Beacon Trust
MarketMonitor
November 20, 2013

All I Want For Christmas Is a Three Factor Equity Model

By Alan Segars, CFA, Chief Investment Officer

Those of us long enough in the tooth might remember a really old Christmas song, "All I Want for Christmas Is My Two Front Teeth." The nerdy 21st century version could be something like "All I Want for Christmas Is a Three Factor Equity Model." So why is a three factor equity model more desirable than one's two front teeth? What is a factor anyway? Ultimately, what is the relevance of factors to equity performance? The succinct answer to the factor definition question is this: a factor is a force that explains or drives equity returns. Quantitative research has developed a host of factors including quality, valuation, size, and momentum. We will link the relevance of three factors to equity performance through three Christmas stories.

Christmas Story #1: Perpetual Santa (Or at least 25-Year Santa)

In mid-October, Neil Woodford, portfolio manager of the UK's Invesco Perpetual, resigned from the fund after 25 years. What he left behind was an incredible equity investment record. Besides being the largest British fund manager with £33 billion under management, Mr. Woodford turned an original £1,000 investment into £23,000 compared to a £10,000 general market return (including dividends). So, how did he do it? Two chief components of his investment philosophy were buying, **(1) high quality companies and (2) low valuation companies**. Also, similar to Warren Buffet, his hero, **he held positions over long time periods**. At this point in time, Invesco perhaps views him as the Grinch that stole Christmas.

Christmas Story #2: 24-Year Elves

While not real money players (hence elves), Max Kozlor and Antti Petajisto of BlackRock published a factor study on January 7, 2013, that encompassed the July 1988 to June 2012 period, or 24 years. The study, titled "Global Return Premiums on Earnings Quality, Value, and Size," covered all developed markets and found that a **value-quality tilt among large-cap stocks produced a 3.9% excess return over the market**. The Sharpe ratio (return per unit of risk) was 0.49, or about twice the Sharpe ratio for the overall market of 0.25. Separately, **the size factor generated a negative excess annual return of -0.5%, as small stocks underperformed large stocks**. Overall, however, the study underscored the return experience from **focus on quality and valuation** evident in Neil Woodford's record at Invesco.

Christmas Story #3: One-Year Wonder

Perhaps with the wonder of the holidays in mind, we decided to create our own three factor model based on quality, valuation, and size. These are the same factors utilized by BlackRock in the aforementioned study, and two (quality and valuation) impacted Woodford's results. We employed our own screening tools and factor proxies to create the model. Two proxies for quality were, **(1) earnings per share volatility (lower is better) and (2) debt/equity (lower is better)**. Valuation was mea-

alan.segars@beacontrust.com
973.410.3117

Market of Relevance: Equities

Market Facts

1) Low P/E stocks outperforming High P/E stocks in 2013
2) Smaller stocks outperforming larger stocks in 2013
3) Factors explain equity returns

Research Contributors

Alan D. Segars, CFA
Chief Investment Officer

William J. Cashin, CPA, CFA, CMT
Senior Vice President
Fixed Income Portfolio Manager

