
**SPRING JOIM CONFERENCE SERIES
MARCH 7–9, 2010
THE STANFORD COURT RENAISSANCE HOTEL
SAN FRANCISCO, CALIFORNIA
CONFERENCE SUMMARIES**



The program emphasized the “**Behavioral Finance**” exploring both the origins and some of the distinctions and characteristics that Behavioral Finance has as compared to Classical Finance.

Brad M. Barber, University of California, Davis
Speaker
Day Trading in Equilibrium

We analyze the cross-sectional differences in the performance of individual investors who engage in day trading in Taiwan. Consistent with prior research on the performance of individual investors, we document that day traders lose money. However, we find striking evidence of persistence: a select few individual investors (less than 1 percent of the day trading population) are able to consistently earn abnormal profits net of fees. When we sort day traders based on their profits in year t , we find that the spread in the returns of the top- and bottom-ranked investors in year $t + 1$ exceeds 60 basis points per day.

David N. Esch, New Frontier Advisors
Speaker
Non-normality Facts and Fallacies

Recently there has been an increasing trend in the quantitative finance community to call for statistical models which explicitly model returns with non-normal probability distributions (e.g. Sheikh and Qiao, 2009; Bhansali, 2008; Harvey *et al.*, 2004). In this paper we explain why summary rejection of normal distributions is almost always ill-advised. We first examine some of the motivations for using normal models in financial applications. These models can account for non-normal return distributions despite their normal model components. We then demonstrate some consequences of switching to more complicated and less well-known non-normal models. These models almost always have more parameters to fit from the same data. All else being equal, rational investors should prefer parsimonious models, especially when the historical signal is weak, as is often the case in finance. We survey the shortcomings of several popular

non-normal financial modeling techniques, especially when implemented naively. Although certain problems may warrant the use of other statistical return distributions, we argue that it is still important to exhaust the possibilities of normal models before switching to them. Models with normal distributions can be extended through methods such as conditioning on other variables, inequality constraints, mixtures, integration and resampling over unknown parameter distributions, or in some cases non-linear transformations. The mathematical properties of the normal distribution facilitate these model-building techniques and allow for thorough post-analysis and model validation to ensure the best choice for the final model. Because of the preceding arguments, we reject the popular fallacy that because return distributions have marginal non-normal distributions, normal models cannot be valid or useful.

Russell J. Fuller, Fuller & Thaler Asset Management

Speaker

Estimating the Amount of “Mis-Pricing” in Various Segments of the Equity Markets

This paper addresses an old question in finance: Capital Markets Theory assumes that the *ex ante* market portfolio lies on the (*ex ante*) efficient frontier. However, as discussed in the text, common sense suggests that the *ex ante* market portfolio is an interior portfolio on the efficient frontier measured *ex post*. We call the difference in realized returns for the *ex ante* market portfolio and a portfolio with similar risk characteristics that lies on the *ex post* efficient frontier “the amount of mis-pricing.”

We develop a simple method to estimate the amount of “mis-pricing” in various segments of the equity markets based on the assumption of perfect foresight about future prices and future shares outstanding at the end of the period. Arbitrarily defining the

1,000 largest stocks based on market values at the beginning of each year as the large-cap US stock segment, our estimate of the average amount of mispricing per year is 7–9% of the total beginning of the year market values of these stocks. We show analytically and empirically that the amount of mispricing is a positive function of the cross-sectional dispersion of the returns of the 1,000 stocks from the beginning to the end of the year. We also investigate mis-pricing in smaller market-cap segments of the US equity market. As one might expect, the cross-sectional dispersion of security returns becomes greater as one moves down the market-cap spectrum and the value of perfect foresight is greater. We present similar findings for EAFE stocks.

Jason Hsu, Research Affiliates, LLC

Speaker

Can Noise Create the Size and Value Effects?

