RISK GOVERNANCE: A BENCHMARKING SURVEY

2011



ABOUT CMRA

Capital Market Risk Advisors (www.cmra.com) is the pre-eminent financial advisory firm providing risk management advisory and litigation support services to investment and commercial banks, insurance companies, institutional investors, mutual funds, hedge funds, asset managers, and other market participants. Founded in 1991, we offer clients a unique perspective based on founder Leslie Rahl, partner Peter Niculescu, and managing director Dave Tyson's collective 100+ years of hands-on experience in risk management, trading, portfolio management, and knowledge of industry best practice.

Our advisory services include assessing risk exposures and advising on risk management, risk appetite, and strategy, the valuation of complex or illiquid instruments, and benchmarking risk management and risk governance practices against best practice. We also advise senior managers and Boards with respect to all types of risk management and risk governance issues, developing risk appetite statements, advising on risk reporting and communication, and reviewing and drafting risk management and compliance policies and procedures.

As pioneers in the derivatives and mortgage businesses and seasoned veterans with front-line as well as Board, governance and regulatory experience, we at CMRA have played a leadership role in establishing best practices in financial services. Our ability to understand the quantitative details while simultaneously understanding Directors' needs uniquely qualifies us to "translate" and "demystify" complex issues for Boards.

The synergy between our advisory and financial forensic/litigation practices helps us provide clients with unique insight about what can and does go wrong in managing risk and informs our perspective in an unparalleled way. Additionally, our work with both the buy- and sell-sides of firms on six continents provides us with an unmatched point of view in solving seemingly intractable problems.



LESLIE RAHL

Leslie Rahl founded CMRA 20 years ago. She is a derivatives pioneer and was Co-Head of Citibank's Derivatives Group in the 80's and on the Board of ISDA for 5 years. She is an experienced Board and Risk Committee Member. She is the author of Hedge Fund Risk Transparency: Unraveling the Complex and Controversial Debate and the editor of Risk Budgeting: A New Approach to Investing. She has an SB from MIT and an SM/MBA from the Sloan School at MIT.



PETER NICULESCU

Mr. Niculescu is a Partner at CMRA and heads Fixed Income Advisory. Peter was an Executive Vice President at Fannie Mae, where he ran the Capital Markets division, responsible for acquisition of securities and loans on balance sheet and for their hedging and funding. During the 1990's, Peter was a Managing Director at Goldman Sachs, where he was responsible for Mortgage and Fixed Income Research. He has a Ph.D from Yale in Economics and is a Chartered Financial Analyst charter-holder.



DAVID TYSON

Mr. Tyson is a Managing Director at CMRA. Prior to joining CMRA, David was the Chief Investment Officer of Citigroup's proprietary insurance companies and head of Travelers' registered investment advisor. His areas of expertise include detailed experience in all fixed income asset classes, derivatives, alternative investments, and equities. David Tyson has a Ph.D in Economics from the Stern School of Business of New York University.

RISK GOVERNANCE SURVEY

EXECUTIVE SUMMARY

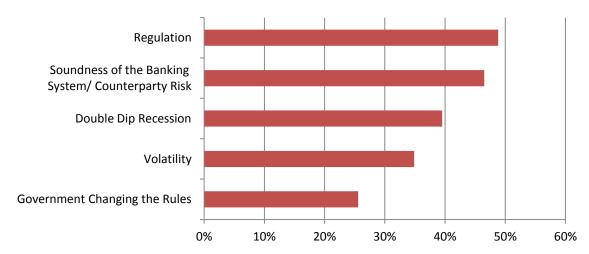
In the wake of the financial crisis, risk governance has emerged as a key topic. What role should a Board play in risk oversight? Should it have a risk committee? Who should the Chief Risk Officer report to? How should compensation be properly risk adjusted? These and other questions are increasingly being debated in boardrooms around the world, as well as by politicians and regulators.

In the midst of this debate, it is important to understand the approach financial institutions are currently taking to Risk Governance and the plans they have for the future. The attached survey represents our third annual survey and is what we believe is the most comprehensive Risk Governance benchmarking exercise to date. It reflects input from financial institutions, including commercial and investment banks, insurance companies, asset managers, plan sponsors, sovereign wealth funds, endowments, and hedge funds with respect to their current risk practices, including the degree to which their Boards are involved in risk governance, whether they have Chief Risk Officers in place, to whom CROs report, what their key functions are, fears and concerns, how and how often they interact with the Board, risk adjusted compensation, and other important information regarding their risk management functions.

At no time in history has there been a greater need for companies to evaluate and strengthen risk governance. We are proud to have led this initiative and pleased to share the results.

TOP CONCERNS FOR NEXT 12 MONTHS

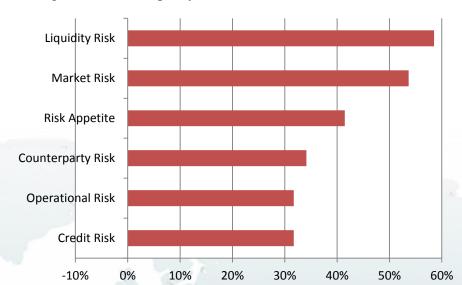
• Regulation, soundness of the banking system and a double dip recession were the biggest concerns of the respondents:



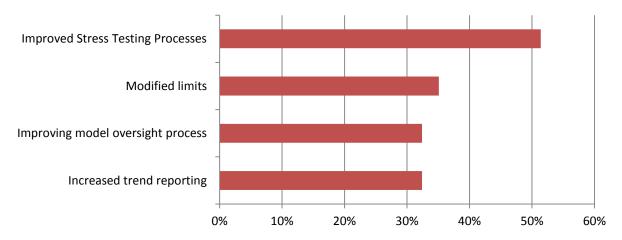
• Credit losses have declined from being 3rd at 21% in 2009, tied for second at 19% in 2010, and now less than 16% and not in the top 5 in 2011

RISK FOCUS

• Greatest focus in risk management over the past year:



• Key changes in risk governance in the past year:



INTERGRATION OF RISK AND STRATEGY

- While some progress is being made in tying risk and strategy, there is no consistent practice as to risk
 metrics that are used in business and strategic plans.
 - Metrics that are used in business level plans include:
 - VaR
 - Economic Capital
 - Funding Required
 - Return on economic capital
 - Volatility of earnings
 - Some respondents budget these metrics as part of the planning process, others just report past usage
- No firms indicated that they asked business units to identify what aspect of the firm's risk appetite statement was the most constraining as part of their budgeting and/or strategic planning process

CRO

Across all sectors, the role of the Chief risk Officer increasingly includes a strategic as well as control role.

- 91% of CROs have both strategic and a control role, up from 66% last year, and 47% from 2009
- 68% CROs report directly to the CEO, among which 15% also report to the board. 23% of CROs report to the CFO, CAO or COO and 10% to others

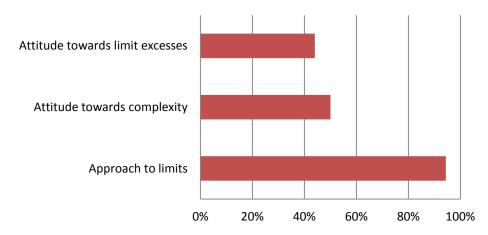
In the past year, only 63% of respondents had executive/in camera sessions with their board compared to 84% in the 2010 survey and 44% in the 2009 survey. This could be due to the fact that an increasing familiarity of the risk manager with the board is leading to a decline in the use of executive/in camera session.

BOARDS

- 77% of respondents indicated that they had Board members with risk management experience and 76% indicated that it was a skill that was on their wish list when selecting new Board members
- 64% of boards have had educational sessions in the past year, up from 61% in the 2010 survey
- 19% of respondents have more Board educational sessions this year than last, 68% have had the same amount of board sessions

RISK APPETITE

- 47% of Boards get minutes of Senior Management Risk Committee meetings
- 61% of respondents include "risk attitude" in their risk appetite statements



CREDIT/COUNTERPARTY RISK

- 29% of respondents have decreased their reliance on rating agencies
- Only 43% of respondents include potential future exposure in counterparty risk assessments

STRESS TESTING

• While most respondents stress tested their exposures to market moves during the lead up to the debt ceiling deadline, only 49% stress tested their exposure to collateral haircuts

MODEL REVIEW

• Only 17% have changed their model review practices post-Axa/Rosenberg

LIQUIDITY

- Only 30% have actual plans to increase liquidity in stress periods
- Only 50% with illiquid assets such as Private Equity, Real Estate, and Resources integrated them into their risk measures
- Only 50% of respondents consider illiquidity when allocating risk, but 17% plan to

RISK ADJUSTED COMPENSATION

- Only 47% or respondents incorporate risk attitude and adherence to policies in their compensation process
- Only 36% make adjustments for actual risk usage
- Only 44% of respondents differentiate between unrealized vs. realized profits when considering compensation

INSTITUTIONAL INVESTORS

- 40% are increasing exposure to alternative assets
- None are increasing exposure to Liability Driven Investing(LDI) and only 50% currently have exposure to LDI

RISK MANAGEMENT POLICIES

• 87% of respondents have Risk Policies that are approved by the Board, up from 74% last year, and 60% in 2009.





NEW PRODUCT REVIEW PROCESS

• Only 1/3 of Boards get reports on new product risk reviews