ABOUT THIS STUDY

We have recently encountered a new wave of challenging economic, political, social, and technological issues that triggered an unimaginable range of risks that have impacted virtually all organizations. Business leaders and other key stakeholders are realizing the benefits of increased investment in how they proactively manage potentially emerging risks. This is done by strengthening their organizations’ processes surrounding the identification, assessment, management, and monitoring of those risks most likely to impact – both positively and negatively – the entity’s strategic success. They are recognizing the increasing complexities and real-time challenges of navigating emerging risks as they seek to achieve key strategic goals and objectives.

Many organizations have embraced the concept of enterprise risk management (ERM), which is designed to provide an organization’s board and senior leaders a top-down, strategic perspective of risks on the horizon so that those risks can be managed proactively to increase the likelihood the organization will achieve its core objectives. To obtain an understanding of the current state of enterprise risk oversight among entities of all types and sizes, we have partnered over the past twelve years with the American Institute of Certified Public Accountants (AICPA) Management Accounting - Business, Industry, and Government Team to survey business leaders regarding a number of characteristics related to their current enterprise-wide risk management efforts. This is the twelfth report that we have published summarizing our research in partnership with the AICPA.

Data was collected during the fall of 2020 through an online survey instrument sent to members of the AICPA’s Business and Industry group who serve in chief financial officer or equivalent senior executive positions. In total, we received 420 fully completed surveys from individuals representing different sizes and types of organizations (see Appendix A for details about respondents). This report summarizes our findings and provides a resource for benchmarking an organization’s approach to risk oversight against current practices. In addition to highlighting key findings for the full sample of 420 respondents, we also separately report many of the key findings for the following subgroups of respondents:

- 130 large organizations (those with revenues greater than $1 billion)
- 113 publicly traded companies
- 108 financial services entities
- 116 not-for-profit organizations

The following page provides an overview of the various aspects of an organization’s risk management process that we examine, which is followed by a high-level summary of key take-aways from our research. The remainder of the report provides more detailed information about other key findings and related implications for risk oversight.

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The ERM Initiative in the Poole College of Management at North Carolina State University provides thought leadership on enterprise risk management (ERM) and its integration with strategic planning and corporate governance, with a focus on helping boards of directors and senior executives gain strategic advantage by strengthening their oversight of all types of risks affecting the enterprise. Our website (www.erm.ncsu.edu) includes an ERM library that contains summaries of over 600 ERM resources. Additional ERM resources are also available at aicpa.org.
OVERVIEW OF TOPICS ADDRESSED IN THIS STUDY

Our survey asked participants to respond to over 40 questions that address a number of aspects related to their organization's risk oversight processes. The data in this report summarizes key insights related to the following components of an organization's enterprise-wide risk management processes:

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>PAGE</th>
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<tbody>
<tr>
<td>Drivers for Enhanced Risk Management</td>
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<td>Strategic Value of Risk Management</td>
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At the beginning of each of the sections, we present questions readers can consider as they review the findings summarized in that section. Those questions prompt readers to consider various aspects of their own organization's risk oversight processes as they review the benchmarking information. For each of the above topics, we subdivide the discussion into a number of subtopics. We provide "Key Insights" that highlight the primary take-aways we observe from the data.

The report concludes with a number of "Calls to Action" that include several questions that ERM leaders can use to identify opportunities for improvements in their organization's risk management processes. The Calls to Action encourage readers to consider questions related to these issues:

1. What are management’s perceptions about the organization’s current approach to risk management?
2. Is there consensus among management about the top enterprise-wide risks?
3. How is output from the enterprise’s risk management process used in strategic planning?
4. Does management have access to robust key risk indicators?
5. Is the entity sufficiently prepared to manage a significant risk event?
Here are some of the most important highlights from this year’s survey:

### DRIVERS FOR ENHANCED RISK MANAGEMENT
- Risk volumes and complexities are at their highest level in 12 years, increased by significant events tied to COVID-19, social unrest, national elections, extremely low interest rates, and a host of other risk triggers – no type of organization is immune.
- COVID-19 is changing the nature of top risks with core operations significantly impacted by real risk events during the pandemic.
- Recent events are revealing a need for real change in how organizations govern business continuity and crisis management.
- Organizations are facing pressures from a number of stakeholders to provide more risk information, and business leaders want to be better prepared when unexpected risk events emerge to avoid being surprised.
- Effective risk management is a priority among boards of directors.

### OVERALL STATE OF RISK MANAGEMENT MATURITY
- While progress has been made in implementing complete ERM processes, more than two-thirds of organizations surveyed still cannot claim they have “complete ERM in place.”
- Public companies and financial services organizations exhibit the biggest move towards ERM in 2020.
- Most types of organizations believe their risk management oversight is more robust or mature than any of the prior four years, with the exception of non-profit organizations; however, fewer than half of respondents describe their organizations’ approach to risk management as “mature” or “robust.”
- Half of the public companies surveyed do not describe their risk management processes as robust or mature. Non-profit organizations are less likely to have structured risk management processes relative to other organizations.

### IMPACT OF CULTURE ON RISK MANAGEMENT
- There are a number of impediments to advancing an organization’s risk management processes, with the belief that “risks are managed in other ways besides ERM” dominating the list.
- Some believe there are other more important priorities that compete with the need to enhance risk management.
- Most organizations do not provide training and guidance on risk management, potentially creating a lack of understanding of how proactive versus reactive risk management might help.
- Few organizations embed risk management incentives in performance compensation arrangements.
- There may be a disconnect between desired versus actual risk management capabilities given the majority of organizations describe their risk culture as “strongly risk averse” to “risk averse” despite the finding that only a minority of respondents describe their risk management processes as “mature” or “robust.”

### STRATEGIC VALUE OF RISK MANAGEMENT
- Organizations continue to struggle to integrate their risk management and strategic planning efforts.
- Except for financial services organizations, most organizations are not emphasizing the consideration of risk exposures when management evaluates different possible strategic initiatives or when making capital allocations.
- Most organizations do not formally articulate tolerances for risk taking as part of their strategic planning activities.
- There is noticeable room for improving ERM processes to help manage risks impacting reputation and brand.
- There are opportunities to reposition an entity’s risk management process to ensure risk insights generated are focused on the most important strategic issues.
## EXECUTIVE SUMMARY OF KEY INSIGHTS

### ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP

- Pinpointing an executive to lead the risk management process is becoming more common relative to a decade ago; however, just one-half of our surveyed organizations are doing so.
- Individuals serving in the CRO or equivalent role most often report directly to either the CEO or CFO.
- Organizations are rethinking the need to pinpoint someone to serve as CRO or equivalent, given an observed increase in the designation of CROs.
- The likelihood an organization has a management-level risk committee is higher than the likelihood they have appointed a CRO or equivalent.
- Most risk committees meet quarterly, with an additional 25% meeting monthly.

### RISK MONITORING PROCESSES

- There appears to be an opportunity for most organizations to improve the nature and type of key risk indicators included in their management dashboard systems. Across the full sample, only 30% report they are “mostly satisfied” or “very satisfied” with their organization’s KRIs.
- The growing use of data analytics may provide opportunities for management to strengthen their management “dashboards” to include more information that helps track potential risks on the horizon.
- Risk communications to senior management are most likely to be ad hoc as part of other management meetings.

### RISK IDENTIFICATION AND ASSESSMENT PROCESSES

- About half of organizations surveyed formally define the term “risk” and when they do, they tend to focus that definition on both the upside (opportunities) and downside (threats) dimensions of risks.
- There is substantial variation in the frequency of updating the identification of risks affecting the enterprise, with around half updating annually with an additional one-third updating semi-annually or quarterly.
- Some form of standardization, such as a template, is commonly used to engage business leaders across an organization in risk identification activities.
- There is a heavy emphasis on risks related to technology, legal/compliance, and financial issues, with ERM processes less focused on emerging strategic/market/industry risks or risk related to reputation.
- There is a growing trend among organizations to maintain enterprise-level risk inventories compared to a decade earlier; however, the majority of organizations do not aggregate risk information to an enterprise-level inventory of top risks.
- Consistent with the recent past about two-thirds of the largest organizations, public companies, and financial services organizations provide explicit guidelines to business unit leaders for them to use when assessing risk probabilities and impact.
- While organizations on average use both a quantitative and qualitative approach to risk assessment, the process tends to be more qualitative than quantitative.
EXECUTIVE SUMMARY OF KEY INSIGHTS

BOARD RISK OVERSIGHT STRUCTURE

- More often than not, boards of directors assign formal responsibility for overseeing management’s risk assessment and risk management process to a board committee, which is typically the audit committee, except for financial services organizations that have a risk committee at the board level.
- Delegated responsibility for risk oversight is usually specified in board committee charters.
- The presence of a formal risk management policy statement is mixed across organizations, with fewer than half of all organizations in our survey having such statement. Policies are most common in financial services organizations.

BOARD REPORTING AND MONITORING

- Most organizations prepare a formal report on top risks to the board at least annually, with the percentage highest in 2020.
- Public companies and financial services organizations are more likely to report risks to the board on a quarterly versus annual basis whereas not-for-profit organizations are more likely to report annually rather than quarterly.
- The majority of boards set aside a specific meeting to discuss the aggregate report of top risk exposures facing the organization, particularly for public companies.
- There is noticeable variation in the number of top risk exposures reported to the board across different types of organizations, with most reporting between five and 19 risk exposures.
- The integration of risk information with discussion of the strategic plan is not occurring extensively across most organizations, suggesting there may be opportunities to enhance the integration of risk information with strategic planning information for most organizations.
- Organizations of all types are perceiving an increase in the public disclosure of risk information to external stakeholders.

A number of additional insights are contained in the pages that follow. It is our hope that this data provides important insights that business leaders can use to benchmark and improve their organization’s strategic use of risk insights for competitive advantage.
DRIVERS FOR ENHANCED RISK MANAGEMENT

This section highlights a number of factors that are motivating leadership teams of all types of organizations to enhance their risk management efforts.

We Suggest These Questions to Assess Your Organization’s Risk Readiness:

1. How is the overall business environment triggering new types of risks for your organization?
2. What gaps, if any, in your organization’s business resiliency and crisis management processes are being revealed as the organization deals with the ongoing pandemic experience?
3. What expectations do external stakeholders have for your organization to improve how its leaders identify and manage ongoing risks?
4. Who within your organization’s leadership team is calling for more management involvement in risk management activities?
To get a sense for the extent of risks faced by organizations represented by our respondents, we asked respondents to describe how the volume and complexity of risks have increased in the last five years. We have asked this question in all 12 years that we have conducted this study. The chart below shows the percentages responding “mostly” or “extensively” to this question for each of those 12 years.

**KEY INSIGHT**

- Uncertainties introduced by COVID-19, local and national elections, social unrest, and economic uncertainties are triggering perceptions of risks that are highest in any of the 12 years, including during the 2008-2010 financial crisis.

**Key Insight**

- No one is immune to the current risk environment. Different types of organizations experienced a perceived increase in the volume and complexities of risks, with large organizations and not-for-profits reporting the highest level of increase in the volume and complexity of risks.
This year, we asked specifically whether COVID-19 had changed the nature and type of the organization’s top risks since the prior year.

<table>
<thead>
<tr>
<th>Percentage of respondents who are “mostly” to “extensively” concerned about...</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent has COVID-19 changed the nature and type of your organization’s top risks since the prior year?</td>
<td>46%</td>
<td>40%</td>
<td>40%</td>
<td>33%</td>
<td>58%</td>
</tr>
</tbody>
</table>

**KEY INSIGHTS**

- Risk profiles are changing due to COVID-19, with just under half responding that COVID-19 has changed the nature and type of top risks “mostly” to “extensively.”
- Not-for-profit organizations signaled the greatest impact of COVID-19 on their risk profiles.
DRIVERS FOR ENHANCED RISK MANAGEMENT

Most executives do not want to be blindsided by unexpected events. Unfortunately, the events of 2020 brought a large volume of operational surprises their way, impacting almost all entities. To get a sense for the impact risk events are having on existing operations, we asked respondents about the extent to which their organization has faced a significant operational surprise in the last five years, with the results shown in the chart below.

KEY INSIGHTS

- Core operations were significantly impacted by real risk events (e.g., a competitor disruption, an IT systems breach, loss of key talent, among numerous others possible events) in 83% of organizations in our sample, with large organizations and not-for-profit organizations impacted the most.
- The increase in 2020 over the prior years was significant for all types of organizations, but financial services organizations revealed the most significant jump in operational surprises.
- The reality is that all organizations are dealing with unexpected risks that are disrupting their core business operations.

This year we asked specifically whether the experiences of 2020 might change how their organizations think about their business continuity planning and crisis management efforts.

| Percentage experiencing a significant operational surprise "Somewhat," "Mostly," or "Extensively" in past 5 years |
|--------------------------------------------------|------------------|----------------|----------------|----------------|
| 2016 | 2017 | 2018 | 2019 | 2020 |
| Full Sample | 69% | 66% | 66% | 83% |
| Large Organizations | 79% | 72% | 69% | 75% | 90% |
| Public Companies | 81% | 73% | 75% | 71% | 85% |
| Financial Services | 70% | 59% | 66% | 58% | 82% |
| Not-for-Profit | 68% | 60% | 70% | 66% | 88% |

To what extent do you believe there will be significant changes in your organization’s approach to business continuity planning and crisis management?

<table>
<thead>
<tr>
<th>Percentage of respondents who are “Somewhat,” “Mostly,” or “Extensively” concerned about...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Sample</td>
</tr>
</tbody>
</table>

KEY INSIGHT

- Many organizations are concluding that their approaches to business continuity planning and crisis management are not at the level of preparedness desired, with almost three-fourths indicating significant changes in those processes will occur.
DRIVERS FOR ENHANCED RISK MANAGEMENT
EXTERNAL PARTIES DEMAND RISK INFORMATION

We asked respondents to describe to what extent external factors (e.g., investors, ratings agencies, emerging best practices) are creating pressures on senior executives to provide more information about risks affecting their organizations.

### PERCENTAGE OF RESPONDENTS SELECTING “MOSTLY” OR “EXTENSIVELY”

<table>
<thead>
<tr>
<th>Extent that external parties are “Mostly” to “Extensively” applying pressure on senior executives to provide more information about risks affecting the organization</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Year</td>
<td>35%</td>
<td>45%</td>
<td>42%</td>
<td>43%</td>
<td>35%</td>
</tr>
<tr>
<td>Prior Year</td>
<td>28%</td>
<td>36%</td>
<td>37%</td>
<td>3%</td>
<td>19%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- There is a noticeable jump in perceived pressures across all organizations in 2020 relative to the prior year, indicating continued strong pressure from external parties for more information from management about risks affecting the organization. This is especially apparent for large organizations, public companies, and financial services organizations.
- Not-for-profit organizations are experiencing the biggest shift in pressures to provide risk information, increasing from 19% to 35%, from 2019 to 2020.

The call for more senior executive involvement in risk management is coming from many external parties.

### PERCENTAGE OF RESPONDENTS SELECTING “MOSTLY” OR “EXTENSIVELY”

<table>
<thead>
<tr>
<th>Which external parties are asking “Mostly” or “Extensively” for increases senior executive involvement in risk oversight?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Directors</td>
<td>36%</td>
<td>40%</td>
<td>41%</td>
<td>32%</td>
<td>43%</td>
</tr>
<tr>
<td>Key Stakeholders</td>
<td>23%</td>
<td>24%</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
</tr>
<tr>
<td>Regulators</td>
<td>22%</td>
<td>25%</td>
<td>31%</td>
<td>43%</td>
<td>19%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- The board of directors’ request for more engagement of senior executives in risk management is strong for all organizations, especially for not-for-profit organizations.
- Regulator expectations are highest for financial services organizations, even higher than board requests.
The sense that management does not really like surprises seems to be holding true. When asked about factors encouraging management to increase senior executive focus on risk management related activities, the factor creating the most pressure is “unanticipated risk events affecting the organization.”

<table>
<thead>
<tr>
<th>Factors “Mostly” or “Extensively” Leading to Increased Senior Executive Focus on Risk Management Activities</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unanticipated risk events affecting organization</td>
<td>45%</td>
<td>56%</td>
<td>49%</td>
<td>41%</td>
<td>57%</td>
</tr>
<tr>
<td>Unanticipated risk events affecting competitors</td>
<td>15%</td>
<td>18%</td>
<td>16%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td>Emerging best practice expectations</td>
<td>32%</td>
<td>32%</td>
<td>30%</td>
<td>39%</td>
<td>36%</td>
</tr>
<tr>
<td>Emerging corporate governance requirements</td>
<td>23%</td>
<td>28%</td>
<td>27%</td>
<td>33%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**KEY INSIGHTS**

- Almost half of the full sample (even higher for large organizations) indicated that unanticipated risk events affecting the organization were putting pressure on management to do more related to risk management.
- There is a general sense that both emerging best practices and corporate governance requirements are collectively pressuring management to increase their focus on risk management activities in most organizations.
DRIVERS FOR ENHANCED RISK MANAGEMENT

SENIOR LEADERS CALL FOR RISK MANAGEMENT

While there are growing external expectations for organizations to increase senior leadership involvement in risk management, there are also requests by the management team for enhanced risk management. This year, we added a question that specifically asked “In light of the ongoing pandemic, to what extent will your organization’s senior leadership team be calling for more enhanced risk management processes?”

KEY INSIGHT

• Overwhelmingly, there is a strong indication that senior management will be looking for ways to enhance the organization’s approaches to risk management going forward.

Interestingly, CEOs are also asking for increased senior executive involvement in risk oversight.

KEY INSIGHT

• CEOs are calling on other senior executives to increase their level of engagement in risk management, especially those in large organizations.
In light of the board’s overall responsibility for overseeing management’s risk taking actions, boards are naturally interested in the risk management processes and infrastructure designed and implemented by senior executives to manage risks affecting the organization. Our survey finds that boards of directors continue to ask “somewhat,” “mostly,” or “extensively” for increased senior executive involvement in risk oversight as shown by the chart below.

**KEY INSIGHTS**

- Board expectations for increased senior executive involvement in risk oversight is strong across all types of organizations but appears to be most dramatic for the largest organizations and public companies.
- Effective risk management is clearly a priority among boards and merits increased management attention.
OVERALL STATE OF RISK MANAGEMENT MATURITY

This section highlights the overall state of risk management maturity across organizations.

We Suggest These Questions to Assess Your Organization’s Risk Readiness:

1. How would your organization’s senior leadership team describe the overall maturity of the organization’s risk management processes? How would that view differ from the view of the board of directors?

2. What has your organization done to invest more time, attention, and resources to explicitly identify, assess, and manage risks across the enterprise?

3. Would you describe your organization’s approach to risk management as explicit, structured, coordinated, or would you describe it as more implicit, ad hoc, informal?

4. To what extent is risk management a siloed activity that exists within different business functions with little coordination and aggregation of risk insights at an enterprise level?
OVERALL STATE OF RISK MANAGEMENT MATURITY

EMBRACE OF ENTERPRISE-WIDE RISK MANAGEMENT (ERM)

To obtain a sense for the current state of ERM maturity, we asked survey participants to respond to a number of questions to help us get a sense for the current level of risk oversight in organizations surveyed. One of the questions asked them to select which of the following statements best describes the state of their risk management processes currently in place:

- No enterprise-wide process in place
- Currently investigating concept of enterprise-wide risk management, but have made no decisions yet
- No formal enterprise-wide risk management process in place, but have plans to implement one
- Partial enterprise-wide risk management process in place (i.e., some, but not all, risk areas addressed)
- Complete formal enterprise-wide risk management process in place

We observe a slight increase in the percentage of organizations that believe they have a “complete formal enterprise-wide risk management process in place” relative to the plateau we observed in the prior three years.

KEY INSIGHTS

- While progress has been made in implementing complete ERM over the twelve years we have conducted this survey, there is still relatively slow progress in continuing to move towards a more robust, complete enterprise-wide approach to risk management.
- In 2009, only 9% of organizations claimed to have complete ERM processes in place; however, in 2020 the percentage has increased to 35% for the full sample. So, greater adoption of ERM has occurred.
- There continues to be significant opportunity for improvement in most organizations, given that more than two-thirds of organizations surveyed in 2020 still cannot yet claim they have “complete ERM in place.”
There is noticeable variation across different types of organizations in the development of complete ERM processes.

**KEY INSIGHTS**

• Over the past year, the percentages of public companies and financial services organizations with “complete ERM processes” increased significantly, with two-thirds of public companies describing their processes in that manner.

• Non-profit organizations significantly lag other types of organizations in implementing complete ERM processes.

For the full sample, we found that 16% of the respondents have no enterprise-wide risk management process in place. An additional 7% of respondents without ERM processes in place indicated that they are currently investigating the concept, but have made no decisions to implement an ERM approach to risk oversight at this time.

**OVERALL STATE OF RISK MANAGEMENT MATURITY**

**EMBRACE OF ENTERPRISE-WIDE RISK MANAGEMENT (ERM)**

<table>
<thead>
<tr>
<th>Description of the State of ERM Currently in Place</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>No enterprise-wide management process in place</td>
<td>16%</td>
<td>4%</td>
<td>0%</td>
<td>6%</td>
<td>15%</td>
</tr>
<tr>
<td>Currently investigating concept of enterprise-wide risk management, but have made no decisions yet</td>
<td>7%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>10%</td>
</tr>
<tr>
<td>No formal enterprise-wide risk management process in place, but have plans to implement one</td>
<td>7%</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td>11%</td>
</tr>
<tr>
<td>Partial enterprise-wide risk management process in place (i.e., some, but not all, risk areas addressed)</td>
<td>35%</td>
<td>38%</td>
<td>30%</td>
<td>31%</td>
<td>41%</td>
</tr>
<tr>
<td>Complete formal enterprise-wide risk management process in place</td>
<td>35%</td>
<td>56%</td>
<td>65%</td>
<td>60%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**KEY INSIGHT**

• Despite the growing level of uncertainty in today’s marketplace, it is surprising that, on a combined basis, just under one-fourth of respondents (23%) have no formal enterprise-wide approach to risk oversight and are currently making no plans to consider this form of risk oversight.
OVERALL STATE OF RISK MANAGEMENT MATURITY

LEVEL OF RISK MANAGEMENT MATURITY

While we observe an increasing percentage of entities that describe their risk oversight processes as “complete ERM processes,” that does not mean those ERM processes are mature. To obtain a sense for the current state of ERM maturity, we asked survey participants to respond to several questions to help us get a sense for the current level of risk oversight in organizations surveyed.

For example, we asked respondents to provide their assessment of the overall level of their organization’s risk management maturity using a scale that ranges from “very immature” to “robust.”

KEY INSIGHTS

- Most types of organizations believe their risk management oversight is more robust or mature than any of the prior four years, with the exception of non-profit organizations.

- Interestingly, only 28% of full sample respondents describe their organizations’ approach to risk management as “mature” or “robust.”
When we breakdown the descriptions of their organization's risk oversight processes, we find room for improvement continues to exist.

### PERCENTAGE OF RESPONDENTS

**What is the level of maturity of your organization's risk management oversight?**

<table>
<thead>
<tr>
<th>Description of the Current Stage of ERM Implementation</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our process is systematic, robust, and repeatable with regular reporting of top risk exposures to the board.</td>
<td>42%</td>
<td>65%</td>
<td>76%</td>
<td>62%</td>
<td>33%</td>
</tr>
<tr>
<td>Our process is mostly informal and unstructured, with <em>ad hoc</em> reporting of aggregate risk exposures to the board.</td>
<td>26%</td>
<td>21%</td>
<td>17%</td>
<td>16%</td>
<td>26%</td>
</tr>
<tr>
<td>We mostly track risks by individual silos of risks, with minimal reporting of top risk exposures to the board.</td>
<td>19%</td>
<td>10%</td>
<td>6%</td>
<td>17%</td>
<td>27%</td>
</tr>
<tr>
<td>There is no structured process for identifying and reporting top risk exposures to the board.</td>
<td>13%</td>
<td>4%</td>
<td>1%</td>
<td>5%</td>
<td>14%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- The level of sophistication of underlying risk management processes still remains fairly immature (e.g., “very immature” or “developing”) for just over one-third of those responding to our survey.
- While public companies appear to have more robust risk management oversight processes, half of the public companies would not describe their processes that way.

In light of the possibility that the questions we used do not reflect how respondents think about their risk management maturity, we provided four possible descriptions of risk management processes and asked respondents to select the statement that best reflects their risk management process.

### KEY INSIGHTS

- Three-fourths of public company respondents, and nearly two-thirds of respondents from large organizations and financial services entities, describe the current state of their ERM process as systematic, robust and repeatable.
- Non-profit organizations are less likely to have structured risk management processes relative to other organizations.
STRATEGIC VALUE OF RISK MANAGEMENT

This section highlights how risk management practices are providing strategic insights for decision making.

We Suggest These Questions to Assess the Strategic Value of Your Organization’s Risk Management Processes:

1. To what extent is the information generated by your organization’s risk management processes highly valued by senior leadership and the board for strategic decision making?

2. How connected are your entity’s risk management processes to strategic planning and resource allocation decisions?

3. Does your organization’s risk management process explicitly prompt management to identify strategic risks?

4. Would you describe the current focus of your organization’s ERM process as heavily weighted towards operational and compliance risks with less focus on external, strategic risks?
STRATEGIC VALUE OF RISK MANAGEMENT

COMPETITIVE ADVANTAGE PROVIDED BY RISK MANAGEMENT

Most business leaders understand the reality that to generate returns the organization must take risks. Thus, they recognize the direct connection of risk with return. Despite that understanding, a number of business leaders fail to appreciate how investing in risk management processes should provide important insights to strategic planning. Many organizations fail to integrate their risk management and strategic decision-making efforts.

We asked several questions to obtain information about the intersection of risk management and strategy in the organizations we surveyed. Responses to the question about the extent to which respondents believe the organization’s risk management process is a proprietary strategic tool reveal how risk management is viewed in those organizations.

<table>
<thead>
<tr>
<th>PERCENTAGE OF RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>To what extent do you believe the organization’s risk management process is a proprietary strategic tool that provides unique competitive advantage?</td>
</tr>
</tbody>
</table>

KEY INSIGHT
• Organizations continue to struggle to integrate their risk management and strategic planning efforts. Two-thirds (66%) responded to this question by indicating “not at all” or “minimally,” consistent with what we observed in prior years.

Furthermore, as shown by the bar graph below, the assessment of the strategic value of the organization’s risk management process was relatively low for all organizations, although it was slightly higher for financial services organizations and public companies.

KEY INSIGHTS
• Overwhelmingly, most organizations do not perceive their risk management processes as providing important risk insights that management can use to create or enhance strategic value.
• There appear to be opportunities to reposition an entity’s risk management process to ensure risk insights generated are focused on the most important strategic issues.
To delve deeper into the strategic value of risk management practices, we asked about the extent to which the ERM process formally identifies, assesses, and responds to emerging risk issues. We are particularly interested in the extent to which the entity’s risk management processes explicitly encourage management to think about emerging strategic, market, or industry risks.

### Extent to which the organization’s ERM process formally identifies, assesses and responds to emerging strategic, market, or industry risks:

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extensively</td>
<td>15%</td>
<td>24%</td>
<td>27%</td>
<td>25%</td>
<td>10%</td>
</tr>
<tr>
<td>Mostly</td>
<td>36%</td>
<td>40%</td>
<td>42%</td>
<td>45%</td>
<td>35%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>25%</td>
<td>21%</td>
<td>20%</td>
<td>20%</td>
<td>28%</td>
</tr>
<tr>
<td>Minimally</td>
<td>15%</td>
<td>11%</td>
<td>10%</td>
<td>8%</td>
<td>16%</td>
</tr>
<tr>
<td>Not at All</td>
<td>9%</td>
<td>4%</td>
<td>1%</td>
<td>2%</td>
<td>11%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- Interestingly, the majority of organizations, except for not-for-profit organizations, indicate that their organization’s ERM process formally focuses “mostly” to “extensively” on emerging strategic, market, and industry risks. Ideally, that percentage would be much higher for all organizations.
- When pairing these results with those on the prior page, organizations appear to be struggling to integrate information about emerging strategic, market, and industry risks into their strategic decision making processes.
To better understand factors that might impact the strategic value of risk management processes, we asked three questions to dive deeper into potential opportunities for risk management considerations to be explicitly embedded in strategic planning decisions.

<table>
<thead>
<tr>
<th>Percentage of respondents who selected “Mostly” to “Extensively” to the following statements</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing risk exposures are considered when evaluating possible new strategic initiatives</td>
<td>47%</td>
<td>44%</td>
<td>48%</td>
<td>63%</td>
<td>42%</td>
</tr>
<tr>
<td>Organization has articulated its appetite for or tolerance of risks in the context of strategic planning</td>
<td>33%</td>
<td>25%</td>
<td>35%</td>
<td>51%</td>
<td>29%</td>
</tr>
<tr>
<td>Risk exposures are considered when making capital allocations to functional units</td>
<td>32%</td>
<td>30%</td>
<td>35%</td>
<td>37%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**KEY INSIGHTS**

- Most organizations, with the exception of financial services entities, are not significantly emphasizing the consideration of risk exposures when management evaluates different possible strategic initiatives.

- A majority of organizations outside of financial services do not formally articulate tolerances for risk taking as part of their strategic planning activities.

- Risk dimensions do not appear to be a significant explicit consideration when making capital allocation or budgeting decisions. That is, different allocations are seemingly made without considering differences in risk exposures.
STRATEGIC VALUE OF RISK MANAGEMENT

MONITORING RISKS TO REPUTATION AND BRAND

When risk events occur, they can often significantly damage an entity’s reputation and brand. More robust risk management processes should aid management and the board in monitoring and responding to risk more proactively rather than reactively, and an effective ERM process should help inform management and the board on a timely basis about events that may be emerging that may impact reputation and brand. We asked respondents about the extent to which organizations are using their ERM processes to identify and manage significant risk events capable of harming the organization’s reputation and brand.

KEY INSIGHTS

• While some organizations find value from their ERM process in helping navigate risks to reputation and brand, there is noticeable room for improvement.

• There may be opportunities for management to identify the primary factors that affect reputation and brand for important stakeholders to then ensure the risk identification processes are focused on identifying and assessing risks to those drivers of reputation and brand.

<table>
<thead>
<tr>
<th>PERCENTAGE WHO BELIEVE RISK MANAGEMENT PROCESS &quot;MOSTLY&quot; OR &quot;EXTENSIVELY&quot; HELPS MANAGE REPUTATION AND BRAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
</tr>
<tr>
<td>FULL SAMPLE</td>
</tr>
</tbody>
</table>

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2021 THE STATE OF RISK OVERSIGHT: AN OVERVIEW OF ENTERPRISE RISK PRACTICES
IMPACT OF CULTURE ON RISK MANAGEMENT

This section highlights how an organization’s culture and tone-at-the top may impact the level of engagement in risk management for strategic decision making.

We Suggest These Questions to Assess Your Organization’s Risk Culture:

1. What viewpoints and opinions expressed from senior leadership of your organization suggest there may be a lack of top-down support for engaging in more robust risk management activities?

2. What are the common points of resistance that you experience as you try to engage different business function leaders in risk management discussions?

3. How is your organization’s overall culture affecting the risk management process?

4. To what extent has your organization’s leaders had opportunities to learn about what ERM is and how it should be integrated with strategic decision making?

5. Could executive reluctance to engage in ERM be due to a lack of appreciation for the strategic value of more proactive versus reactive risk management?
IMPACT OF CULTURE ON RISK MANAGEMENT

IMPEDIMENTS TO EMBRACING ERM

While organizations have engaged in risk management activities for centuries, the concept of ERM has only fully emerged over the past two decades. So, relative to traditional risk management activities, the concept of ERM is still fairly new. There often is confusion about what ERM represents and there is a lack of understanding as to how ERM might be beneficial to senior leadership and the board.

To get a sense of impediments to the embrace of ERM, we asked respondents whose organizations have not yet implemented an enterprise-wide risk management process to provide some perspective on that decision. Respondents could indicate more than one hurdle or obstacle to ERM progress as shown in the table below.

<table>
<thead>
<tr>
<th>Percentage of respondents indicating that each of the following “Mostly” to “Extensively” is impeding risk management progress</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks are monitored in other ways besides ERM</td>
<td>27%</td>
<td>22%</td>
<td>21%</td>
<td>34%</td>
<td>24%</td>
</tr>
<tr>
<td>Too many pressing needs</td>
<td>20%</td>
<td>16%</td>
<td>25%</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>No requests to change our risk management approach</td>
<td>18%</td>
<td>18%</td>
<td>12%</td>
<td>30%</td>
<td>22%</td>
</tr>
<tr>
<td>Do not see benefits exceeding costs</td>
<td>12%</td>
<td>12%</td>
<td>4%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>No one to lead effort</td>
<td>12%</td>
<td>16%</td>
<td>21%</td>
<td>3%</td>
<td>16%</td>
</tr>
<tr>
<td>Would overcomplicate what can be best done ad hoc</td>
<td>11%</td>
<td>16%</td>
<td>17%</td>
<td>15%</td>
<td>9%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- There are a number of impediments to the embrace of ERM, with the most frequently cited obstacle reflecting a sentiment that organizations manage risks in other ways besides ERM. That is important to consider in addition to the 12% who indicate that leaders “do not see the benefits exceeding the costs.”
- A lack of clear direction and leadership of an ERM implementation is also a factor that restricts ERM progress as indicated by the percentages of respondents selecting “No requests to change our risk management approach (18%)” and “No one to lead effort (12%).”
- Earlier we reported that 83% respondents noted that the volume and complexities of risks have drastically increased over the past 5 years and 34% of the full sample indicated that their organization’s risk oversight processes are “very immature” or “developing.” However, as noted above 27% believe risks are monitored in other ways besides ERM and “there are too many pressing needs” to spend time on implementing more robust risk management processes. This may represent an important disconnect that business leaders should consider as they evaluate their risk management processes.
CULTURAL BARRIERS THAT LIMIT PROGRESS

An organization’s overall culture and the tone-at-the-top can have a direct impact on attitudes and perceptions about the need for and benefits of a more robust risk management process. Cultural barriers often exist that lead to resistance to investing time and energy in risk management processes, despite the reality that risks continue to grow in volume and complexity for most organizations. Several perceived barriers appear to limit management from taking the necessary actions to strengthen their approach to risk oversight.

We asked respondents to identify the impact of several cultural barriers that restrain progress in advancing an organization’s ERM processes. Respondents could indicate more than one barrier as shown in the table below.

<table>
<thead>
<tr>
<th>Percentage of respondents who describe each of the following as being a &quot;barrier&quot; or &quot;significant barrier&quot; to effective ERM</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competing priorities</td>
<td>41%</td>
<td>35%</td>
<td>32%</td>
<td>37%</td>
<td>51%</td>
</tr>
<tr>
<td>Insufficient resources</td>
<td>40%</td>
<td>34%</td>
<td>36%</td>
<td>34%</td>
<td>48%</td>
</tr>
<tr>
<td>Lack of perceived value</td>
<td>29%</td>
<td>27%</td>
<td>23%</td>
<td>24%</td>
<td>28%</td>
</tr>
<tr>
<td>Perception ERM adds bureaucracy</td>
<td>27%</td>
<td>25%</td>
<td>16%</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>Lack of board or senior executive ERM leadership</td>
<td>23%</td>
<td>16%</td>
<td>10%</td>
<td>11%</td>
<td>33%</td>
</tr>
<tr>
<td>Legal or regulatory barriers</td>
<td>6%</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>7%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- The most common barrier in the full sample to advancing an organization’s risk management processes is a perception that there are other more important priorities for the organization, with 41% identifying this as a “barrier” or “significant barrier” to the organization’s implementation of ERM processes. Not-for-profits especially perceive that to be a significant barrier to ERM progress.

- It is likely a combination of barriers that need to be considered based on the data shown above suggesting that a perceived lack of resources and a lack of perceived value of ERM are also important cultural factors to address if the organization desires to advance its risk management processes.
IMPACT OF CULTURE ON RISK MANAGEMENT

EDUCATION AND AWARENESS OF ERM

Some of the overall reluctance to embrace ERM across an organization may be due to a lack of understanding and knowledge of what an enterprise-wide risk management process actually entails relative to traditional approaches organizations use to manage risks. ERM is a relatively new business paradigm that business leaders are hearing about but may lack an understanding of how it might help them achieve their strategic objectives.

To get a sense for the extent that organizations are providing training about ERM processes we asked respondents to describe the extent of risk management training provided to the management team.

KEY INSIGHTS

- Most organizations (55%) have not provided or only minimally provided training and guidance on risk management in the past two years for senior executives or key business unit leaders. This is slightly lower for the largest organizations (45%), public companies (44%), and financial services (34%).

- The lack of robustness in ERM maturity we discuss earlier in this report may be due to a lack of understanding of the key components of an effective enterprise-wide approach to risk oversight that some basic training and education might provide.
IMPACT OF CULTURE ON RISK MANAGEMENT
INCENTIVES TO ENGAGE IN RISK MANAGEMENT

• Some of the overall reluctance to embrace ERM across an organization may be due to a lack of incentives and accountabilities for individual business leaders to assume ownership of risk management responsibilities. We asked respondents about the extent to which risk management activities are an explicit component of determining management performance compensation.

<table>
<thead>
<tr>
<th>To what extent are risk management activities an explicit component in determining management performance compensation?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>34%</td>
<td>35%</td>
<td>23%</td>
<td>20%</td>
<td>44%</td>
</tr>
<tr>
<td>Minimally</td>
<td>29%</td>
<td>26%</td>
<td>30%</td>
<td>26%</td>
<td>29%</td>
</tr>
<tr>
<td>Combined</td>
<td>63%</td>
<td>61%</td>
<td>53%</td>
<td>46%</td>
<td>73%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

• Most organizations have not incorporated risk management incentives and accountabilities into management’s performance compensation plans.
• Even large organizations, public companies, and financial services organizations are unlikely to factor risk management activities into performance compensation.
• The increasing focus on compensation and risk-taking should lead more organizations over time to consider modifications to their compensation policies and procedures.
IMPACT OF CULTURE ON RISK MANAGEMENT

OVERALL RISK MANAGEMENT CULTURE

The level of engagement in designing and implementing enterprise-wide risk management processes may be influenced by the overall willingness for the organization to take risks. Organizations that are more averse to risk-taking may have a greater interest in having robust ERM processes, whereas other organizations with a much higher willingness to take risks may perceive less need in investing in risk management processes and infrastructures.

To obtain a sense of the overall risk management culture, we asked respondents to select what best describes their organization’s current attitude towards risk taking.

### PERCENTAGE OF RESPONDENTS

<table>
<thead>
<tr>
<th>How would you describe the risk management culture at your organization?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Risk Averse</td>
<td>6%</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Risk Averse</td>
<td>46%</td>
<td>54%</td>
<td>46%</td>
<td>49%</td>
<td>54%</td>
</tr>
<tr>
<td>Risk Neutral</td>
<td>31%</td>
<td>24%</td>
<td>28%</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>Risk Seeking</td>
<td>16%</td>
<td>14%</td>
<td>19%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Strongly Risk Seeking</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>3%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- The majority of organizations (52%) in our full sample describe their risk culture as “strongly risk averse” or “risk averse” with an additional 31% selecting “risk neutral,” while an even higher percentage of large organizations (61%) describe their risk management culture as “strongly risk averse” to “risk averse,” up from about 50% in the prior year for them. That suggests that in general the overarching “culture” for taking risk is neutral to averse.
- A slightly higher percentage of public companies view their organization as “risk seeking” relative to other types of organizations.

To put the above in perspective, we show (again) how these organizations describe the overall maturity of their risk management processes.

### KEY INSIGHTS

- While the majority of organizations describe their risk management culture as “strongly risk averse” or “risk averse,” much smaller percentages of organizations describe their risk management processes as “mature” or “robust.”
- There may be a disconnect between desired versus actual risk management capabilities. If organizations are more averse to risk taking, one might expect greater investment in risk management infrastructure and processes to meet that expectation.
ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP

This section highlights benchmarking information related to how leadership of the risk management process is assigned and structured.

We Suggest These Questions to Assess Your How Your Organization Approaches Risk Management Leadership:

1. Who is leading the enterprise risk management process? Is that responsibility formally assigned?
2. What are the lines of reporting within the organizational chart for the leader of the ERM process? Is the position at the appropriate level of the leadership structure?
3. What committee(s) oversee the risks identified to assess the appropriateness of how the entity is managing enterprise level risks?
4. If the organization has a management-level risk committee, what functions are represented and is the committee composed of individuals who can provide a multi-functional lens on risks?
5. How frequently is the risk committee meeting and are the agendas of those meetings leading to ongoing, robust risk conversations?
ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP
DESIGNATION OF A CHIEF RISK OFFICER

Designing and implementing a robust risk management process does not happen without dedicated leadership of that process. Assigning responsibilities for leading an ERM effort is critical for an organization to make progress in risk management. Given all the demands on business leaders’ time, individual leaders are less likely to carve out time to explicitly design effective risk management techniques. Rather, they need someone with the responsibility to be the organization’s risk management champion to organize and coordinate the organization’s risk management efforts.

To get a sense for whether organizations are explicitly naming an individual to serve as risk champion, we asked respondents to indicate whether their organization has formally designated an individual to serve as the Chief Risk Officer (CRO) or senior executive equivalent.

KEY INSIGHT
• Pinpointing an executive to lead the risk management process is becoming more common relative to a decade ago; however, just less than one-half of our surveyed organizations are doing so.

When comparing the percentages of organizations formally designating an individual to serve as CRO or equivalent, there are noticeable differences across different organization types.

<table>
<thead>
<tr>
<th>Year</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>18%</td>
<td>21%</td>
<td>18%</td>
<td>22%</td>
<td>18%</td>
</tr>
<tr>
<td>2010</td>
<td>21%</td>
<td>23%</td>
<td>21%</td>
<td>23%</td>
<td>21%</td>
</tr>
<tr>
<td>2011</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>2012</td>
<td>26%</td>
<td>31%</td>
<td>26%</td>
<td>31%</td>
<td>26%</td>
</tr>
<tr>
<td>2013</td>
<td>29%</td>
<td>32%</td>
<td>29%</td>
<td>32%</td>
<td>29%</td>
</tr>
<tr>
<td>2014</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>2015</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
<td>32%</td>
</tr>
<tr>
<td>2016</td>
<td>41%</td>
<td>47%</td>
<td>41%</td>
<td>47%</td>
<td>41%</td>
</tr>
<tr>
<td>2017</td>
<td>48%</td>
<td>50%</td>
<td>48%</td>
<td>50%</td>
<td>48%</td>
</tr>
<tr>
<td>2018</td>
<td>50%</td>
<td>49%</td>
<td>50%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>2019</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
<td>47%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS
• Financial services organizations are most likely to have an appointed CRO or equivalent position, followed by public companies.
• It is especially interesting to see that even many not-for-profit organizations are appointing someone to serve as CRO.
ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP
DESIGNATION OF A CHIEF RISK OFFICER

The downward trend in recent years in the percentage of organizations designating an individual to serve as CRO or equivalent seems to have reversed itself by the end of 2020, when this survey was conducted.

KEY INSIGHT

- Given the events of 2020, it appears that all types of organizations are rethinking the need to pinpoint someone to serve as CRO or equivalent. This result has increased from the prior year for the full sample and for all of our subgroups. That is especially true for public companies and financial services organizations.

![Percentage of Organizations Designating Individual as CRO or Equivalent](chart.png)
The overall positioning of the risk champion role within an organization’s leadership can directly affect the overall impact that individual can have on the risk management process. While an organization might designate an individual to be the risk leader for the organization, if that individual is too far removed from the senior leadership of the organization, the ERM process is less likely to get visibility and focus from those at the enterprise level.

To get a sense for where the risk champion resides in the leadership structure, we asked respondents from organizations that appointed an individual to serve as CRO or equivalent to whom that individual formally reports.

### Key Insights
- There is a mixture of lines of reporting across different risk champions. Financial services organizations and not-for-profit organizations are more likely to have the risk champion reporting formally to the chief executive officer or president.
- The chief financial officer (CFO) is also often the position overseeing the risk champion’s work.
ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP

MANAGEMENT LEVEL RISK COMMITTEES

To help organizations develop a more enterprise-wide view of risks, a number of organizations are creating management-level risk committees that are comprised of individuals across multiple functions of the organization. Bringing individuals from different functions together to discuss risk issues helps the leadership team develop a more robust, enterprise-wide perspective of how risks might impact the organization as a whole.

We asked respondents to indicate whether or not their organization has a management-level risk committee.

KEY INSIGHTS

- We observe that a majority of organizations have a management-level risk committee or equivalent and that has been the case since 2016.

  While there was a slight drop in that percentage for 2019, the events of 2020 appear to be encouraging organizations to think again about the benefits of an internal management-level risk committee.

  Interestingly, the likelihood that an organization has a management-level risk committees is higher (at 61%) than the likelihood they have appointed a CRO or equivalent (47% shown earlier).

KEY INSIGHT

- The presence of an internal management-level risk committee is noticeably more likely to be present in the largest organizations, public companies, and financial services entities where 85%, 86%, and 81% respectively, of those organizations have such a committee. It is important to highlight that risk committees are also common for not-for-profit organizations.
To get a sense for the frequency of meetings for the risk management committee, we asked respondents to indicate the cadence of their meeting schedule.

### ASSIGNMENT OF RISK MANAGEMENT LEADERSHIP

#### MANAGEMENT LEVEL RISK COMMITTEES

For organizations with a formal management-level risk committee, those committees most commonly meet on a quarterly basis, although about one-fourth of them meet on a monthly basis.

<table>
<thead>
<tr>
<th>How Frequently Does the Management Level Risk Committee Meet?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-Annually</td>
<td>7%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>53%</td>
<td>58%</td>
<td>57%</td>
<td>58%</td>
<td>51%</td>
</tr>
<tr>
<td>Monthly</td>
<td>24%</td>
<td>25%</td>
<td>27%</td>
<td>24%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**KEY INSIGHT**

- For organizations with a formal management-level risk committee, those committees most commonly meet on a quarterly basis, although about one-fourth of them meet on a monthly basis.

For those respondents that indicated their organizations have a risk management committee, we asked them to identify the titles of positions of individuals who serve on the committee to obtain a sense of the overall composition of the committee.

**KEY INSIGHTS**

- The officer most likely to serve on the executive risk committee is the chief financial officer (CFO), who serves on 82% of the risk committees that exist among organizations represented in our survey.
- The CEO/President serves on 63% of the risk committees.
- Other positions typically represented on the risk management committee include the general counsel (63%), chief technology officer (63%), chief risk officer (59%), and chief operating officer (59%).
- The reason why some positions are not as frequent may be due to the fact the organization does not have an individual with that position title. For example, as noted earlier, not all entities have a chief risk officer position.
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES

This section highlights benchmarking information related to techniques entities use to engage management in the identification and prioritization of risks affecting the enterprise.

We Suggest These Questions to Assess Your Organization’s Risk Identification and Assessment Processes:

1. What techniques are used to prompt management to identify top risks on the horizon?
2. What types or categories of risks seem to be the primary focus of the entity’s risk identification process?
3. How does your organization summarize and aggregate risk information to obtain an enterprise view of top risks?
4. What processes does your organization use to rank-order the most important risks?
5. Would you describe your risk management process as mostly quantitative or qualitative in nature?
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES
DEFINING MEANING OF “RISK”

As organizations engage business leaders in risk identification tasks, sometimes they face confusion among leaders about what is meant by the term “risk.” That can occasionally lead to a lack of clarity as to what leaders should be thinking about as they assess the potential for emerging issues that might trigger risk events for the organization. That may lead to frustration among leaders about the ERM process in general.

To get a sense for whether organizations provide guidance about the kinds of issues management should consider as it thinks about risks, we asked respondents whether or not the organization has formally defined the meaning of the term, “risk.”

![Percentage that define "risk"](chart)

**KEY INSIGHTS**
- Just over half (51%) of the full sample has formally defined the meaning of the term “risk” for employees to use as they identify and assess key risks.
- Defining “risk” occurs more often for large organizations, public companies, and financial services organizations (about two-thirds of those organizations).

