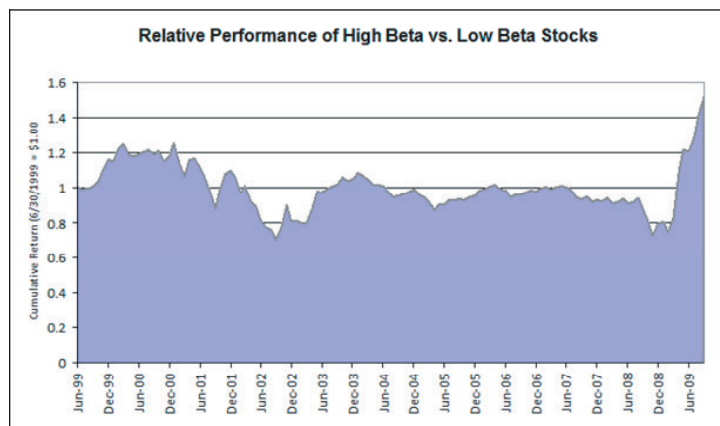


Figure 5

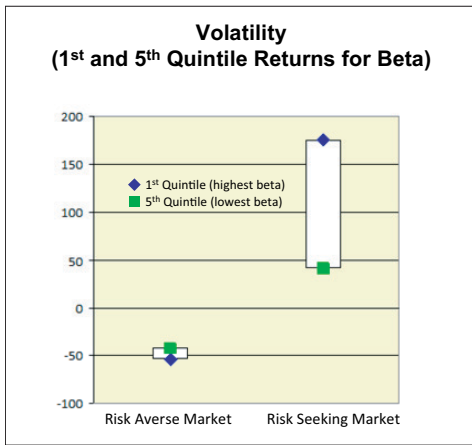


Figure 6

Recent markets were no exception. High beta stocks took the biggest beating during the down market from mid-2008 through February 2009 (left bar in Figure 6); the first quintile (highest betas) of the Russell 3000® Index was down 54.8% compared to down 42.1% for the fifth quintile (lowest betas). But they also enjoyed an unprecedented rebound, with more volatile stocks gaining a whopping 175.2% (right bar), more than four times that of the less volatile stocks (with 40.5%). The extreme nature of high beta returns during the recent rebound suggests that the move to a more risk seeking market is nearly complete or perhaps overdone at this stage.

**Size**

Size, measured by market capitalization, was another important factor in distinguishing performance. Small companies underperformed large companies more often than they outperformed from 2004 through mid 2008 (in Figure 7 green bars are months when small stocks outperformed large stocks and red bars are the opposite).

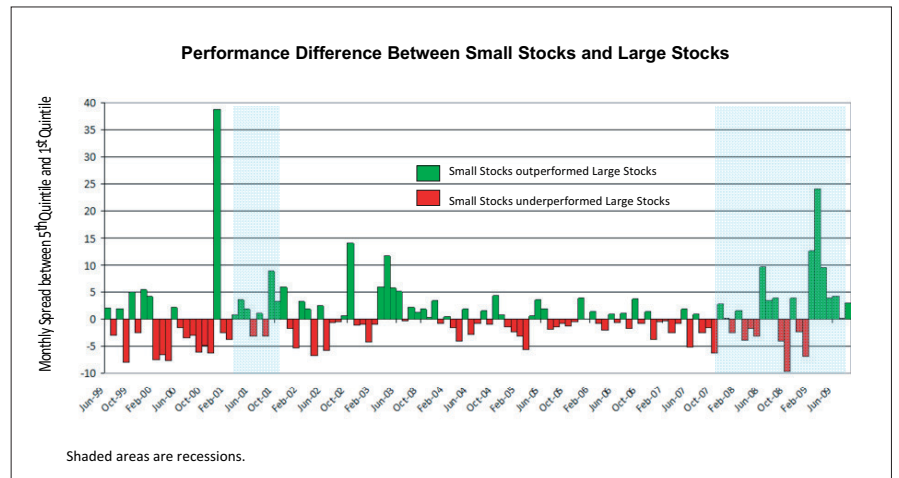


Figure 7

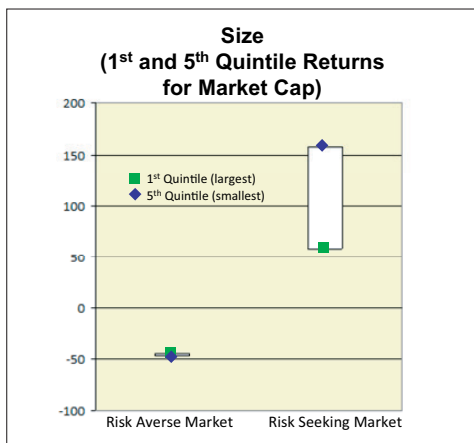


Figure 8

Returns for stocks fell during the risk averse market, regardless of market capitalization, but there were significant differences in the subsequent risk seeking market. Beginning in March 2009, small-cap companies outdistanced large-caps by a wide margin. Once again, the reversal was rapid and the magnitude of returns was unusually large with small stocks up 157.1% compared to 57.3% for large stocks (Figure 8).