Whether persistent investor behavioral defects or hidden risk factors drive the value and small cap premium remains one of the most researched questions in finance. In this paper, we show that a simple limited rationality economy, compatible with a large variety of behavior biases, could allow for a mean-reverting noise component in stock prices. When we replicate the Fama and French sorting of stocks into style deciles using our noise-in-price data generating process, we find that overvalue stocks (stocks with a positive pricing noise) would tend to sort into high price-to-book and high capitalization deciles. As we resort the Fama–French style deciles quarterly and rebalance the corresponding long–short portfolios based on value minus growth and small minus large deciles, we are essentially constantly buying stocks that are more likely to be undervalued and shorting the overvalued. This intuition is markedly different from a hidden risk factor-based interpretation. We also observe that the excess return from value and small cap stocks are driven by stock migration from value deciles and small cap deciles

toward more neutral deciles, rather than from stocks which are permanent members of the value/small cap deciles. This observation is consistent with the empirical observation documented Fama and French (2007) and is inconsistent with the standard risk-based story. We argue that the behavioral interpretation of the value and small cap premium is more compatible with the recent empirical evidence on value stock migration patterns.

Andrew W. Lo, MIT Sloan School of Management

Speaker

The Origin of Behavior

We propose a single evolutionary explanation for the origin of several behaviors that have been observed in organisms ranging from ants to human subjects, including risk-sensitive foraging, risk aversion, loss aversion, probability matching, randomization, and diversification. Given an initial population of individuals, each assigned a purely arbitrary behavior with respect to a binary choice problem, and assuming that offspring behave identically to their parents, only those behaviors linked to reproductive success will survive, and less reproductively successful behaviors will disappear at exponential rates. This framework generates a surprisingly rich set of behaviors, and the simplicity and generality of our model suggest that these behaviors are primitive and universal.

Terrance Odean, University of California, Berkeley

Speaker

Once Burned, Twice Shy: How Pride and Regret Affect the Repurchase of Stocks Previously Sold

We establish two previously undocumented patterns in the purchase selections of individual investors and confirm a related pattern. These patterns hinge on investors' previous experience with a stock. We demonstrate that investors prefer to:

(1) repurchase stocks they previously sold for a gain rather than stocks they previously sold for a loss; (2) repurchase stocks that have lost value subsequent to a prior sale, rather than stocks that have gained value subsequent to a prior sale; and (3) purchase additional shares of stocks that have lost value since being purchased, rather than additional shares of stocks that have gained value since being purchased. We document these trading patterns by analyzing trading records for 66,465 households at a large discount broker between January 1991 and November 1996, and 665,533 investors at a large retail broker between January 1997 and June 1999. We propose that these trading patterns are driven by investors' desire to limit the degree of regret they experience in association with unsuccessful trades and increase feelings of pride and satisfaction associated with successful trades. Investor returns do not reliably benefit from any of the three trading patterns we document.

Hersh Shefrin, Santa Clara University

Speaker

Behavioralizing Finance

Finance is in the midst of a paradigm shift, from a neoclassical based framework to a psychologically based framework. Behavioral finance is the application of psychology to financial decision making and financial markets. Behavioralizing finance is the process of replacing neoclassical assumptions with behavioral counterparts. This volume surveys the literature in behavioral finance, and identifies both its strengths and weaknesses. In doing so, it identifies possible directions for behavioralizing the frameworks used to study beliefs, preferences, portfolio selection, asset pricing, corporate finance, and financial market regulation. The intent is to provide a structured approach to behavioral finance in respect to underlying psychological concepts, formal framework, testable hypotheses, and empirical findings. A key theme of the volume is that the future of finance will combine realistic assumptions

from behavioral finance and rigorous analysis from neoclassical finance.

Meir Statman, Santa Clara University

Speaker

What do Investors Want? And How Do Our Wants Shape Our Behavior?

We want more from our investments than low risk and high returns. We want to nurture hope for riches and banish fear of poverty. We want to win, be

#1, and beat the market. We want to feel pride when our investments bring gains and avoid regret when they inflict losses. We want the status conveyed by hedge funds, the virtue conveyed by socially responsible funds, the patriotism conveyed by investing in our own country, and the loyalty conveyed by investing in the companies that employ us. We want financial markets to be fair but we search for an edge that would let us win. We want to leave a legacy for our children when we are gone. And we want to leave nothing for the tax man.