For those organizations that define the term “risk,” we asked them to describe whether that definition focuses mostly on the “downside” of risk (e.g., risks as a threat) or whether it also focuses on the “upside” potential for risks (e.g., risks as an opportunity).

<table>
<thead>
<tr>
<th>The definition of “risk” focuses</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both on “upside” risks (risk opportunities) and “downside” risks (threats to the organization)</td>
<td>63%</td>
<td>61%</td>
<td>61%</td>
<td>65%</td>
<td>59%</td>
</tr>
<tr>
<td>Only on “downside” of risks (threats to the organization)</td>
<td>34%</td>
<td>39%</td>
<td>39%</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>Neither</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**KEY INSIGHT**
- If an organization defines the term “risk,” the majority focus the definition to emphasize both the “upside” (opportunities for the organization) and “downside” (threats to the organization) of risk.
Risks emerge constantly and thus it is important for management to stay abreast of top risks on the horizon for the organization. To get a sense for the frequency of activities organizations engage in to identify risks, we asked respondents to describe how often they go through a dedicated process to update their key risk inventories.

### Percentage of Respondents

<table>
<thead>
<tr>
<th>Frequency of Going Through Process to Update Key Risk Inventories</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>41%</td>
<td>56%</td>
<td>56%</td>
<td>47%</td>
<td>40%</td>
</tr>
<tr>
<td>Semi-Annually</td>
<td>11%</td>
<td>9%</td>
<td>9%</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>22%</td>
<td>26%</td>
<td>32%</td>
<td>31%</td>
<td>19%</td>
</tr>
<tr>
<td>Monthly, Weekly, or Daily</td>
<td>4%</td>
<td>2%</td>
<td>0%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Not At All</td>
<td>22%</td>
<td>7%</td>
<td>3%</td>
<td>8%</td>
<td>27%</td>
</tr>
</tbody>
</table>

### Key Insight

- While there is substantial variation as to whether they go through an update process, when organizations do update their risk inventories, it is generally done annually, although a noticeable percentage of organizations update their risk inventories quarterly.

We also asked respondents to indicate whether their organizations use any kind of standardized process or template for identifying and assessing risks.

### Percentage That Have a Standardized Template to Identify Risks

- Some form of standardization, such as a template, is commonly used to engage business leaders across an organization in risk identification activities.
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES

CATEGORIES OF RISKS

The goal of enterprise risk management is to identify, assess, manage, and monitor any type of risk that might affect the entity’s strategic success. All kinds of risks, such as those that are operational, compliance, financial, reputational, or strategic in nature, for example, can be triggered by internal or external issues and events. Unfortunately for some organizations, they limit their focus of risk management to more traditional areas of risks that primarily identify internal operational or compliance issues, with minimal explicit focus on strategic and external areas of emerging risk issues.

We asked respondents to indicate the extent to which their organization’s ERM process formally identifies, assesses, and responds to several risk categories. The table below summarizes the percentage that describe their organization’s focus as “mostly” to “extensive.”

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging Strategic/Market/Industry Risks</td>
<td>48%</td>
<td>64%</td>
<td>69%</td>
<td>70%</td>
<td>45%</td>
</tr>
<tr>
<td>Operational/Supply Chain/Process Risks</td>
<td>56%</td>
<td>73%</td>
<td>74%</td>
<td>67%</td>
<td>39%</td>
</tr>
<tr>
<td>Financing/Investing/Financial Reporting Risks</td>
<td>61%</td>
<td>75%</td>
<td>77%</td>
<td>77%</td>
<td>57%</td>
</tr>
<tr>
<td>Information Technology System Risks</td>
<td>71%</td>
<td>88%</td>
<td>88%</td>
<td>88%</td>
<td>70%</td>
</tr>
<tr>
<td>Legal Regulatory/Compliance Risks</td>
<td>64%</td>
<td>83%</td>
<td>86%</td>
<td>82%</td>
<td>59%</td>
</tr>
<tr>
<td>Reputational/Political Risk</td>
<td>51%</td>
<td>70%</td>
<td>69%</td>
<td>69%</td>
<td>55%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

• While most ERM processes focus on a number of different categories of risks, the dominant focus is on risks related to information technology systems, legal regulatory/compliance, and financial related risks.
• ERM processes tend to focus less on emerging strategic/market/industry risks and risks related to reputation/political issues.
• Not-for-profit organizations’ ERM processes tend to focus least on various categories of risks other than IT-related risk concerns.
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES

USE OF RISK INVENTORIES

As organizations go through the process of identifying risks, they compile that information at an enterprise level to stay abreast of the universe of risks that might impact the organization. Over time, they use risk inventories as a repository of potential risk concerns that they can monitor and track over time. We asked participants to indicate whether they have some process or system to formally maintain an enterprise-level inventory of potential risks in order to have an aggregate view of the population of risks issues affecting the enterprise.

In 2020, 47% of the organizations maintained enterprise-level risk inventories compared to 44% in the prior year. When compared to 2010, we definitely see more awareness of the importance of maintaining an understanding of the universe of risk facing the organization.

KEY INSIGHTS

- There is a growing trend among organizations to maintain enterprise-level risk inventories.
- However, the majority of organizations (53%) do not aggregate risk information to have an enterprise-level inventory of top risks. For those organizations, they only track risks within specific business functions, if at all.

The following table shows the breakdown by type of organization.

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage that maintain risk inventories at enterprise level</td>
<td>47%</td>
<td>62%</td>
<td>68%</td>
<td>63%</td>
<td>42%</td>
</tr>
</tbody>
</table>

KEY INSIGHT

- Large organizations, public companies, and financial services organizations are most likely to maintain an enterprise-level inventory of risks.
Once risks are identified, management needs to assess the importance of the risk in order to determine which risks deserve management’s attention first. Typically, the assessment of a risk is based on considerations of the probability/likelihood that a risk event might occur and the impact/consequence to the organization should the risk occur. Other dimensions also include the speed/velocity of a risk and the organization’s level of preparedness for managing the risk.

Some organizations provide guidelines to assist management in assessing the likelihood and impact of a risk. We asked respondents to indicate whether their organization provides explicit guidelines or measures to business unit leaders on how to assess the probability or frequency of a risk event and how to assess the impact of a risk event.

### Table: Percentage of Respondents

<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>45%</td>
<td>66%</td>
<td>66%</td>
<td>60%</td>
<td>37%</td>
</tr>
<tr>
<td>Impact</td>
<td>46%</td>
<td>65%</td>
<td>66%</td>
<td>57%</td>
<td>41%</td>
</tr>
</tbody>
</table>

### Key Insights

- Less than half of the full sample provides explicit guidelines or measures to business unit leaders on how to assess the probability and impact of a risk event (45% and 46%, respectively). We found slightly lower results for not-for-profit organizations.
- Consistent with recent years, about two-thirds of the largest organizations, public companies, and financial services organizations provide explicit guidelines or measures to business unit leaders for them to use when assessing risk probabilities and impact.
- If guidelines are provided, they usually are provided for assessing both likelihood and impact of the risk.
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES
QUALITATIVE VERSUS QUANTITATIVE APPROACHES

Most business leaders prefer to make decisions using quantified data and that desire holds true for decisions related to risk management. That works well when there are structured databases available with data that shed insights about emerging risks that can be analyzed. However, for a number of risks on the horizon, there is a lack of available structured data that might help inform decision making. As a result, management must rely on qualitative versus quantitative data to make a number of strategic decisions.

We asked respondents to provide us an overview of whether their organization's risk assessment process is perceived as taking a mostly quantitative approach to risk assessment or whether that process is more qualitative in nature.

