



SOCIETY OF ACTUARIES

**ERM Symposium  
April 2009**

**B3 – The Role of the Board in Providing Effective  
ERM Oversight**

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## The Role of the Board in Providing Effective ERM Oversight

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## Role of the Board in providing ERM oversight

- An increasing number of Boards agree that risk management oversight is a key part of their role
- According to S&P, within a strong ERM program a “Board regularly receives, discusses, and understands reports on risk positions and the company's risk management programs”
- According to AM Best, within a strong ERM program a “Board and senior management receive, and constructively critique, frequent reports on risk metrics and updates on key risk-management activities across the entire organization.”
- Recent events have highlighted the need for the Board oversight of risk management to be strengthened

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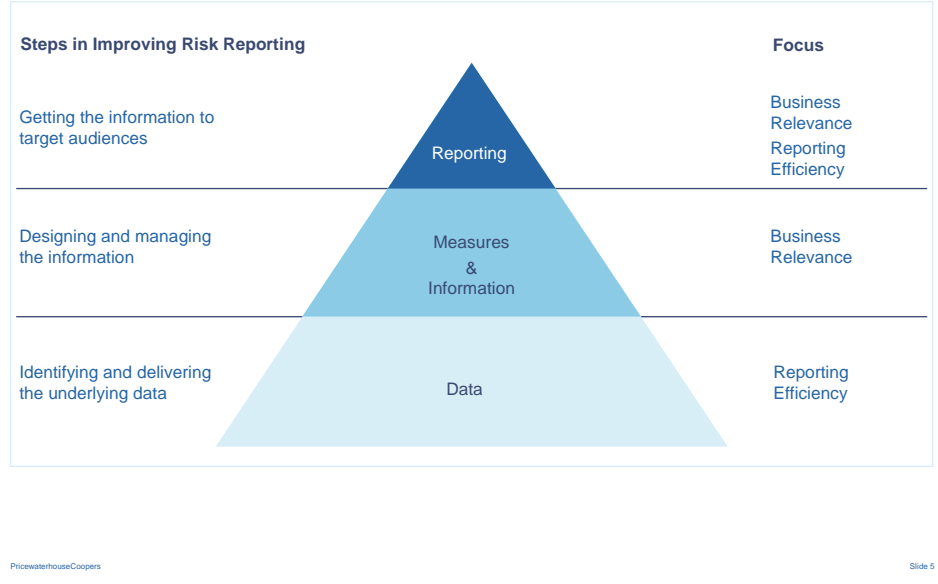
## Role of the Board in providing ERM oversight

- While some companies use their Audit Committees for this function (given their existing focus on financial reporting controls), others believe that a separate Risk Committee is required
- Several Boards have sought directors who are skilled in the area of risk management
- Improved communication with management on risk is essential, and yet is too often limited.
- Central to the effective oversight is a robust risk reporting structure.

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Risk reporting to senior management and the Board requires careful consideration of report designs, underlying data and production/delivery methods



## Recent market events have highlighted the importance of adequate risk reporting to the Board

- Solid discussion of risk matters between the Board Risk Committee, Management, and the independent risk overview function
- Transparency of risk profiles, emerging trends, key exposures, and mitigation
- The Board Risk Committee and management have a common understanding of risk culture and risk management framework



- Reinforce dual reporting channels for risk**
- Primary responsibility for reporting risks lies with the business
  - CRO provides independent perspective and validation
- Provide the Board Risk Committee with periodic reporting packages of risk information that is**
- Timely, concise and accurate
  - Comprehensive
  - Easy to understand
  - Clear in terms of key messages
  - Focused on the information contained in the data
- Annually assess and report**
- Risk culture as assessed through analytical methods such as employee surveys
  - Response to limit breaches
  - Overall effectiveness of risk management practices across the company and for each business
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## Current issues with risk reporting

