NAVIGATING A SENTIMENT CRASH

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ABOUT QMA

QMA began managing multi-asset portfolios for institutional investors in 1975. Today, we manage systematic quantitative equity and global multi-asset strategies as part of PGIM, the global investment management businesses of Prudential Financial, Inc. Our investment processes, based on academic, economic and behavioral foundations, serve a global client base with $127.2 billion in assets under management as of 12/31/2019.

FOR MORE INFORMATION

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***Gavin Smith, PhD**, Managing Director and Portfolio Manager on QMA's Quantitative Equity team, explores the ways investors can navigate, and potentially profit from, a sentiment crash.*

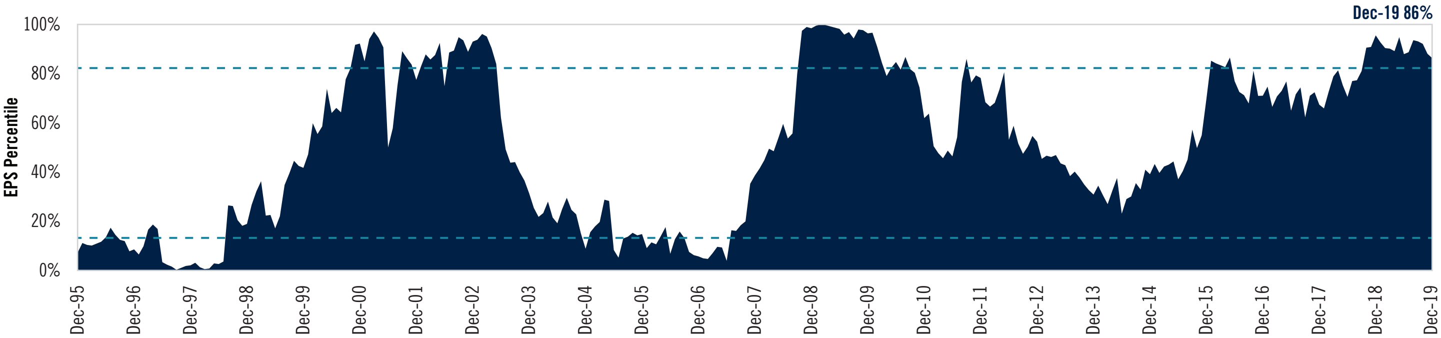
WHAT IS A SENTIMENT CRASH? SHOULD I BE CONCERNED?

Changes in stock prices are driven by new information, primarily through changes in fundamentals, and/or multiple expansion (e.g., changes in a firm's the price-to-forward earnings ratio over a specified time period). Multiple expansion is evident particularly when price movements are being driven by investor sentiment.

The issue is when sentiment dissipates. Multiples collapse—dramatically. Since there has been no (or little) fundamental support for stock prices, the prospect of substantial losses is a credible threat. A sentiment crash could wipe out all of the gains achieved by exploiting sentiment, plus more.

Given recent market dynamics, the issue of a sentiment crash is at the fore of our current thinking. Our analysis shows that valuation spreads in the market are at historical extremes. Valuation spreads look at the difference in earnings yield between the cheapest and most expensive stocks. We then rank this spread against history. A wide valuation spread signals that prices have deviated from fundamentals. As of 12/31/2019, the spread is at the 86th percentile. This deviation is most likely driven by elevated investor sentiment. With valuation spreads at such extremes, we believe that a sentiment crash is looming on the horizon.

Percent Ranking of Earnings/Price Spread of Russell 3000® Stocks
12/31/1995 – 12/31/2019



Sources: QMA, FTSE Russell. As of 12/31/2019.

WHAT HAPPENED IN PAST SENTIMENT CRASHES?

Past sentiment crashes have been dramatic and severe. Two notable sentiment crashes were the Tech Bubble and the Global Financial Crisis (we do not, however, expect entire market collapses to accompany every sentiment crash and correction). During the Tech Bubble, prices were no longer driven by fundamentals, but by investor enthusiasm about new technology and new possibilities. Eventually, it became apparent that the vast majority of new technology stocks were not going to transform the world. Sentiment started to turn in March 2000, and the bubble continued to unwind over the next year. We use a simple 12-1 month price momentum factor to illustrate the magnitude of this change in sentiment. In January 2001 alone, the factor lost –42%. This was an example of a positive sentiment crash. Of course, we can model price dynamics in different ways. We could decompose price momentum to systematic and idiosyncratic sources of price returns, look at price direction instead of cumulative returns, or adjust for the volatility of returns. These are just a few examples of alternative specifications, which are beyond the scope of this paper.