### Quality

Quality is another characteristic that reflects a stock’s riskiness and has been a very effective stock picking characteristic over time. As Figure 9 shows, over time, returns for high quality companies generally have been superior (green bars), with sporadic pockets of outperformance by low quality issues (red bars).

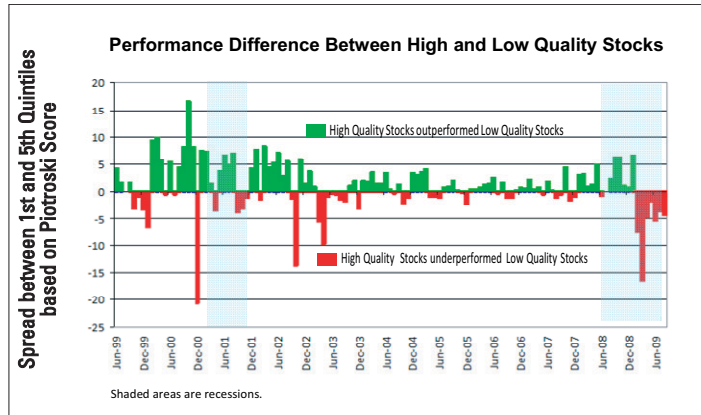


Figure 9

From June 2008 to the market’s bottom in March 2009, high quality fell less than low quality stocks (-39.9% versus -54.0%, respectively). But once the market bottomed, lower quality issues out earned higher quality by almost 2 to 1 with returns of 134.5% versus 59.8% (Figure 10). As with beta, the recent unprecedented strength in lower quality issues is extreme, and in our opinion, overdone. As a result, we believe that high quality will return to favor and once again outperform as it has historically.

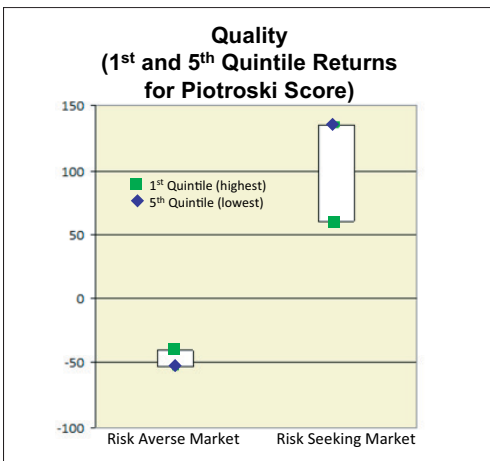


Figure 10

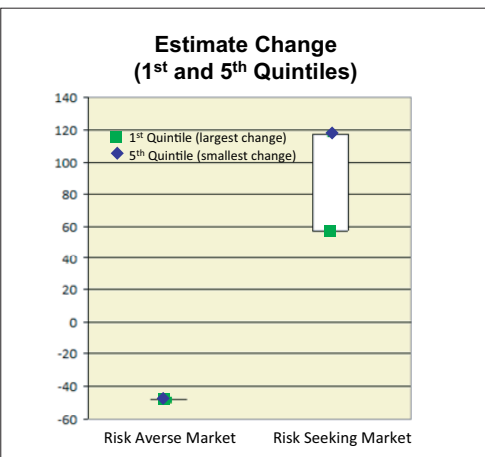


Figure 11

### Estimate Changes

Historically, buying companies with the highest positive changes in earnings estimates has added value the majority of the time. This “change signal” did not work during the recent risk seeking market, however. Stocks with the largest change in estimates underperformed those with the smallest change during this time, returning 56.3% and 117.2%, respectively (Figure 11). This underperformance may be due to the large dispersion in analysts’ estimates noted earlier, which fell considerably since its peak in February 2009 through September 2009, but was still high by historical standards. This change in direction, however, may be a signal that this strategy should begin to work again.

