



Northfield's 29th Annual Research Conference

Sunday, March 19, 2017 – Wednesday, March 22, 2017

Stowe Mountain Lodge
7412 Mountain Road
Stowe, VT 05672

Since 1989, Northfield's Research Conference has been the premier industry event for analytical research in the management of financial assets. As always, presentations were selected through a formal "call for papers." The 2017 program will include a broad array of topics including asset allocation, market return forecasting, advances in portfolio construction, and several cutting-edge approaches for alpha generation. Our distinguished list of presenters includes thought leaders from all sectors of the financial services industry, including asset owners, asset managers, and financial intermediaries. In aggregate, our twelve presenters have more than *two hundred publications to their credit* including several books that have been industry standards. We believe that no other conference can match this content in offering the ideal combination of academic rigor and industry experience. In keeping with Northfield custom, the conference will take full advantage of our spectacular venue to augment the working sessions with social events and family-friendly activities.

CFA Institute Continuing Education Credit Approved



CFA Institute has approved this program, offered by Northfield Information Services, Inc, for 12 CE credit hours. If you are a CFA Institute member, CE credit for your participation in this program will be automatically recorded in your CE tracking tool.

Travel Arrangements and Accommodations

Reservations are on a first come basis so it is a good idea to register early. Please note - we are accepting registrations via online registration only for the conference and hotel accommodations. If you have any difficulties registering, please contact Kathy@northinfo.com for assistance.

Hotel accommodations at the reduced conference rate are nearly gone and **must** be arranged by contacting The Stowe Mountain Lodge, at 888-478-6938 or 802-760-4755, reference NORTHFIELDINFO when calling, or visit the registration website by [clicking here](#).

Business Agenda

Monday, March 20, 2017

12:30 pm Buffet Luncheon, Solstice Restaurant

1:30 pm General Session, Junior Ballroom
Afternoon sessions are from 1:30 pm – 4:30 pm

1:30 pm Estimation Error and What to Do About It
Mark Kritzman, *Windham Capital*

When investors construct portfolios they often estimate covariances from long historical return samples. This process exposes them to three sources of estimation error: small-sample error because the investment horizon is shorter than the historical return sample; independent-sample error, because the investment horizon is independent of the historical return sample; and interval error because investors care about how assets co-vary over longer intervals than the return interval used to estimate the covariances. This presentation introduces a non-parametric procedure for creating a new return distribution that internalizes estimation error. It produces portfolios that are more stable out of sample than portfolios that are blind to estimation error. It differs from Bayesian shrinkage and resampling in an important way. Rather than rendering portfolios less sensitive to estimation error by averaging it away, this process explicitly accounts for the relative stability of covariances in the portfolio formation process.

2:30 pm Risks and Rewards of Tax Loss Harvesting Strategies: Near Term and Deferred
Lisa Goldberg, Aperio Group and University of California at Berkeley

Tax-loss harvesting (TLH) aims to realize losses on individual stocks in conjunction with an investment objective such as index tracking. Realized losses are used to offset pending capital gains, enabling an investor to delay tax payment or to avoid it entirely. This makes TLH valuable to taxable investors, but how valuable? To date, the appraisal of the potential benefits, risks, and limitations of tax-loss harvesting has been largely based on anecdotes and Monte Carlo simulation. Both deliver useful, but incomplete, information: anecdotes are necessarily limited in scope, and Monte Carlo simulations rely on idealized assumptions about return and risk. Here, we complement those perspectives with a detailed historical analysis, emphasizing the spectrum of potential investor experiences rather than simple averages.

3:30 pm The Low-Volatility Anomaly, Interest Rates and the Canary in a Coal Mine
Edward Qian, PhD, CFA Wayne Qian, CFA, Panagora Asset Management

Capital markets are interconnected. The low volatility anomaly in equity markets can be partly attributed to change of interest rates in fixed income markets. We extend this contemporaneous relationship to serial relationship across time. It is shown that returns from low volatility anomaly in US stocks have information about changes of US treasury yields in the future. Specifically, when low volatility stocks outperform high volatility stocks, treasury yields tend to decline subsequently. This relationship does not seem to exist in the opposite direction. Trading strategies in US Treasury note futures based on forecasting models using this relationship would have been profitable. Even though common perception is that the bond market is more prescient than equity market in terms of anticipating market movements and economic shocks, in this instance, we show that equity investors move ahead of bond investors and they are the canary in a coal mine.

Tuesday, March 21, 2017

8:00 am Breakfast, Hour Glass

9:00 am Seminar sessions: Junior Ballroom
Morning sessions 9 am – 12 pm

9:00 am Investment Horizon and Portfolio Selection
Martin Tarlie, QMA Investors

This presentation introduces a method of portfolio selection based on that idea that investment risk is not having enough wealth when you need it. Not having enough wealth translates into a required return. When you need wealth translates into an investment horizon. These two simple ingredients, when combined with asymmetric preferences for wealth above and below the target, result in a portfolio selection process that depends explicitly on the time horizon, in new and interesting ways.

10:00 am Does Market Liquidity Explain the Idiosyncratic Volatility Puzzle: Evidence from the Chinese Stock Market

Bin Shi, Acadian Asset Management

This research explores the existence and significance of the relationship between idiosyncratic volatility and stock returns in the Chinese stock market, and considers market liquidity as an explanation for the idiosyncratic volatility “puzzle.” The results show that equally-weighted portfolios based on idiosyncratic volatility have a negative premium, while value-weighted portfolios based on idiosyncratic volatility have a positive premium. The monotonic patterns of market liquidity from the highest to the lowest idiosyncratic volatility portfolios demonstrate that liquidity has an important impact. After controlling for liquidity and common risk factors, we show that the apparent anomaly related to idiosyncratic volatility is driven by market liquidity. This result is confirmed via the method of doubled sorted portfolios addressing both idiosyncratic volatility and liquidity.

11:00 am Extending Fama–French Factors to Corporate Bond Markets
Demir Bektic, Deka Investment GmbH

The explanatory power of size, value, profitability and investment has been extensively studied for equity markets. Yet, the relevance of these factors in global credit markets is less explored although equities and bonds should be related according to structural credit risk models. We investigate the impact of the four Fama-French factors in the U.S. and European credit space. While all factors are

economically and statistically significant in the U.S. high yield market, we find mixed evidence for U.S. and European investment grade markets. Nevertheless, we show that investable multi-factor portfolios outperform the corresponding corporate bond benchmarks on a risk-adjusted basis.

12:00 pm Lunch, Tamarack AB

1:30 pm Seminar sessions: Junior Ballroom
Afternoon sessions are from 1:30 pm – 4:30 pm

1:30 pm **Direct Estimation of Factor Exposures from Appraisal Returns**
Jen-Wen Lin, Canadian Pension Plan Investment Board

Valuation of alternative assets such as private equity and commercial real estate are appraisal based, rather than marked-to-market. Empirical studies show that appraisal based returns tend to be smoothed and exhibit strong autocorrelation, which creates a “stale price” bias. In this presentation, we will have described the weaknesses of the current “one step” and “two step” regression approaches to estimating risk factors for alternative assets. We will then introduce a new method for estimating risk factor exposures which avoids these weaknesses. We illustrate the application of the new method to popular measures of return for private equity and real estate. Finally, we attempt to explain why factor sensitivities estimated from appraisal returns tend to be smaller than those estimated on underlying cash flows.

2:30 pm **Portfolio Optimization in an Uncertain World**
Marielle de Jong, Amundi

Mean-variance efficient portfolios are risk optimal only if risk were foreseeable, that is, under the hypothesis that asset price (co)variance is known with certainty. Admitting uncertainty changes the perception. Risk optimality is no longer synonymous to minimum price variance, but pertains to the diversification in the portfolio as well, for that provides protection against unforeseen risks. The importance of diversification over efficiency depends on the degree of uncertainty, which is a central parameter in the portfolio optimization problem, we argue.

Generalizing Modern Portfolio Theory (Markowitz, 1952) in this respect leads to an optimization problem with a double objective function: minimize variance and maximize diversification. The optimum of this problem is attained when the portfolio is in parity, meaning that all assets contribute equally to the overall price variance. If foreseeability is low, the optimum lies close to an equally-weighted portfolio, and shifts towards the minimum-variance solution as foreseeability improves.

3:30 pm **The Black-Litterman Model: Active Risk Targeting and the Parameter Tau**
Randy O’Toole, Federated Investors

While the Black-Litterman (BL) model of expected returns is well-known and widely used throughout the investment management industry, there is apparent persistent confusion over certain aspects of the model, with a number of publications offering various explanations and clarifications as to how the model works in practice. The parameter tau (t) has proved to a particularly confounding feature of the model: a wide range of opinions and suggestions on how to interpret and quantify tau has accumulated in the literature, and includes some harsh criticism of the BL model specifically related to tau. In this research, we consider tau in the context of active risk. We show how tau is directly related to the level of active risk implicit in BL expected returns, and that up to a certain maximum tau can be calibrated to target the desired level of active risk. We next introduce an alternative derivation of the BL model that provides a more direct approach to active risk targeting for which tau is irrelevant.

