Since the financial crisis of 2008, the role of risk management has assumed greater prominence in the investment management industry. Wells Capital Management (WellsCap) and Wells Fargo Asset Management continue to commit significant resources to monitoring risk in our clients’ portfolios. Unlike many firms that only recently began investing in portfolio risk management, our robust portfolio analytics and proprietary portfolio risk management process were established in 1999. While market and regulatory changes in recent years have dictated enhancements, the core risk management philosophies and processes have remained remarkably consistent for over a decade. While a credible, client-focused, portfolio risk management effort has certainly become a competitive imperative, WellsCap has always considered it to be a critical and integral component of investment performance. In this interview, WellsCap’s President and Chief Investment Officer, Kirk Hartman, discusses our approach to portfolio risk management and analytics.

Q: What is the philosophy behind portfolio risk management at Wells Capital Management?
We believe an organization of autonomous investment teams is the optimal platform for achieving consistent outperformance for our clients. For this reason, we are structured as a firm with 26 independent portfolio management teams organized by asset class and style. While every portfolio management team is expected to integrate risk management into their investment process, our portfolio risk management process anchors our collection of autonomous investment teams to the firm via a consistent, unbiased framework for evaluating the various risks in each of our strategies. This process also serves as the “voice of the client,” verifying that our portfolio managers are doing what they have been hired to do, in a manner that does not entail inordinate risk.

Each portfolio management team is responsible for their own research and portfolio construction, as well as the implementation of internal risk controls consistent with their investment philosophy and process. In addition, our Compliance team is heavily involved in ensuring that any client-specific rules are followed. The mandate of our Portfolio Risk Management and Analytics (PRMA) team is to quantify, decompose, evaluate and communicate both benchmark- and peer-relative risk and return. This is done through three main mandates:

- Make intended and unintended portfolio risks transparent to portfolio management teams. This also includes providing all of our teams with superior portfolio analytics, which in many cases are made available on a daily basis via our robust risk reporting infrastructure.
- Identify and communicate to senior management, products taking significant levels of risk. We use risk checklists, reports that establish risk target ranges for each product, to facilitate this process.
- Monitor each portfolio management team’s investment process through time to ensure that alpha generation is consistent with clients’ expectations.

Q: Describe the resources comprising WellsCap’s investment risk management oversight process.
Investment risk management oversight at WellsCap is coordinated by “the Office of the CIO”, which consists of me (the CIO); Chief Equity Officer Jon Baranko; Head of LDI and Global Credit, Andy Hunt; and Director of Fixed Income Strategy, David Germany.

Security level investment risk is monitored by each portfolio management team based on the specifics of their investment process. The Office of the CIO provides credible challenges to portfolio managers to ensure that individual security positions are well understood and consistent with the team’s stated investment process.

Portfolio level investment risk is monitored by the Portfolio Risk Management and Analytics team. PRMA is led by Co-Heads John Hockers and Randy Mangelsen, who direct a staff of sixteen organized around four functions: equity risk management, fixed income risk management, portfolio analytics and counterparty risk management. PRMA employs an extensive infrastructure of proprietary software overlaying vended risk models and databases to produce highly-automated portfolio risk reports. Those reports are used to inform the Office of the CIO of significant risks via daily, monthly, and quarterly processes. The Office of the CIO then provides credible challenges to portfolio managers to ensure that portfolio risks are well understood and consistent with each team’s stated investment process.
Q: Expand on the role Portfolio Risk Management and Analytics plays with respect to portfolio management teams.

Whereas WellsCap’s Compliance team is responsible for ensuring that portfolio management teams are operating within client-specified guidelines and regulatory limitations, PRMA tackles the more nuanced task of encouraging portfolio managers to deliver attractive risk-adjusted performance while adhering to the investment philosophy and process they have communicated to their clients. Its primary tool in executing this task is transparency. A greater sense of accountability is achieved when portfolio management teams understand that the Office of the CIO is fully aware of the magnitude and nature of their most significant risks.

PRMA routinely publishes its primary reports to network drives accessible to portfolio management teams. This frequently leads to conversations triggered by portfolio management teams’ desire to better understand risks identified in the reports. Additionally, following the monthly risk briefings PRMA conducts for the Office of the CIO, each portfolio management team receives an e-mail summarizing the significant risks in their strategies that were communicated to senior management.

While it is certainly part of PRMA’s mandate to keep the Office of the CIO informed of all risks that could lead to extreme performance, they endeavor to do so in a very open and objective manner. The result is that portfolio management teams view the team more as a resource than as the “risk cops” looking over their shoulder. Accordingly, portfolio management teams frequently engage the team to better understand how they are positioned relative to their benchmarks and peers, to investigate performance anomalies, to evaluate elements of their investment process, and to refine the tools supporting their decision-making.