Joseph F. Healy, CFA
Manager of Research Analysis

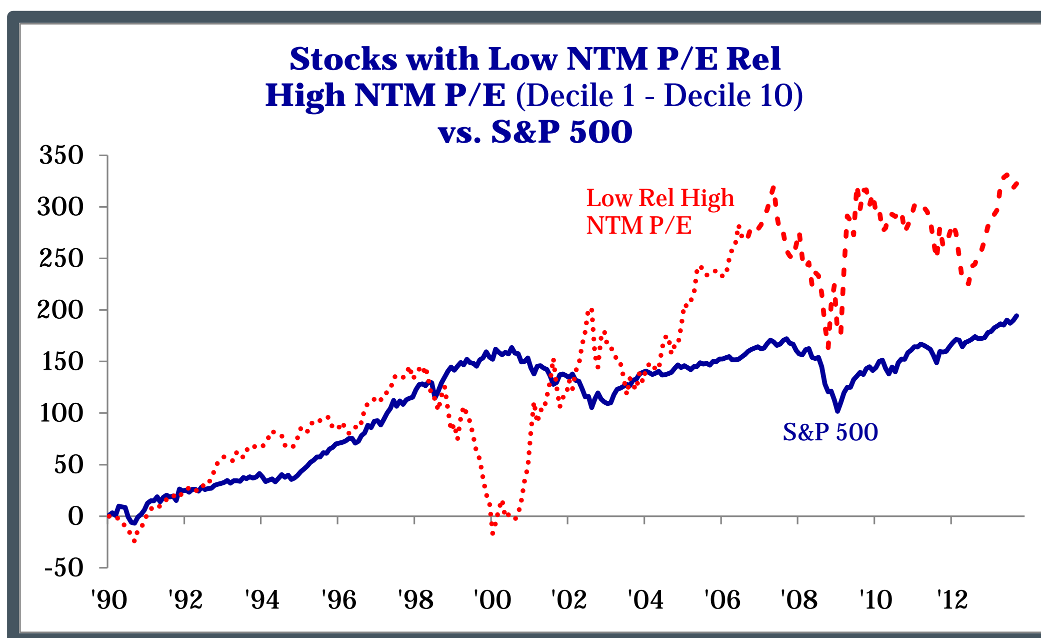
Linell T. Bigelow
Research Analyst:
Energy, Healthcare, Materials, Consumer Discretionary, Consumer Staples

Andrew J. Massey
Research Analyst:
Industrials, Information Technology, Telecommunication Services, Financials, Utilities

sured by **price/earnings ratio (lower is better)**; and the size factor was represented by the **market capitalization (smaller is better)**. Stocks were selected from the S&P 500 universe with 44 names making the cut. We gave leading quality factor stocks the heaviest weight and leading size factor stocks the least weight, such that model distribution was 47% quality, 42% valuation and 11% size. We dubbed the model FIRM, an acronym for Factor Information Return Model

So, why is FIRM a one-year wonder? As of this writing (11/20/13), year-to-date (nearly a year) performance results are indeed a bit of a wonder. FIRM's return of 33.0% compared to 27.9% for the S&P 500 for an excess return of 5.1%. The return came with less risk as the Sharpe ratio comparison was 3.82 for FIRM versus 3.68 for the S&P benchmark. The contribution to return was driven by valuation followed by size and then quality. It has been a very strong year for low P/E and smaller stocks, so the dominance of these factors is not too surprising. (See accompanying chart for low P/E stock versus high P/E stock performance record.)

Going forward, we will continue to measure FIRM's resiliency. Model rebalances, which should be modest in scope, will result from monthly screenings. Quality, valuation and size weights will likely be adjusted periodically based on fundamental considerations. Finally, a Factor Information Return Model constructed as of December 31, 2012, outperformed the S&P 500 by 10.4% from 1/2/12 to the present. Perhaps the FIRM qualifies as a Multi-Year Wonder.



Source: Strategas Research Partners
NTM: Next Twelve Months

To contact Beacon Trust, please call 866.377.8090

The Beacon Trust Market Monitor is intended to be an unbiased review of financial issues and topics of possible interest to Beacon Trust's clients and friends; it is not intended as personalized investment advice. It reflects opinions based on market and other information which is subject to change. Any opinions in this publication reflect our judgment at this date and are subject to change. Beacon Trust may hold some of the securities discussed in this publication in our clients' accounts. Some of the information on which our opinions are based was obtained from third-party sources believed to be reliable as of the date of publication, but we make no representation as to the accuracy or completeness of such third-party information, and we do not have any obligation to update, modify or amend this information or to otherwise notify a reader in the event that any such information becomes outdated, inaccurate or incomplete. There is no assurance that any targets or estimates mentioned will be attained. This publication is not intended as an offer or solicitation for the purchase of any investment product or service. Actual investment decisions are made in light of all applicable circumstances and may differ from the strategies or products mentioned here. Readers are encouraged to discuss the applicability of any topic or view contained in any publication of Beacon Trust with their Beacon Trust representative. Past performance is not a guarantee of future results.

SECURITIES AND INVESTMENT PRODUCTS:
NOT FDIC INSURED - MAY GO DOWN IN VALUE - NOT A FINANCIAL INSTITUTION - NOT A DEPOSIT - NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY