

## NORTHFIELD ASIA RESEARCH SEMINAR

Tuesday, 19<sup>th</sup> November 2013

Landmark Mandarin Oriental

Hong Kong

**8:30 Continental Buffet Breakfast**

**9:00 Welcome and Introductions**

**9:15 Experiments in Conditioning Risk Estimates with Quantified News**

*Christopher Kantos, Northfield Information Services*

*Since 1997, Northfield has used various forms of “contemporaneously observable” information to improve estimates of the future risk of securities and investment portfolios. Our first effort was to include changes in “option implied” stock volatility in our short horizon risk models. In 2007, we began to expand this concept using information sets outside the regular data inputs to our models to adjust risk forecasts to fit current market conditions. Our “near horizon” family of models was commercially introduced in 2009 and uses observable broad market information (e.g. VIX level) to inform our models on how things now are different from the way they usually are. Recently we conducted a joint research project with a group of MIT graduate students to explore how quantified news text can be used to further improve risk estimates of over short time horizon, as first suggested in diBartolomeo, Mitra and Mitra (Quantitative Finance, 2009). This presentation will review the research done to date on “conditional” risk modeling, describe the various forms of quantified news feeds that are now available to investment professionals, and provide empirical data from the MIT study on the extent to which quantified has been demonstrated to be a useful ingredient of stock level risk assessment.*

**10:00 Co-integration Strategies for Asset Allocation**

*Nick Wade (or) Dan diBartolomeo, Northfield Information Services*

*It is frequently the case that investors in financial markets are seeking to achieve fixed target returns over long periods of time. This preference applies to both institutional investors such as pension funds, and households saving for retirement. In the institutional framework this is often evidenced by pension funds considering their true risk to the volatility of the “funding ratio” of the plan. When formulating asset allocations to fulfill these financial needs, it is common for investors to focus on the expected value of the return stream, and the volatility of the return stream, as in the concept of the Markowitz efficient frontier. Underlying such strategies is the belief that returns patterns have the statistical property of being “stationary”. Cointegration is a statistical concept in which we combine two or more non-stationary series such that the sum is stationary. In simplest terms, we will use this concept to formulate asset allocations where the residual returns (above or below the fixed target) will have strong mean reverting properties such that there is a high likelihood that periods of underperformance will be promptly and reliably followed by periods of outperformance and thereby minimize volatility of funding ratios.*

**10:45 Break**

**11:00 “An Innovative Look at Corporate Credit Risk”**

*Dr. Stephen Malinak, ThomsonReuters*

*Dr. Stephen Malinak is Global Head of Quantitative Research for Thomson Reuters, serving Investment and Advisory customers in all of the world’s major financial centers. His team builds a wide variety of innovative analytics, quant factors, and quant models based on the vast range of Thomson Reuters content sets. He was Director of Quantitative Research for StarMine prior to its acquisition by Thomson Reuters. Previously, he worked as a litigation consultant at LECG, valuing businesses and intellectual property in the telecommunications, high tech, and pharmaceuticals industries. As a strategy consultant for Strategic Decisions Group, he constructed detailed probabilistic cash flow forecasts for portfolios of new products and new business ventures. He built a practice area around commodity price forecasting and risk management, based on fundamental supply/demand analysis as well as stochastic process models. Stephen has a Ph.D. and M.S. from Stanford in Engineering-Economic Systems. He also has an S.B. in Electrical Engineering and Computer Science from MIT, where he studied acoustics under Dr. Bose.*

*The importance of unbiased, timely and predictive models of credit risk was highlighted in the recent financial crisis and continues to be on investors’ minds today. In this presentation we will discuss the innovative research behind the StarMine Credit Risk Model, a robust, multi-factor predictor of corporate bankruptcies and financial distress. This timely, quant-driven approach blends information from traditional data sources such as equity prices and reported financial information with underutilized sources such as forward-looking analyst estimates and text mining of news, transcripts, statements, and select broker research to provide a more predictive measure of credit risk. Fixed income investors will learn how this research applies to their default and credit risk analysis, while equity managers will learn how this approach is superior to common alternatives such as the widely used Altman Z-Score.*

**12:00 LUNCH**

**13:30 Incorporating Commodities in Multi-Asset Class Portfolio Risk Assessment**

*Dan diBartolomeo, Northfield Information Services*

*Mr. diBartolomeo is President and founder of Northfield Information Services, Inc. Based in Boston since 1986, Northfield develops quantitative models of financial markets. Additional Northfield staff members are located in London, Moscow, Tokyo and Chicago. The firm’s clients include*

nearly three hundred financial institutions in a two dozen countries. Dan has recently received substantial acknowledgement in books and television interviews for his analytical work in 1999 that contributed to the early detection of the Madoff investment fraud.