Q: You mentioned attractive risk adjusted performance, how do you measure that?

There are many ways to look at risk-adjusted numbers, but one of the best and most prominent is a statistic known as the information ratio. An information ratio (or IR) takes the alpha or excess return a product has delivered versus a benchmark and divides that number by the historical tracking error or risk versus that same benchmark. It tells us how much extra return a product has delivered for each extra unit of risk that product has taken. IRs can be calculated over many different historical time frames. A value at or above 1 is considered exceptional. It essentially means that the manager was rewarded with extra return (i.e. alpha) for every unit of risk taken in the portfolio. We encourage our managers to target information ratios around 0.50 over longer time periods like three or five years. Knowing and understanding risk analytics at the portfolio level are crucial to obtaining competitive IRs. A portfolio cannot generate alpha without taking some level of risk. Our portfolio risk management processes are geared to help us optimize risk levels across our strategies, not reduce or minimize risk. Adding smart risks into a portfolio that are primarily driven by well researched security selection decisions is one of the best ways to deliver alpha and strong risk-adjusted returns.

Q: What specific risks are monitored?

The focus of our portfolio risk management process is the quantification and evaluation of benchmark-relative and peer-relative market risk. Equity and fixed income versions of two primary portfolio risk reports are generated daily:

- Equity and fixed income risk analytics reports that forecast and decompose benchmark-relative tracking error attempt to quantify the level and sources of a strategy’s benchmark-relative risk.
- The Equity and Fixed Income Risk Checklists evaluate a strategy’s key risk exposures relative to a set of objective target ranges derived from peer group norms. They seek to identify specific risks that could lead to extreme peer-relative performance and to quantify the severity of each risk’s potential impact.

An additional primary equity-specific risk report is generated monthly:

- The Equity Portfolio Consistency Checklist evaluates a strategy’s key risk exposures relative to its own trailing 5-year history. It seeks to identify potential style or process drift.

Specific equity risk exposures monitored include: country, currency, sector, style and security-specific. Specific fixed income risk exposures monitored include: duration, country, currency, yield curve positioning, credit, sector, and issuer.

Where feasible, liquidity risk and its impact on capacity are monitored closely.

Finally, counterparty credit risk is monitored and managed via the approval and on-going assessment of all trading counterparties, the measurement and evaluation of counterparty risk exposures within client portfolios, and the communication of significant risk exposures to the Office of the CIO. The focus of this effort is to manage pre-settlement exposure to a target range commensurate with each counterparty’s financial profile, regulatory track record, reputation, and area(s) of expertise. As you might expect, counterparty credit risk associated with over-the-counter derivatives is given particular scrutiny.

Q: How frequently does the Office of the CIO interact with portfolio managers and the PRMA team? Describe the extent of the interaction.

The Office of the CIO interacts with PRMA on a continuous basis. Analysts on PRMA send the Office of the CIO daily equity and weekly fixed income risk briefing e-mails to keep them apprised of near-term shifts in risk exposures and to explain short-term performance anomalies. Any significant and potentially impactful change in a strategy’s risk profile triggers an immediate conversation between the Office of the CIO and PRMA. Additionally, PRMA is regularly conducting research into ad hoc requests from the Office of the CIO.

More formally, PRMA conducts a “risk briefing” for the Office of the CIO monthly. To prepare for each risk briefing, PRMA reviews all of its risk monitoring instruments and assembles an issues list that
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identifies every strategy’s significant risk exposures, particularly those deemed capable of producing extreme performance.

The Office of the CIO also conducts quarterly reviews with each portfolio management team supported by materials prepared by PRMA. The reviews include discussions of both trailing performance and current risk positioning. The goal of the quarterly reviews is to maintain an ongoing, well-informed dialogue regarding the adequacy of returns to historical risks and the appropriateness of current risks. Follow-up actions are discussed and formulated, potentially including specific steps to modify particular risk exposures.

Q: Can you share examples of how PRMA has added value to portfolio management teams?

Several examples come to mind, but I’ll focus on just three. A few years back, one of our equity portfolio management teams considered their sell discipline key to their ability to generate alpha, but they needed help to confirm this intuition and quantify its impact. PRMA stepped in and developed a report that followed the benchmark-relative performance of stocks after they were sold and performed a statistical analysis of the results. Doing so confirmed the team’s intuition that their sell discipline was critical to their ability to generate alpha and provided a detailed means of quantifying and tracking the evolution of this skill over time.

The second example involves a process that PRMA developed in response to a request from the Office of the CIO. PRMA implemented a “deep dive” review—a framework for evaluating the effectiveness of a portfolio management team’s investment process and identifying opportunities for improvement. The deep dives pay particular attention to identifying a portfolio management team’s strengths and weaknesses. Often the suggested improvements encourage the portfolio management team to play to its strengths while addressing its weaknesses. To date, the deep dives have resulted in refinements to a number of teams’ investment processes.