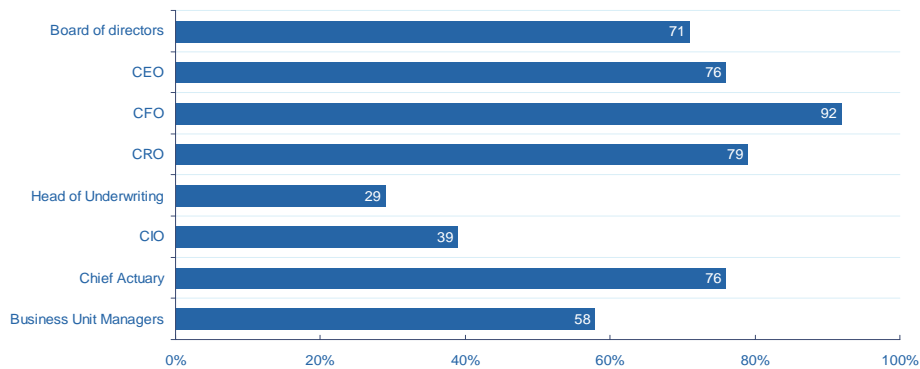
### Issues with Risk Reporting

#### Questions that Investors and Boards are asking

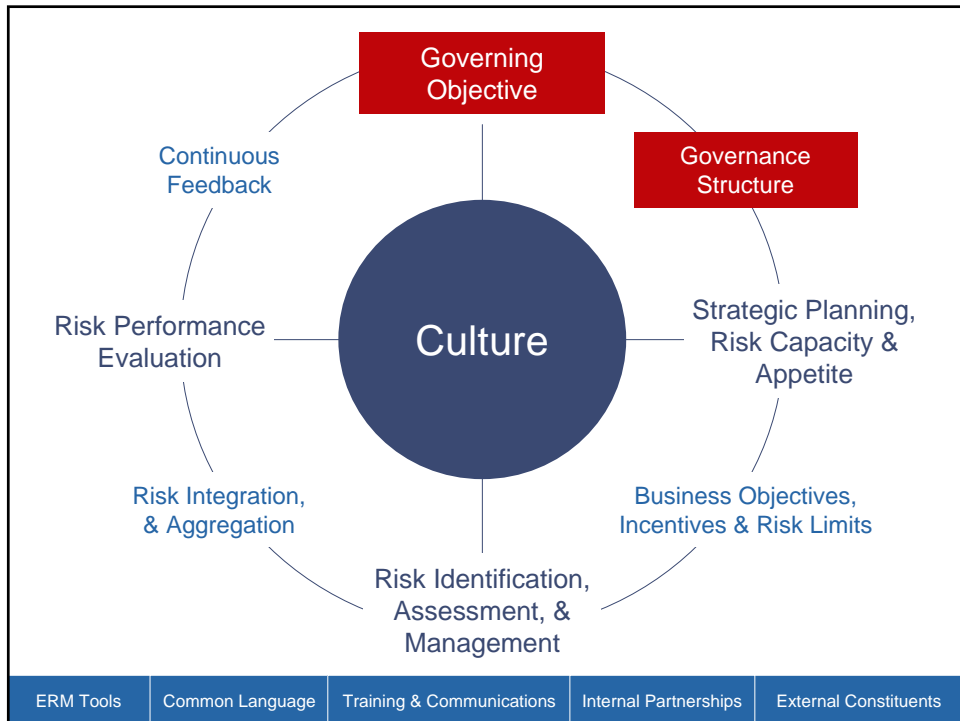
- Are risk measures appropriately detailed in reports to management and the Board?
- Are these measures clear and comprehensive?
- Are the key risk issues clearly identified for the Board?
- Are emerging risks identified and discussed?
- Are the limits imposed by management and the Board reasonable and actionable?
- Are risk models validated, documented, implemented and maintained with proper independent controls?
- Does model transparency obscure the underlying key risks and sensitivity of results?
- Are risk measurement assumptions communicated and consistent across business units valuing the same assets?
- Was stress testing properly applied to understand worst case loss outcomes?
- Are the results of stress tests, along with the key assumptions, provided to the Board?
- Are the limitations of risk and economic capital models understood?

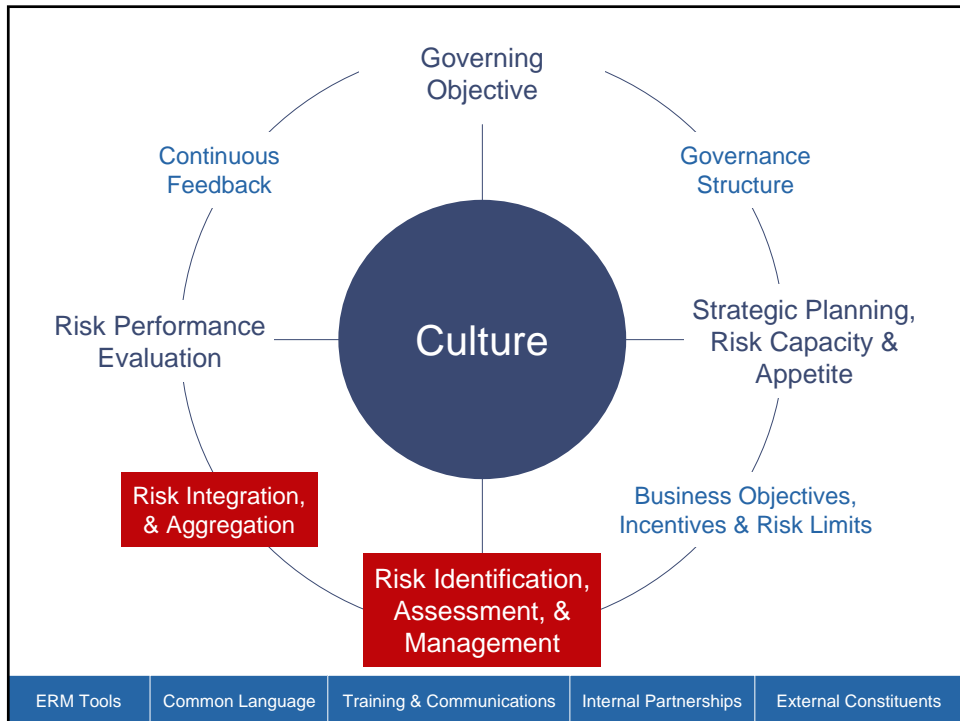
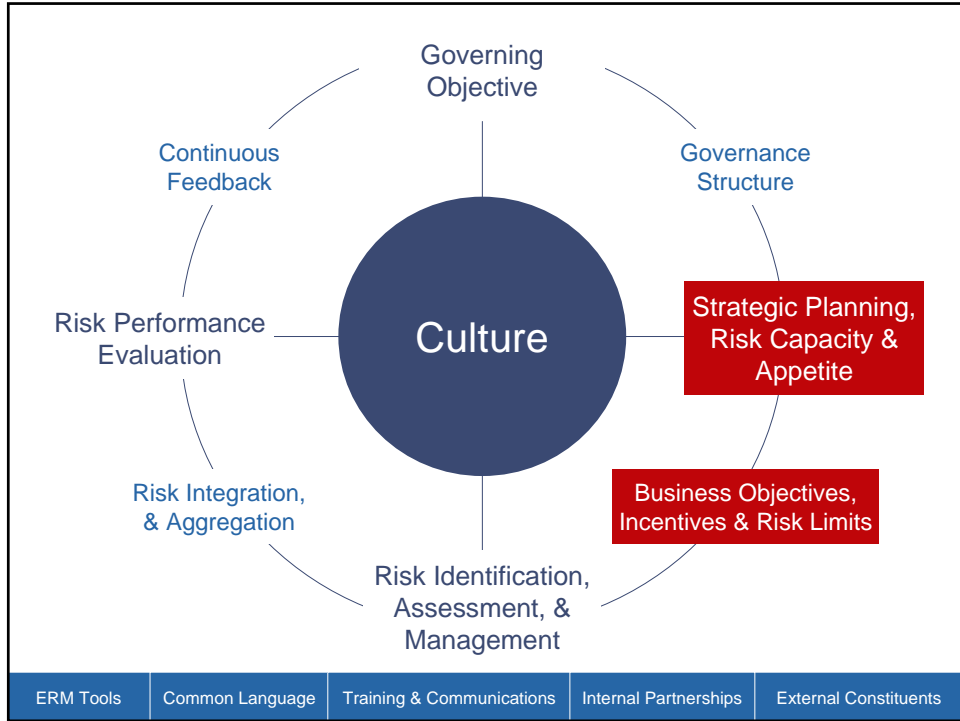
## An example of today's challenge: reliance on economic capital models

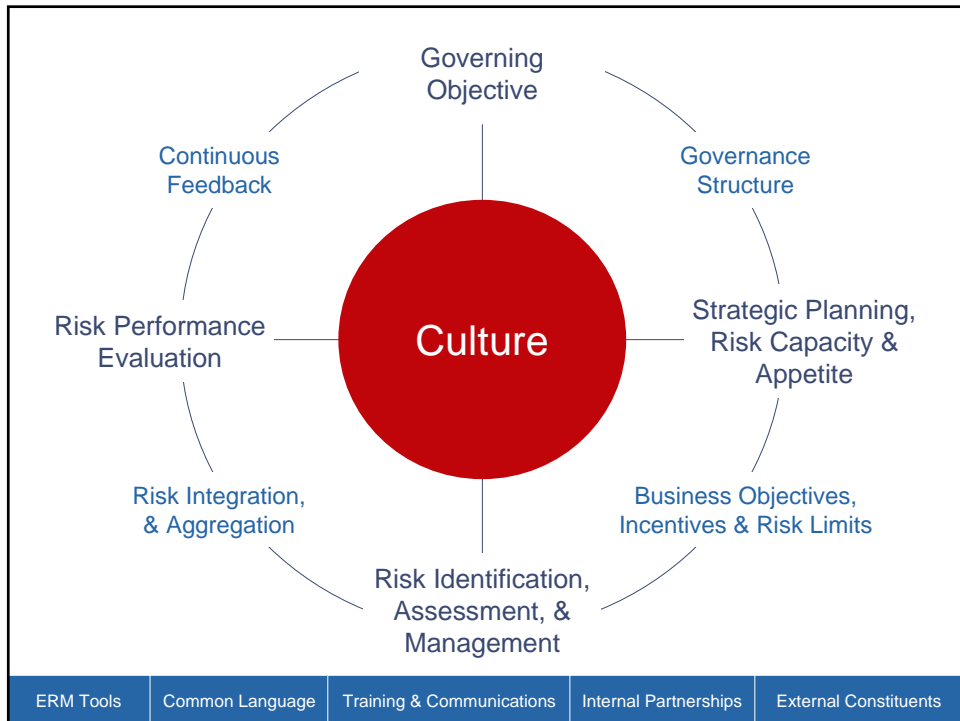
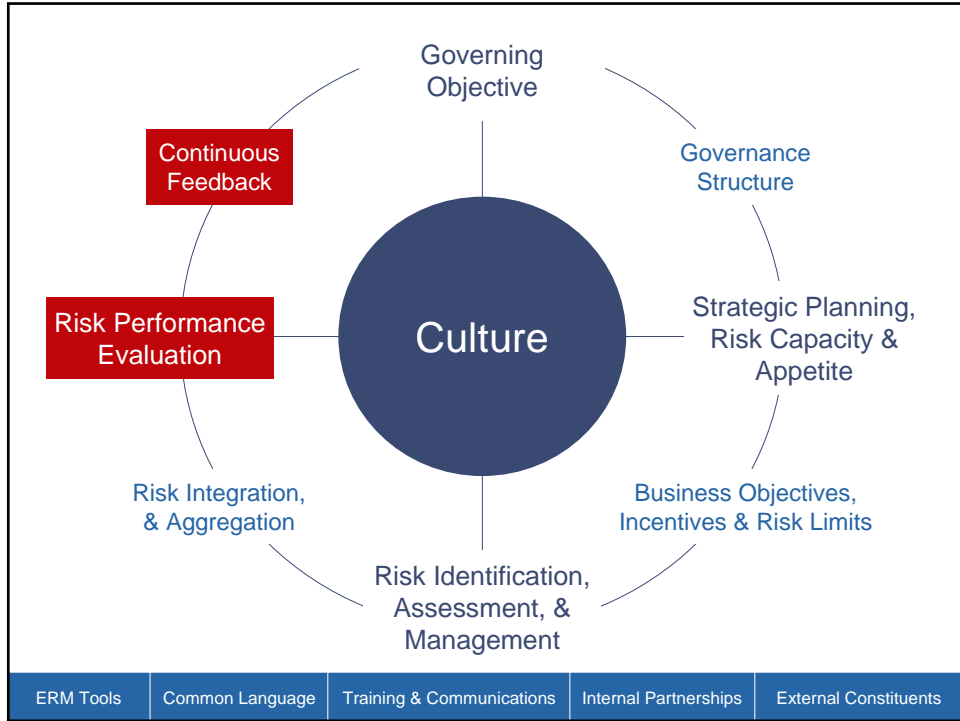
A high proportion of respondents to PwC's Insurance ERM survey indicated that their Board, CEO, CFO, CRO and Chief Actuary are the key users of the results of economic capital models. However, 30% of respondents indicated their Boards cannot clearly articulate the purpose or use of these models.



Source: PricewaterhouseCoopers Global ERM Survey







## Governing Objective & Risk Governance Structure

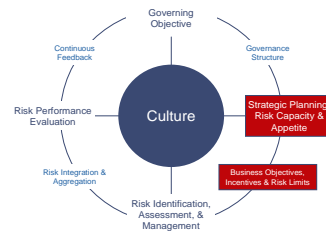
- Establishing the Governing Objective
  - Full Board responsibility to establish
  - Must encompass risk and be value-based
- Clarifying Role of Board and Board Committees
  - Clear separation (and coordination) of duties (e.g., Audit vs. Risk vs. Compensation Committees)
- Clarifying Role of CRO, ERM, and Risk Partners
  - Clear separation (and coordination) of duties (e.g., ERM vs. Audits vs. Compliance vs. Privacy)
  - ERM goal is optimal capital allocation
  - ERM must be independent and influential



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## Strategic Planning, Risk Capacity & Appetite, Objectives & Incentives

- Risk & Strategy go hand-in-hand
  - Full Board responsibility
- Understand your Risk Capacity and explicitly state Risk Appetite
  - If management cannot describe it there's a problem
- Incentives must:
  - be aligned with governing objective
  - drive collaboration and cooperation
  - be long-term focused
- Compensation committee has significant influence



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## Risk Identification, Assessment, Integration and Aggregation



- Scenarios are the bridge between academic and pragmatic
- Boards should focus on the big picture and longer-term
  - Systemic and Emerging Risks
    - Tell me something I don't know
  - Top list - prioritization
- Assumptions and caveats need to be clear – know the model's limitations
- All models are wrong, some models are useful

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## Risk Performance Evaluation, Reporting, and Feedback



- Risk metrics must be measurable, current, clear, and sustainable
- Linked to governing objective
- Common language
- Education is essential
  - Engage in dialogue vs. “Death by PowerPoint”
  - Board advisor may be necessary
- Making the complex simple (not the simple complex)
  - “Everything should be made as simple as possible, but no simpler.”

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## Bull's-eye: It's All About the Culture



- In many ways, it is the only thing that matters
- Shadow of the Leader
- Consensus Leadership is an oxymoron
- Encourages constructive debate (can't be a "good news" culture)
- Ownership
- Team-orientation vs. Individual Stars
- Risk is part of everyone's job
- Boards must go on-site, bring key people into boardroom and evaluate culture

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## Enhanced Board risk reporting packages

- As discussed, the risk reporting metrics and information to the Board must be measurable, understandable and timely.
- Board reporting should have transparency of risk profiles, cover emerging trends, key exposures and risk mitigation
- Board reports should solicit dialogue around the key issues and exposures

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## Improved Board reporting - quarterly reporting package

### Desired Outcomes

- Solid discussion of risk matters between the Board Risk Committee, Management, and the independent risk overview function
- Transparency of risk profiles, emerging trends, key exposures, and mitigation