In 2009, during the Global Financial Crisis, there was a negative sentiment crash. Price momentum proved to be an effective factor through late 2008, as long as stocks trending downward kept going down. During that time, severe negative sentiment reflected onto certain names—companies that were expected to go out of business. Then the US Federal Reserve initiated the beginning of a massive Quantitative Easing program in March 2009. All of a sudden, the stocks that were expected to sink stayed afloat. Negative sentiment evaporated. In April 2009, price momentum factors returned –37%, even though the S&P 500 Index was up by over 9%.

HOW DO INVESTORS AVOID A SENTIMENT CRASH?

It's difficult to completely avoid the downdraft of a sentiment crash. One thing that can help tremendously is to substitute signals based on fundamentals, where possible, as an alternative to using price momentum as a stock selection factor. This helps prevent investors from loading portfolios up with high-sentiment stocks. Instead, QMA uses what we call information momentum (see *News Not Trading Volume Builds Momentum*; and *Price Momentum or Information Momentum?*).

Information momentum focuses on expected changes in fundamentals. This draws from the principle that new information about a company's future earnings will change its price. We use several different approaches to capture new information, such as data from sell-side equity analysts, earnings conference calls, news stories, etc. When information about fundamentals is the driver of stock prices, there is support for those prices. This is not the case when sentiment drives stock prices. As a result, we find that information momentum factors navigate a sentiment crash more effectively then price momentum.

Information momentum is also more firm-specific, and less concerned with overall macro themes or issues. Sentiment, however, tends to manifest as a result of macro issues. Below, we show rolling cumulative returns to price momentum and information momentum. The difference in drawdowns during a sentiment crash is striking.

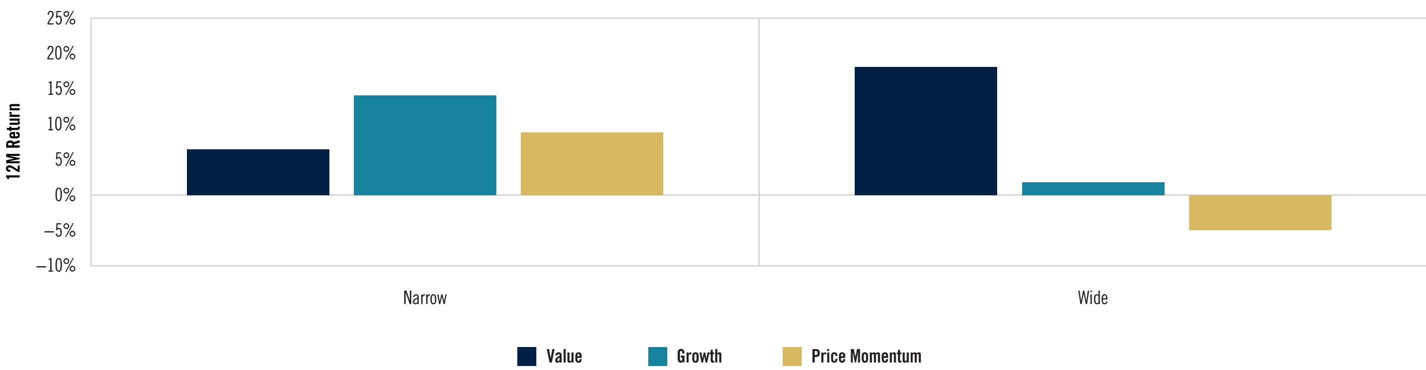
QMA's US Stock Universe: Cumulative Factor Performance
As of 12/31/2019

Sources: QMA, FactSet, Compustat, FTSE Russell. As of 12/31/2019.

What we have seen in recent times is that price momentum has outperformed information momentum. This means that prices are not being driven by information, which again supports our concerns about an increased risk for a sentiment crash.

To reinforce the risk of crash risk, remember that the value spread can indicate this impending danger. So we look at the return to value, information momentum and price momentum factors both when the value spread is wide and also when it is narrow. When the spread is wide, price momentum underperforms and value performs strongly. On average, information momentum holds up much more effectively than price momentum.

Historical Average 12-Month Long-Short Returns for Russell 3000® Stocks (Significant returns to Value factors after E/P spread breaches 80th Percentile)
12/31/1995 – 12/31/2019



Sources: QMA, FTSE Russell. As of 12/31/2019.

IN THE ABSENCE OF FUNDAMENTAL INFORMATION, WOULD YOU USE PRICE MOMENTUM AS A FACTOR?

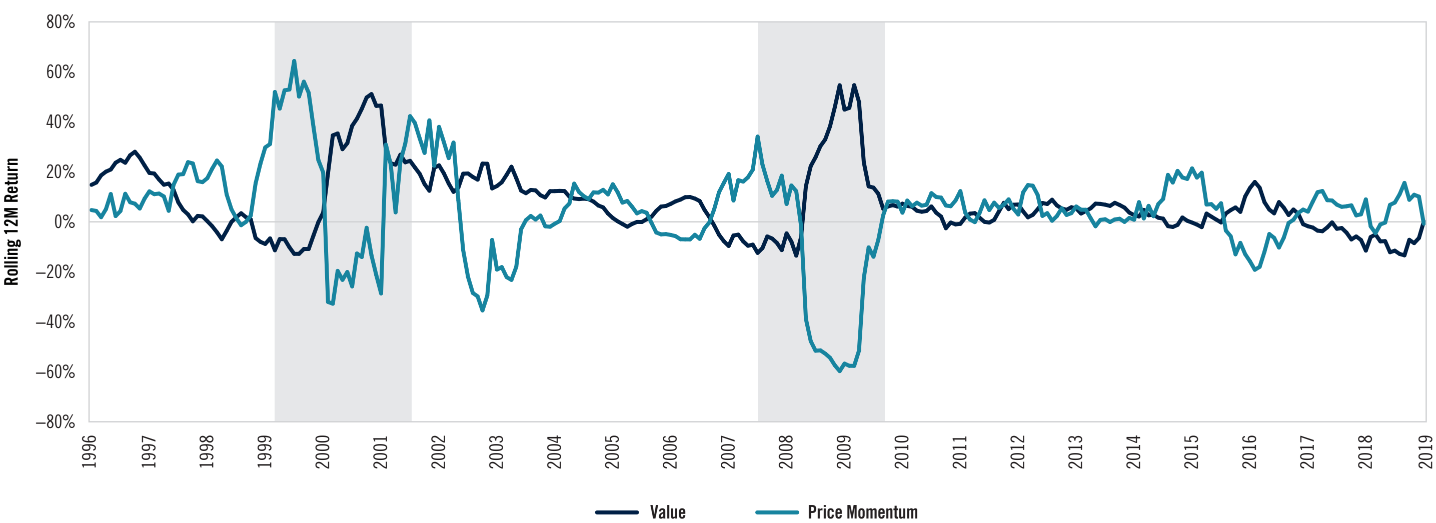
Our research has shown that there is rarely an absence of fundamental information about a company, today. Analyst coverage is robust; most firms in the Russell 3000 Index have at least some level of coverage. Most firms also host a conference call to discuss earnings. As such, we are able to construct an information momentum measure using at least one source of information.

Additionally, we do not find price momentum to be a useful tool for evaluating individual stocks, even in the absence of information. (*See Price Momentum or Information Momentum?*). In these situations, a price momentum signal is so noisy that investment performance is ultimately much less reliable (more volatile). We find a similar result when we examine international markets (i.e., EAFE and emerging markets), where one would argue that there is less information. In these markets, information momentum still outperforms price momentum. We believe that investors should not take on price momentum exposure and the added risk of a sentiment crash. To be clear, our aversion is to price momentum as it relates to a stock selection tool. Yes, there are investors who use price momentum successfully in, or in combination with, top-down selection across countries or industries, or across asset classes. But top-down macro investing is a different ballgame.

IS IT POSSIBLE TO PROFIT FROM A SENTIMENT CRASH?

Value can help investors profit from a sentiment crash. To show how this works, we examine the performance of value relative to price momentum. During episodes in which price momentum crashes, value experiences its strongest performance. In fact, the best months for value correspond to the worst months for price momentum. So we see value as an effective hedge against a sentiment crash. While a sentiment crash can be painful for some, it may also be profitable for a fundamentally-aware investor.