More recently, PRMA implemented an enhanced suite of money market fund stress tests in response to revised SEC Rule 2a-7 guidelines. PRMA pursued an innovative design to provide better information about the funds’ resiliency in the face of significant interest rate, spread, credit rating, and investor redemption shocks. Instead of simply testing each fund’s ability to withstand a set of historical or pre-defined stresses, the team turned the problem on its head by identifying the levels of stresses that a fund would not withstand. The stress tests also use informed assumptions about how assets would be sold to meet investor redemptions and how much loss may be incurred from those asset sales in a distressed, potentially illiquid market environment. These reports are used to both monitor and manage investment risk and to further inform the portfolio management process.

Q: Given the heightened awareness of the full complement of investment risks portfolio managers face after the financial crisis of 2008, how has Wells-Cap’s portfolio risk management process evolved to better help portfolio managers cope?

The core methodology of our portfolio risk management process—quantifying, decomposing, evaluating, and communicating benchmark- and peer-relative risk and return—served us well through the crisis, and has not changed. Several refinements and new tools, though, have served to make the process even more robust.

First, the Portfolio Risk Management and Analytics team has been expanded and reorganized to provide greater specialization and focus. Specifically, we expanded from two functions, equity and fixed income risk management, to four by adding dedicated portfolio analytics and counterparty risk management functions. The Portfolio Analytics team manages the collection, analysis, and reporting of data not derived from risk models to ensure the consistent communication of characteristic data to third parties. Portfolio Analytics is also responsible for risk management tasks that cross equity and fixed income boundaries, such as aggregate exposure reporting and monitoring alternative risk factors associated with environmental, social, or corporate governance (ESG) exposures. While PRMA had established a sophisticated counterparty risk management process well ahead of the financial crisis, we refined our counterparty risk management processes and procedures over the last several years after establishing a dedicated team to provide even greater focus on this increasingly important task. The Counterparty Risk Management team continues to work closely with the deep and broad credit research resources within Wells Fargo Asset Management and across the greater Wells Fargo organization. Additionally, the Counterparty Risk Management team is tasked with the independent approval, annual review, and ongoing monitoring of all counterparties with whom we transact and with the measurement and evaluation of risk exposures vs. associated exposure thresholds.

Second, given heightened regulatory focus on risk management processes, PRMA has developed tracking logs to help document interactions between the Office of the CIO, portfolio managers, and PRMA. One added benefit of these new logs is that the team can now sort and analyze the interactions with teams to identify patterns.

Third, our Fixed Income Risk Management team is currently investing significant resources to completely overhaul the proprietary software infrastructure supporting fixed income risk analysis and reporting. Follow-on projects will include re-writes of our primary fixed income risk reports: the Fixed Income Risk Summary and the Fixed Income Risk Checklist. The new reports will be more sophisticated and more approachable. Additionally, the new infrastructure should support the rapid development of more flexible tools and additional time series analyses.
Q: In your last answer, you mentioned alternative risk factors associated with environmental, social, and corporate governance exposures. Can you expand upon that?

Environmental, social and corporate governance risk factors commonly referred to as ESG risk factors or ESG exposures, have started receiving a significant amount of industry attention. Understanding a company’s exposures to these factors helps us, as investment managers, better understand risks that the company might face that are not typically measured via an income statement or a balance sheet. For instance, a company with significant operations in California that does a poor job managing their water usage could face increased regulations and costs during a drought; or a company with weak governance controls could find itself a victim of fraud or the subject of a lawsuit because of the actions of a few bad players within that organization. Having access to research that looks at these ESG risk factors can alert us to these problems before they become significant issues that will impact the income statement. The research also allows us to offer clients an extra level of customization, towards more socially responsible investments, if they desire it.

WellsCap has enlisted a leading industry provider of ESG research to help us analyze these alternative risk factors in our portfolios. We combine the research that we receive from this vendor with our portfolio holdings to generate reports that both flag unusual exposures and summarize benchmark-relative differences. We encourage our portfolio management teams to factor this information into their investment decision making processes.

Q: Any last thoughts?

In summary, WellsCap is continuing its long history of valuing and investing in a robust portfolio risk management process that serves as the “glue” that binds our independent, autonomous portfolio management teams to a singular commitment to deliver the consistent risk-adjusted alpha our clients expect.
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Kirk Hartman
President and Chief Investment Officer
As president and chief investment officer of Wells Capital Management, Kirk Hartman oversees all business groups at Wells Capital Management. This oversight includes the management of overall investment risk and investment professionals. Prior to assuming his dual role in 2012, Kirk served solely as the chief investment officer of Wells Capital Management since 2002. A veteran of the investment industry, Kirk began his career in 1981. Before joining Wells Capital Management, he was managing director of fixed income at Banc of America Capital Management, LLC, where he was responsible for $150 billion in assets under management. Kirk was also formerly the chief investment officer of the Private Bank at Bank of America. Earlier in his career, Kirk served as a managing director and co-chief operating officer at Lehman Brothers Global Asset Management. Prior to that, he was president of E. F. Hutton Risk Management Inc. Kirk earned a bachelor’s degree from Amherst College and a master’s degree from the University of Chicago. He also earned a master’s degree in business administration from the Kellogg School of Management at Northwestern University.

