The Role of Behavioral Finance in Investment Decisions Manager Call with Canterbury Consulting and Fuller & Thaler Asset Management

On December 13, 2016, Raife Giovinazzo, PhD, CFA and David Potter, CFA addressed behavioral finance theory and its application to investment management. Raife discussed the theoretical framework and David explained how the firm's process works to exploit systematic investor mistakes in order to earn superior returns. Fuller & Thaler Asset Management was founded in 1993, and is led by experts in applying behavioral finance to stocks, including Nobel Prize winner Daniel Kahneman, PhD, and "Father" of Behavioral Finance Richard Thaler, PhD. The notes below provide a synopsis of the views and remarks made by the managers and do not necessarily reflect the opinions of Canterbury Consulting.

WHAT IS BEHAVIORAL FINANCE?

- The study of how and when investors make mistakes
- Behavioral finance combines classical finance, which assumes that people are always rational, and cognitive psychology, which recognizes consistent human biases
- Random mistakes cancel out, but systematic mistakes don't
 - Dart board example: Under normal conditions, darts will not always hit the bullseye but on average are likely to be 50/50 high/low. However, when you introduce a systematic bias such as the dart being heavier or the dartboard being farther away, that will influence the average result
- Nobel prize winners in economics for research on behavioral finance:
 - o Herb Simon (1978) decision-making ability is limited
 - o Daniel Kahneman (2002) use of "rules of thumb" cause systematic biases
 - Robert Shiller (2013) home and stock prices are biased

WHEN ARE INVESTORS LIKELY TO MAKE A MISTAKE?

- Investors over-react (e.g., panic) to vivid, emotional stories; and they under-react (e.g., don't pay attention) to dull or unexpected data
- Overreaction biases:
 - o Availability overweighting memorable stories
 - Homicides vs. strokes example: people underestimate the ratio of deaths from strokes to death from homicides because there is 30x more press coverage of homicides
 - Sharks/Bears/Cows example: people are more afraid of sharks and bears but there are 20x more deaths from cows
 - o Stereotyping overweighting first impressions
 - "Steve" example: based on a description, people estimate that Steve is a librarian and not a farmer, but there are 80x more male farmers than male librarians in the U.S.
 - This effect is often seen in the markets when all stocks in the same sector (i.e. banks) get sold indiscriminately regardless of fundamentals
 - o Loss aversion more emotional impact from losses than equivalent gains
 - Winners & losers example: people prefer to buy winners over losers, but Thaler in 1985 found that long-term losers on average outperformed long-term winners over the next five years
- Under-reaction biases:
 - o Disposition effect investors prefer to book gains rather than losses

- Investors are three times more likely to sell a stock that is up 30% than one that is flat
- Anchoring & adjustment analysts are biased towards an initial number ("anchor") and fail to adjust appropriately
 - Doctors in London example: 300 portfolio managers surveyed on average based their guesses of how many doctors there were in London on the last four digits of their phone number
- o Overconfidence people ignore facts that contradict their opinions

HOW DOES FULLER & THALER USE BEHAVIORAL FINANCE TO INVEST?

- Buy discipline:
 - Wait for a behavioral "conditioning period" where investors over-react to a stock that has been a consistent loser. Look for "multiple compression" (e.g. earnings decline by 25% but the stock price declines by 50%) to confirm over-reaction
 - Look for significant insider buying or share repurchases this is a positive signal that investors tend to under-react to
 - o Conduct fundamental analysis to corroborate behavioral thesis
- Sell discipline:
 - Look for negative signals: significant insider selling/stock issuance, decline in company fundamentals, etc.
 - Avoid the anchoring/disposition effect by not using price targets. Instead, set ranges and continuously re-evaluate
- Behavioral finance provides some successful ways to beat the market, but is still risky and only
 works on average, which is part of the reason why these anomalies continue to persist
- The most important lesson of behavioral finance is not that others are biased, it is that you are also biased and should work to eliminate those biases from your process

Raife Giovinazzo, PhD, CFA

Fuller & Thaler Asset Management

Dr. Giovinazzo is responsible for research at Fuller & Thaler, using market insights and behavioral finance to enhance the investment processes at the firm. He also co-manages some of the rulesbased behavioral strategies. Dr. Giovinazzo has over 13 years of financial industry experience. Prior to joining Fuller & Thaler, Dr.Giovinazzo was a researcher and co-portfolio manager with Blackrock's Scientific Active Equity group (formerly Barclays Global Investors). His previous experience also includes investment and consulting work with Wellington Management, Marsh & McLennan, and Mercer Management Consulting (now Oliver Wyman).

Dr. Giovinazzo received his BA in sociology from Princeton, and his MBA in analytic finance, economics, and statistics, as well as a PhD in finance from the Booth School of Business at the University of Chicago. He wrote his undergraduate thesis for Dr. Kahneman (winner of the 2002 Nobel Prize in Economics) while at Princeton, and Dr. Thaler ("Father of Behavioral Finance") was his dissertation co-chair at the University of Chicago. Dr. Giovinazzo holds the Chartered Financial Analyst designation and is a member of the CFA Society of San Francisco. He is an owner of the firm and a member of the Board of Directors.

David Potter, CFA

Fuller & Thaler Asset Management

Mr. Potter is the Portfolio Manager responsible for Fuller & Thaler's Small-Cap Value strategy. He has been with the firm since 2005 and has over 20 years of financial industry experience. Prior to joining Fuller & Thaler, he was a Vice President at Goldman Sachs. Previously, he was an Associate Director at Scotia Capital Markets.

Mr. Potter received his BA (honors) in Economics and Finance from McGill University in Montreal and his MBA (honors) in Finance from the University of Chicago. He holds the Chartered Financial Analyst designation and is a member of the CFA Society of San Francisco. Mr. Potter is an owner of the firm and a member of the Board of Directors.

Matthew Lui, CFA

Associate, Investment Research

Mr. Lui is a member of Canterbury's Research Group and is responsible for sourcing, evaluating, and monitoring traditional, long-only equity managers. Mr. Lui serves as the Chair of Canterbury's Global Equity Research Committee and he also sits on the Capital Markets Committee. Prior to joining Canterbury, Mr. Lui was a trader and research analyst at Knightsbridge Asset Management. Mr. Lui received a degree in Economics from U.C. Berkeley and is a CFA charterholder.

About Canterbury

Canterbury Consulting is a leading investment advisory firm, overseeing more than \$16 billion for foundations, endowments, and families. Founded in 1988, the Company designs and manages custom investment programs aligned with each client's goals. Canterbury acts as the investment office for its diverse clients and provides objective investment advice, asset allocation, manager selection, risk management, implementation, and performance measurement. Canterbury Consulting strives to deliver performance and service that exceeds the needs and expectations of its clients.