QMA's US Stock Universe: Rolling 12M Factor Performance
12/31/1995 – 12/31/2019



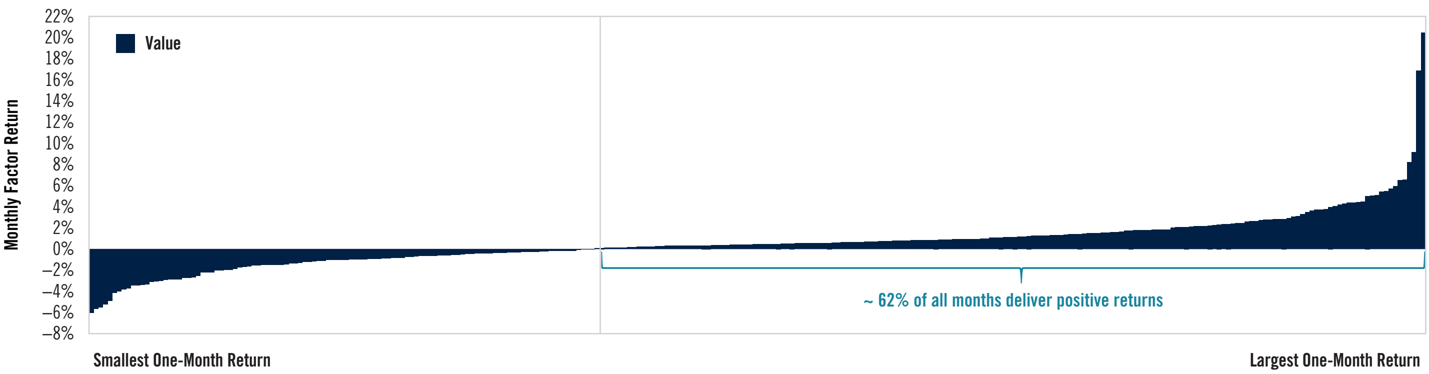
Sources: QMA, FactSet, Compustat, FTSE Russell. As of 12/31/2019.

Note, too, that value exposure is still effective once a sentiment crash has occurred. We find that investors are rewarded for having consistent value exposure within their portfolio. As seen below, value factors outperform 62% over 1-month horizons, and 71% over 12-month horizons. One could also say that over rolling 12-month horizons, fundamentals win 71% of the time. Fundamentals dominate in the long run.

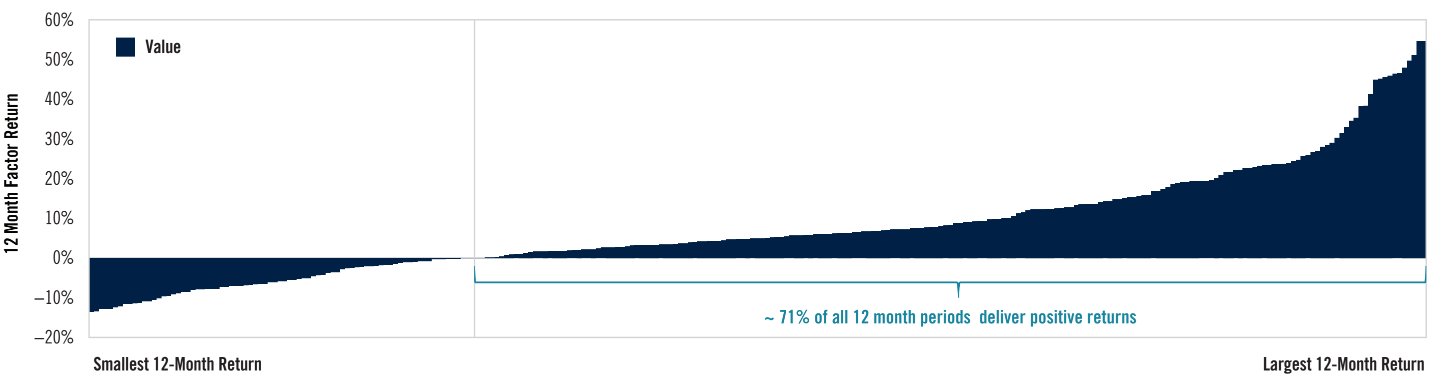
QMA's US Stock Universe: Value Factor Returns

As of 12/31/2019

Value Factor Returns: One-Month Horizon



Value Factor Returns: 12-Month Horizon



Sources: QMA, FactSet, Compustat, FTSE Russell. As of 12/31/2019.

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