### Examples of Potential Action Items

- Reinforce dual reporting channels for risk
  - Primary responsibility for reporting risks lies with the business
  - CRO provides independent perspective and validation
- Provide the Board Risk Committee with periodic reporting packages of risk information that is:
  - Timely, concise and accurate
  - Comprehensive
  - Easy to understand
  - Clear in terms of key messages
  - Focused on the information contained in the data
- Distribute materials to the Board Risk Committee sufficiently in advance

## Quarterly Board reporting package – illustrative content

Potential Contents	Illustrative Description
<b>Overall risk profile of the Firm</b>	<ul style="list-style-type: none"> <li>▪ One to two text pages with key messages (exposures, drivers, and considerations)                             <ul style="list-style-type: none"> <li>- By risk category (market risk, credit risk, insurance risk, liquidity, and operational risk (including legal / regulatory / compliance risks))</li> <li>- By division and by business unit</li> </ul> </li> </ul>
<b>Business environment</b>	<ul style="list-style-type: none"> <li>▪ Two to three text pages, with supporting charts                             <ul style="list-style-type: none"> <li>- Review of market conditions since last report, and outlook</li> <li>- Key trends and external events affecting the Firm's risk profile</li> </ul> </li> </ul>
<b>Risk and performance by business</b>	<ul style="list-style-type: none"> <li>▪ One commented tabular page, with supporting charts                             <ul style="list-style-type: none"> <li>- Economic capital, sources of diversification benefit, and allocated capital by division and by business unit</li> <li>- Change in economic capital from prior period</li> <li>- Revenues with attribution</li> <li>- Risk adjusted performance metrics</li> </ul> </li> </ul>
<b>Market risk</b>	<ul style="list-style-type: none"> <li>▪ Two to four tabular / chart pages with comments                             <ul style="list-style-type: none"> <li>- Summary of key risks and actions</li> <li>- VaR, sensitivities, scenario values, and stress test results, by business</li> <li>- Current VaR / scenario limits, trend, and limit utilization, by business</li> <li>- Largest VaR, sensitivity and scenario limit exceptions and resolution</li> <li>- Negative convexity measures, basis risk, and notional exposures, by business</li> <li>- Market risk concentration analysis by sector and region, by name within each business</li> </ul> </li> </ul>

## Quarterly Board reporting package – illustrative content (cont'd)

Potential Contents	Illustrative Description
<b>Credit risk</b>	<ul style="list-style-type: none"> <li>▪ One to two tabular / chart pages with comments               <ul style="list-style-type: none"> <li>– Summary of key risks and actions</li> <li>– Total exposure by type (counterparty, leveraged lending, relationship lending, prime brokerage, margin lending, etc.)</li> <li>– Total exposure by sector and region</li> <li>– Credit risk concentration analysis, largest single name exposures, and limit breaches within each business</li> <li>– Concentration by rating and migration analysis</li> <li>– Credit stress testing results</li> </ul> </li> </ul>
<b>Insurance risk</b>	<ul style="list-style-type: none"> <li>▪ One to two tabular / chart pages with comments               <ul style="list-style-type: none"> <li>– Summary of key risks and actions</li> <li>– Total exposure by type (catastrophe PMLs, reserve volatility, insured limits, ALM, pricing, longevity, etc.), sector and region</li> <li>– Insurance risk concentration analysis, largest single exposures, and limit breaches within each business</li> <li>– VaR, TVaR, sensitivities, scenario values, and stress test results, by business</li> <li>– Analysis of tail events</li> </ul> </li> </ul>
<b>Operational risk</b>	<ul style="list-style-type: none"> <li>▪ One to two tabular / chart pages with comments               <ul style="list-style-type: none"> <li>– Overview of key operational risks firmwide, and action plans</li> <li>– Operational risk profile by business based on incidents, risk assessments, risk indicators, audit scores, etc.</li> <li>– Sum of internal risk events by business and type, latest period and trends</li> <li>– Largest internal risk events by business</li> <li>– Largest risk events that have occurred in the industry in the latest period</li> </ul> </li> </ul>
<b>Liquidity risk</b>	<ul style="list-style-type: none"> <li>▪ One to two tabular / chart pages with comments               <ul style="list-style-type: none"> <li>– Liquidity scorecard by business</li> <li>– Exposures to Level 3 assets, and complex / structured investment vehicles</li> </ul> </li> </ul>
<b>Special topics</b>	<ul style="list-style-type: none"> <li>▪ Contents as appropriate; could include               <ul style="list-style-type: none"> <li>– Briefings on specific topics</li> <li>– Reviews of business lines</li> <li>– Outside perspectives (rating agencies, analyst reports, etc.)</li> </ul> </li> </ul>