Wednesday, March 22, 2017

8:00 am Breakfast, Hour Glass

9:00 am Seminar sessions: Junior Ballroom
Morning sessions 9 am – 12 pm

9:00 am Transparent Expected S&P 500 Expected Returns To Complement Discretionary Wealth-Based Asset Allocation
Jarrold Wilcox, *Wilcox Investment, Wealthmate Inc.*

Equity allocations for investors need to coordinate three estimates – risk, return, and risk tolerance. The discretionary wealth approach to setting appropriate risk tolerance provides useful customization across investors. However, because discretionary wealth, and the ability to bear risk, tends to be correlated with major stock movements, the framework’s usefulness for customization across time can be improved through coordination with time-varying estimates of risk and return. Here we show an example of a transparent and modular estimate of the 1 year return for the S&P 500, suitable both for consensus financial planning and as a point of departure for non-consensus views. Three modules deriving estimates are illustrated and combined, with a bias toward Bayesian mixing of qualitative and quantitative methods. In declining effective weight order, the first is a long-term model based on economic growth and the share of its rewards allocated to investors. The second is the 10 year CAPE valuation model mostly associated with Shiller. The third is a one-year forecast based on a) aggregate price to book valuation relative to excess ROE over expected inflation, b) independent return momentum and c) an independent sentiment indicator based on currency returns.

10:00 am Securitizing Equity Returns
Keith Quinton, *Former Portfolio Manager Fidelity Disciplined Equity Fund*

Income-oriented investors often buy equities directly or via equity mutual funds. This has been true for both the long-term but has been particularly pronounced during the post Financial Crisis low- or zero- interest rate policy period. Investors "forced" to buy equities for income may not be aware of nor prepared for the volatility their principal may experience. Simultaneously there has been quite good demand for bonds yielding historically low rates. At the other end of the spectrum investors are buying 2x and 3x levered products that do a poor job of tracking their underlying indices over the long term. By taking a diversified portfolio of stocks and issuing securities that are entitled to differing allocations of income and capital, it is possible to create investment opportunities that better suit the needs of the investors. Using the S&P 500 as an example, I will explore the components of return and how divvying them up works over time. I will discuss the theoretical underpinnings of the approach and the arbitrage relationship that exists. I will conclude with a historical perspective, implementation and other thoughts.

11:00 am Efficient Currency Hedging
Jason MacQueen, Daniel Mostovoy, *Northfield*

Most international fund managers do not have strong views about expected currency returns, so currency risks should normally be hedged out as far as possible. Froot (1993) showed that hedging currency risk will usually reduce portfolio volatility over short investment horizons up to five years (although not over longer horizons). The only hard part is deciding how much to hedge. Most managers assume that currency risk is determined by the weight of stocks in some foreign currency; if 15% of the portfolio is Japanese stocks, doesn't that mean we have a 15% exposure to the Yen, and should hedge accordingly?

A moment's thought suggests that this might not be right. Many large Japanese stocks, such as Toyota, are actually multinationals, earning most of their profits abroad. For such companies, a stronger Yen clearly means smaller profits, and vice versa. If we hedge currency risk based simply on the currency of denomination, we are very likely to over hedge, so that while the unhedged portfolio has an implicit bet on Yen appreciation, the (over) hedged portfolio will actually have an implicit bet on Yen depreciation. Although the overall hedged portfolio volatility will be lower, the manager has not actually done a very efficient job of making the portfolio returns nearly currency-invariant.

It is the portfolio's exposure to the Yen that matters for optimal currency hedging, not simply the weight held in Japanese stocks. This talk will compare hedging by weight with hedging by exposure, and show that exposure hedging requires less hedging overall, (thereby incurring fewer transaction costs) and gets much closer to currency neutrality.

12:00pm Closing Luncheon, Solstice Restaurant

Our final meal will be a buffet luncheon to encourage everyone to eat together and enjoy a final dose of local camaraderie. If you do need to catch a plane and have to run, there will be boxes available so you can get your sandwich to go.