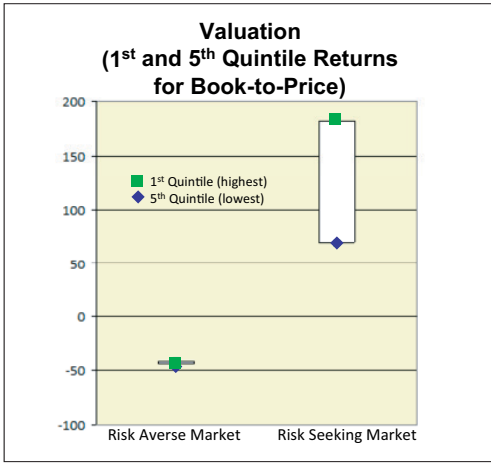


Figure 12

### Valuation

Valuation measures, notably the Book-to-Price ratio, historically have consistently added value over long periods of time although they have gone through periods of significant underperformance in the short term. As investors became more risk averse between June 2008 and February 2009, the cheapest stocks (in the fifth quintile by Book-to-Price) fell by 41.4%, slightly better than the first quintile which fell by 44.7% (Figure 12). After the market bottomed in March 2009, investors favored cheap stocks, which rose by 182.0% compared to 69.0% for more expensive stocks.

There is an inverse relationship between returns for cheap stocks and the dispersion in valuations mentioned earlier. During the recent risk averse market, cheap stocks (green line in Figure 13) lost value as the disparity in valuations widened, and significantly outperformed beginning in March when the disparity declined. The effects of both the flight from cheap stocks when risk aversion was high and the flight to cheap stocks when risk appetites returned were tremendous in comparison to historical standards. We believe most of the move had already taken place by the end of September, but room remained for this stock metric to work as the spread was still high by historical standards at the end of September.

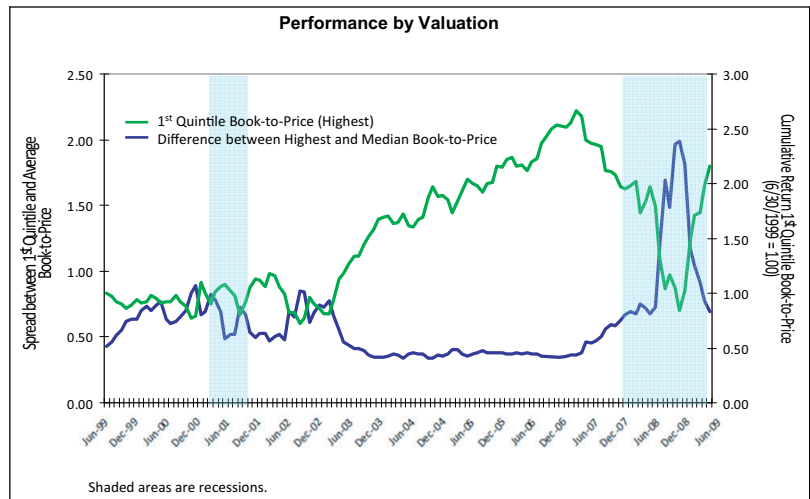


Figure 13

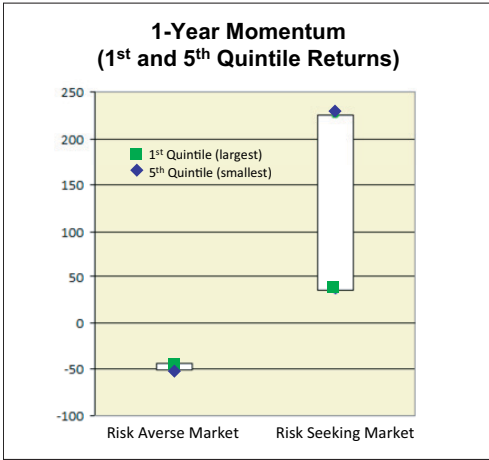


Figure 15

### Momentum

Momentum investors believe that stocks with strong upward price movement should continue to trend higher and vice versa. This strategy of buying previous “winners” tends to be very successful when markets are trending, but it underperforms in periods of high uncertainty and high volatility as it did when the technology bubble burst in 2000.

Buying stocks with increasing price momentum has been at times one of the most efficacious stock picking strategies. One-year price momentum had a tremendous run from 2003 to the end of 2007 (Figure 14). (First Quintile includes stocks with the greatest price momentum, and fifth quintile, stocks with the least momentum, for the preceding 12-month period.) But since the height of the financial crisis in September 2008, the momentum strategy has failed miserably; volatility has been high, and the market has dramatically changed direction twice. Thus, it has lacked a trend. As a result, momentum investing has been unable to capture the changing dynamics of the market. During the risk seeking market, returns for stocks with the greatest one-year momentum were just a fraction of those with the least momentum (Figure 15) with 34.3% and 225.8%, respectively.