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## Improved Board reporting – annual risk assessment

### Desired Outcomes

- The Board Risk Committee and management have a common understanding:
  - The risk culture of the Firm
  - The Firm's end-to-end risk management framework
- The Board Risk Committee receives an independent view on the overall effectiveness of risk management

### Examples of Potential Action Items

- Produce an annual overview of:
  - The Firm's risk culture and philosophy as stated by management
  - The design of the end-to-end risk management framework of the Firm (including governance & organization, measures & analytics, and reporting & infrastructure)
- Annually assess:
  - The Firm's risk culture as assessed through analytical methods such as employee surveys
  - The Firm's reaction to limit breaches
  - The overall effectiveness of risk management practices across the Firm and for each business, in light of industry practices
- Report findings to the Board Risk Committee

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## Annual risk management practices assessment – illustrative content

Potential Contents	Illustrative Description
Overview	<ul style="list-style-type: none"> <li>▪ Four to six to pages               <ul style="list-style-type: none"> <li>– Summary assessment of risk management effectiveness</li> <li>– Improvement opportunities and action plans</li> </ul> </li> </ul>
Risk objectives and philosophy	<ul style="list-style-type: none"> <li>▪ Two to four pages               <ul style="list-style-type: none"> <li>– Definition of the categories of risks to which the Firm is exposed, including examples</li> <li>– Risk management objectives and philosophy of the firm</li> </ul> </li> </ul>
Risk governance and organization structure	<ul style="list-style-type: none"> <li>▪ Four to six pages               <ul style="list-style-type: none"> <li>– High level roles and responsibilities of the business, control / support functions, Internal Audit, and the Board</li> <li>– Short description of key risk management policies</li> <li>– Risk-related organization charts</li> <li>– Perceived gaps and improvement opportunities</li> </ul> </li> </ul>
Key risk management processes	<ul style="list-style-type: none"> <li>▪ Six to eight pages               <ul style="list-style-type: none"> <li>– Description of key aspects of the end-to-end risk management process                   <ul style="list-style-type: none"> <li>– Strategic planning</li> <li>– Risk identification and representation</li> <li>– Risk measurement and reporting</li> <li>– Risk communication and escalation</li> </ul> </li> <li>– Perceived gaps and improvement opportunities</li> </ul> </li> </ul>

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## Annual risk management practices assessment – illustrative content (cont'd)

Potential Contents	Illustrative Description
Risk culture	<ul style="list-style-type: none"> <li>▪ Two to four pages               <ul style="list-style-type: none"> <li>– Description of targeted risk culture / behavioral attributes</li> <li>– Actual risk culture attributes based on objective observation and analysis</li> </ul> </li> </ul>
Measures and Analytics	<ul style="list-style-type: none"> <li>▪ Four to six pages               <ul style="list-style-type: none"> <li>– Description of key tools and metrics used by the Firm (economic capital models, cat models, daily hedging models, scenarios, sensitivities, etc.)</li> <li>– Strengths and inherent weaknesses</li> <li>– Perceived gaps and improvement opportunities</li> </ul> </li> </ul>
Reporting and infrastructure	<ul style="list-style-type: none"> <li>▪ Six to eight pages               <ul style="list-style-type: none"> <li>– Description of key reports</li> <li>– Key risk systems and initiatives</li> <li>– Perceived gaps and improvement opportunities</li> </ul> </li> </ul>
Challenges and opportunities	<ul style="list-style-type: none"> <li>▪ Four to six pages               <ul style="list-style-type: none"> <li>– Anticipated risk management challenges in the year ahead</li> <li>– Action plans to improve the Firm's risk management framework</li> </ul> </li> </ul>

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