F. Jon Baranko
Chief Equity Officer
Jon Baranko is the chief equity officer at Wells Capital Management. In this capacity, he oversees all equity related business activity for the firm. This oversight includes the management of our equity investment professionals, risk management and equity business related issues. Jon has served in his current capacity since December, 2006. Prior to this, Jon was managing director and national sales manager for institutional separate accounts at WellsCap. He joined WellsCap from Strong Capital Management in 2004, where he was managing director of Strong’s institutional business group. Earlier, he served as the director of Strong’s equity trading team for five years. Jon joined Strong in 1992, starting his investment industry career as a trader for the firm’s growth equity products. During his tenure in the investment department, Jon served on various advisory committees of the New York Stock Exchange and the NASDAQ stock market. He began his career at the Chicago Stock Exchange in 1989. Jon earned a bachelor’s degree in economics from Colorado College and a master’s degree in business administration with an emphasis in finance from Marquette University. He currently serves on a number of nonprofit boards within the Milwaukee area.

David Germany, Ph.D.
Director of Fixed Income Strategy
David Germany serves as the director of fixed income strategy at Wells Capital Management. David joined WellsCap Management from Evergreen Investments, where he was chief investment officer since 2008. Prior to this, David spent more than 21 years with Morgan Stanley Investment Management and predecessor organizations, most recently serving as global head and chief investment officer for the firm’s fixed income business. Prior to joining Morgan Stanley, David served as the senior staff economist for international finance at the President’s Council of Economic Advisers, as an economist at the Board of Governors of the Federal Reserve System and as an assistant professor of economics at Princeton University. He earned a bachelor’s degree in economics from Princeton and a doctoral degree in economics from the Massachusetts Institute of Technology.

Andy Hunt, FIA, CFA
Head of LDI and Global Credit
Andy Hunt serves as the head of liability-driven investing and global credit at Wells Capital Management. In this capacity, he focuses on building out the firm’s LDI solutions, creating a cohesive global credit platform, and overseeing the portfolio management teams that have strong credit-based strategies. Andy joined WellsCap in 2014 from Blackrock where he served as the head of North American solutions for corporate pensions plans, including U.S. liability-driven investment capabilities, since 2005. Earlier, he was a partner at Watson Wyatt (now Towers Watson) in the United Kingdom since 1992 in various roles as an actuary, senior investment consultant, and head of investment consulting for defined contribution. Andy earned his degree in mathematics from Cambridge University. He has earned the right to use the CFA as well as FIA designations.
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John P. Hockers, CFA, PRM
Co-Head of Portfolio Risk Management and Analytics
John Hockers co-directs the portfolio risk management and analytics efforts at Wells Capital Management. Prior to this role, he was the director for equity risk management. John entered the investment industry in 2000 and joined Wells Capital Management in 2005 from Strong Capital Management, where he held the position of senior investment risk analyst. Before this, John was a senior business analyst at Strong working with the firm’s equity and fixed income trading systems. He has also worked as an information technology consultant before starting his investment industry career. John earned a bachelor’s degree in physics and nuclear engineering from the University of Wisconsin-Madison and a master’s degree in business administration with an emphasis in finance from Marquette University. He is a member of the CFA Society of Milwaukee, Inc., the CFA Institute, the Global Association of Risk Professionals and the Professional Risk Managers’ International Association. John has earned the right to use the CFA and PRM designations.

Randy G. Mangelsen, CFA, CQF, FRM, PRM
Co-Head of Portfolio Risk Management and Analytics
Randy Mangelsen co-directs the portfolio risk management and analytics efforts at Wells Capital Management. Prior to this role, he was the director for fixed income risk management. He joined Wells Capital Management in 2005 from Strong Capital Management, where he held the position of investment risk analyst. Prior to his role in Investment Risk Management, Randy was a business analyst in investment accounting at Strong, where he began his investment industry career as a systems administrator in 2000. Randy earned a bachelor’s degree in math and economics from Lawrence University. Randy is a member of the CFA Society of Milwaukee, Inc., the CFA Institute, the Global Association of Risk Professionals and the Professional Risk Managers’ International Association. Randy has earned the right to use the CFA, FRM, and PRM designations and has earned the Certificate in Quantitative Finance.