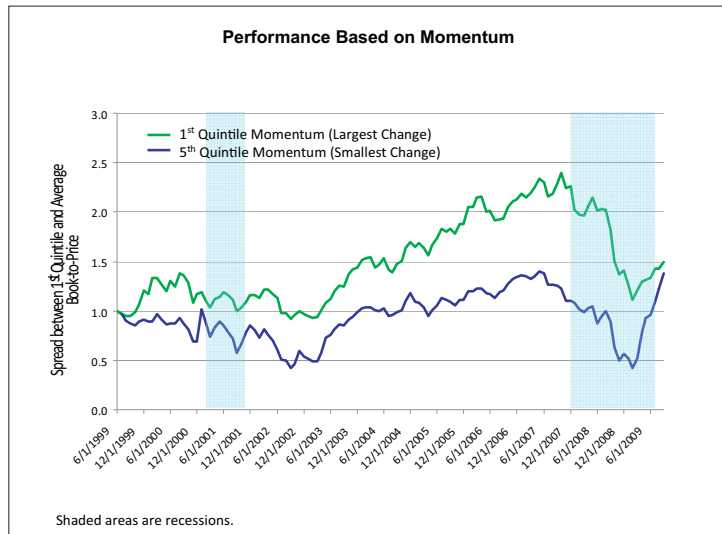


Figure 14

These returns were even more extreme than those following the technology bubble, a time at which valuations were historically high. Regardless of the trailing period used to define previous “winners”, momentum as a strategy failed for the year to date period ended September 30, 2009 (Figure 16). However, history suggests that momentum strategies should begin working again once the most recent rally has matured.

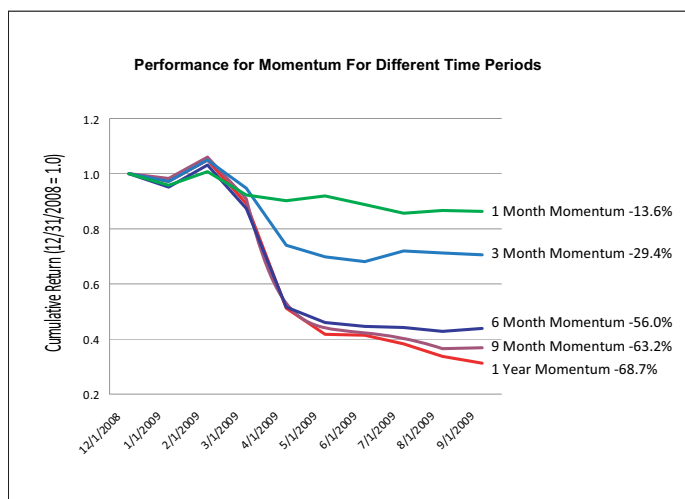


Figure 16

### Two Sides of the Risk Bet

Volatility in the two recent market periods mentioned was extreme by historical standards as investors reacted to changing events by adjusting their appetite for risk twice in just 15 months. The resulting rapid change in valuation and performance was one of the swiftest and greatest in magnitude on record. These adjustments – from “normal” to risk averse to risk seeking – were the most important determinants in stock performance and in turn, in managers’ performance relative to the market, their benchmarks, and each other.

In the risk seeking market, managers with an emphasis in several key areas – notably: high beta, small-cap, low quality, high book-to-price valuation, and low momentum – may have outperformed their peers with more conservative high quality portfolios. This makes evaluating manager performance more challenging for investors as many managers – both strong and weak – may have underperformed simply because they held less risky holdings. The opposite was true in the risk averse market. Fortunately, the market shows signs of returning to a more normal environment, historically speaking, where stocks of good quality, with strong earnings are favored.

Sources:

Estimates: IBES via FactSet. Estimates are based on information obtained from a third party that is believed to be reliable. Estimates are only projections and not guarantees.  
Fundamental Data: FactSet

Footnotes:

<sup>1</sup>The Russell 3000<sup>®</sup> Index is used as a market proxy. The Russell 3000<sup>®</sup> Index measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market.

<sup>2</sup>The Piotroski score is based on a nine-criteria stock-scoring system for evaluating a stock's financial strength based on financial statements. A high Piotroski score indicates high quality, and a low score indicates low quality.

<sup>3</sup>Momentum strategies favor stocks at or near the top of the performance rankings over a trailing period, for example, three months, six months, one year.

<sup>4</sup>A stock with a beta greater than 1.0 is proportionately more sensitive to changes in prices compared to the market, and a beta less than 1.0, proportionately less sensitive.

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