Many institutional investors have begun to hold passive positions in commodities as part of their portfolio. Commodities are presumed to be a diversifying asset with behavior quite different from equities or traditional fixed income securities. This may be attractive to some investors but is problematic from a risk management perspective. On the one hand, we would like explain as much as possible of this behavior, but we must also keep any models of risk sufficiently parsimonious to be statistically stable. Finally, our multi-asset class risk scheme must respect the fact that for most non-leveraged institutional investors, most portfolio risk arises from exposure to equity markets. The major groups of commodities such as energy, agriculture and metals have behaviors quite different from one another but have obvious linkages to equities of companies whose business relates to the respective commodities. This presentation will cover a recent Northfield research project that has led to a new approach to estimating risk factor exposures for a wide range of commodity contracts. The new methodology will debut in Northfield models around the end of 2013.

## 14:15 Estimating Time-Varying Equity Risk Premium

**Dr. Katsunari Yamaguchi, Ibbotson Associates Japan, Inc**

*Dr. Yamaguchi serves as the President of Ibbotson Japan, which he joined in 2000, prior to which he was Chief Portfolio Manager at LTCB. In addition, Dr. Yamaguchi currently and previously serves as a guest lecturer at various universities including Keio University, Tohoku University, and Senshu University. He has published over a dozen papers in academic journals, and has also translated research by Peter Bernstein, Roger Ibbotson, and Werner Debon. Currently, Dr. Yamaguchi is an Executive Board Member of Nippon Finance Association, an Executive Board Member of the Association of Behavioral Economics and Finance, a member of the Examination Committee for the Security Analysts Association of Japan, and a Board Member of the MPT Forum.*

*This study attempts to detect time-varying equity risk premium (ERP) over three decades from 1980 to 2012 in the Japanese stock market. Based on the standard valuation model, a proxy of expected growth is defined by earnings spread (ROE – E/P). Time-varying ERP is estimated from residual return series from regressions to explain monthly TOPIX price changes by valuation variables and other factors. We have found that approximately 50% of market volatility was attributable to ERP, and detected ERP's declining trend in 1980's and upward trend after 2000. Excluding foreign factors, we identified Japan-specific part of risk premium increasing after the bubble economy busted to financial crisis in late 1990's.*

## 15:00 Liquidity Planning Tools and Strategy Capacity for Equity Markets

**Nick Wade (or) Dan diBartolomeo, Northfield Information Services**

*Since 2003 Nick has been the Marketing Director for Asia and responsible for managing Northfield's operations in that region. Previously with Northfield Nick has been responsible for, or involved with, researching and developing many of our new analytical models, including the US Short-Term Model, and Northfield's flagship multi asset class enterprise risk model "EE". Prior to joining Northfield he designed risk management systems as a consultant with AMS UK Ltd., where he was the risk engine team leader on the West Deutsche Landesbank project, and began his career as a Quantitative Analyst with Grantham, Mayo, van Otterloo & Co., where he worked on interest-rate, currency, and volatility forecasting models as well as optimization and risk. Nick holds an honors degree in theoretical physics from the University of York, England, and an MBA from Northeastern University, Boston USA, where he worked for the finance department.*

*Liquidity shortages during the Global Financial Crisis underlined the need to have well articulated liquidity policies as part of investment strategies. To formulate such policies, first need to understand the potential liquidity needs of a fund and the cost of carrying out a partial liquidation under difficult market conditions. The first part of the presentation will review Northfield model for estimating liquidation costs, and show how the costs can be incorporated into a simple metric for "liquidity-adjusted risk". For active managers, the issue of liquidity also relates to the issue of fund size. In the second part of the presentation will provide a model of AUM capacity of particular active strategies in terms of the tradeoffs between turnover, trading costs and alpha. We will review model output in light of the empirical data provided in Elton, Gruber and Blake (2011). Both of these procedures require framing the cost of transacting equity trades into true supply/demand curves that have quantity, side and time dimensions.*

## 15:45 Closing Remarks

*A wrap-up discussion with final questions and answers on any of the sessions.*

If you have any questions or require additional information please contact our office in Tokyo at +81 (0)3 5403 4655. Please register online at <http://www.northinfo.com/events.php> or RSVP by email to [events@northinfo.com](mailto:events@northinfo.com). We look forward to seeing you!

Name \_\_\_\_\_

Firm \_\_\_\_\_

Email address \_\_\_\_\_

Telephone \_\_\_\_\_

Do you or any of your guests have any **special** dietary concerns that we should be aware of?

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