<table>
<thead>
<tr>
<th>Quantitative Versus Qualitative Approach to Risk Assessment</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly Quantitative Assessment (Models)</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>A Blend, But More Quantitative</td>
<td>20%</td>
<td>30%</td>
<td>32%</td>
<td>26%</td>
<td>16%</td>
</tr>
<tr>
<td>A Blend, But More Qualitative</td>
<td>38%</td>
<td>45%</td>
<td>48%</td>
<td>44%</td>
<td>36%</td>
</tr>
<tr>
<td>Mostly Qualitative Assessments</td>
<td>19%</td>
<td>18%</td>
<td>17%</td>
<td>14%</td>
<td>27%</td>
</tr>
<tr>
<td>N/A – No Formal Assessment Done</td>
<td>20%</td>
<td>5%</td>
<td>1%</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- While organizations, on average, use both a quantitative and qualitative approach to risk assessment, the process tends to be more qualitative than quantitative.
- Even large organizations, public companies, and financial services organizations have a predominantly qualitative approach to risk assessment.
RISK IDENTIFICATION AND RISK ASSESSMENT PROCESSES
IMPACT OF COVID-19 ON RISK IDENTIFICATION AND ASSESSMENT

Organizations have learned a lot over the past year about risks and how to navigate them when they emerge and impact virtually all aspects of their enterprise. We wanted to assess whether the experience of navigating the COVID-19 pandemic might provide insights that influence the processes organizations use to identify and assess risks.

We asked two questions specific to this issue.

<table>
<thead>
<tr>
<th>How might COVID-19 impact risk identification and assessment?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent have lessons been learned in light of W-19 that might impact the organization's risk identification and assessment processes?</td>
<td>20%</td>
<td>20%</td>
<td>19%</td>
<td>12%</td>
<td>32%</td>
</tr>
<tr>
<td>To what extent will your organization increase its use of formalized scenario planning activities to anticipate future risks?</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
<td>20%</td>
<td>24%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- The experience of navigating the pandemic is providing insights to help organizations improve how they identify and assess risks on the horizon. But, generally, organizations do not appear to be making drastic changes to how they identify and assess risks.
- Not-for-profit organizations are more likely to be reassessing how they oversee risks affecting their organizations relative to other types of organizations.
RISK MONITORING PROCESSES

This section highlights benchmarking information related to techniques entities use to monitor risks over time.

We Suggest These Questions to Assess Your Organization’s Risk Monitoring Process:

1. What kinds of metrics does your organization use to keep an eye on emerging risk trends?
2. How frequently does the CRO (or other executives) communicate risk information to senior management?
3. How satisfied is senior management with the nature and frequency of risk reports received from the ERM function?
RISK MONITORING PROCESSES

USE OF KEY RISK INDICATORS

Most organizations track a number of key performance indicators (KPIs) that provide an historical lens on how the organization is performing. Management dashboards provide trend information about how KPIs are changing over time. In addition to KPIs, a number of organizations are also including additional metrics that provide a forward-looking, and often external, view of risks that may be emerging on the horizon. These are known as key risk indicators (KRIs), which are metrics that help management begin to identify trends that suggests risks may be emerging.

We asked respondents to describe the overall robustness of their organization's suite of key risk indicators.

![Percentage with "Mostly" to "Extensively" Robust Key Risk Indicators](chart)

**KEY INSIGHTS**

- There appears to be an opportunity for most organizations to improve the nature and type of key risk indicators included in their management dashboard systems. Across the full sample, only 30% report that they are "mostly satisfied" or "very satisfied" with their organization's KRIs.
- The majority of public companies are not satisfied with their organization's KRIs.
- Financial services organizations are most likely to have effective KRIs.
- The growing use of data analytics may provide opportunities for management to strengthen their management "dashboards" to include more information that helps track potential risks on the horizon.
RISK MONITORING PROCESSES

FREQUENCY OF RISK COMMUNICATIONS TO SENIOR EXECUTIVES

As chief risk officers and risk committees aggregate and discuss risk information generated by the entity's ERM process, they periodically elevate risk information to the senior executive team, particularly when risks are escalating at a rapid pace. To get a sense for the frequency of communications to senior executives, we asked respondents to indicate how often they communicate key risks to senior executives. Respondents could indicate more than one type of communication frequency.

### PERCENTAGE OF RESPONDENTS

<table>
<thead>
<tr>
<th>How are key risks communicated to senior executives?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ad hoc discussions at management meetings</td>
<td>38%</td>
<td>23%</td>
<td>23%</td>
<td>27%</td>
<td>40%</td>
</tr>
<tr>
<td>Scheduled agenda discussion at management meetings</td>
<td>26%</td>
<td>29%</td>
<td>27%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Monthly written risk report submitted by management</td>
<td>5%</td>
<td>5%</td>
<td>6%</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Quarterly written risk report submitted by management</td>
<td>17%</td>
<td>25%</td>
<td>27%</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>Annual written risk report submitted by management</td>
<td>14%</td>
<td>18%</td>
<td>17%</td>
<td>13%</td>
<td>16%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- Across the full sample, risk communications to senior management are most likely to be *ad hoc* and reported as part of other management meetings.
- Between one-quarter and one-third of organizations communicate risk information to senior executives as part of a scheduled agenda discussion at management meetings, which is typically occurring on a quarterly basis.
BOARD RISK OVERSIGHT STRUCTURE

This section highlights benchmarking information related to how the board of directors organizes its risk oversight processes.

We Suggest These Questions to Assess Your Board’s Risk Oversight Structure:

1. How does your board of directors manage its responsibility for risk oversight?
2. To what extent does your board of directors delegate risk oversight to a subcommittee? If they do, which committee is most likely to be responsible for risk oversight?
3. Do board committee charters formally describe responsibilities for risk oversight?
4. Has your organization established a formal policy on enterprise risk management?
BOARD RISK OVERSIGHT STRUCTURE

DELEGATION OF RISK OVERSIGHT

An entity’s board of directors has primary responsibility for overseeing management’s risk taking actions on behalf of shareholders. Ultimately, it is the board’s responsibility to ensure that management is not taking risks beyond the appetite of the entity’s key stakeholders. Board risk oversight is an important aspect of board governance.

A number of boards delegate their risk oversight responsibilities to others. We asked respondents to indicate whether their organization’s board of directors has delegated risk oversight to a board-level subcommittee.

<table>
<thead>
<tr>
<th>Percentage That Delegated Risk Oversight to a Board Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Sample</td>
</tr>
<tr>
<td>58%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- More often than not, boards of directors assign formal responsibility for overseeing management’s risk assessment and risk management process to a board committee.
- Delegation of risk oversight to a board subcommittee is most common among public companies.
BOARD RISK OVERSIGHT STRUCTURE

BOARD SUBCOMMITTEE WITH PRIMARY OVERSIGHT RESPONSIBILITY

We asked respondents of those organizations whose board of directors delegates responsibility to a subcommittee to indicate which committee is the recipient of that delegation. The table below summarizes the key findings.

<table>
<thead>
<tr>
<th>If board delegates formal responsibility of risk oversight to a subcommittee, which committee is responsible?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit committee</td>
<td>50%</td>
<td>62%</td>
<td>57%</td>
<td>38%</td>
<td>48%</td>
</tr>
<tr>
<td>Risk committee</td>
<td>32%</td>
<td>26%</td>
<td>39%</td>
<td>55%</td>
<td>15%</td>
</tr>
<tr>
<td>Executive committee</td>
<td>10%</td>
<td>4%</td>
<td>0%</td>
<td>4%</td>
<td>20%</td>
</tr>
<tr>
<td>Corporate governance committee</td>
<td>4%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
<td>3%</td>
<td>0%</td>
<td>0%</td>
<td>12%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- If the board delegates risk oversight responsibility to a board subcommittee, the audit committee most often is the recipient of that designation, except for financial services organizations.
- Financial services organizations are most likely to have a board level risk committee that is responsible for the board’s risk oversight.

We also asked whether the subcommittee with delegated risk oversight responsibility has explicitly noted that responsibility in the committee’s charter.

KEY INSIGHT

- Most board committees responsible for risk oversight explicitly describe that responsibility in the committee’s charter.
Some organizations issue formal policy statements articulating the organization’s approach to risk management. We asked respondents to indicate whether their organization has issued a formal policy regarding its enterprise-wide approach to risk management.

**KEY INSIGHTS**

- The presence of a formal risk management policy statement is mixed across organizations, with fewer than half of all organizations in our survey having such a statement.

- Financial services organizations, however, are noticeably more likely to have a formal risk management policy statement relative to other types of organizations.

- Not-for-profit organizations are least likely to have a formal risk management policy statement.
BOARD REPORTING AND MONITORING

This section highlights benchmarking information related to the nature and frequency of risk reporting to the board of directors and how the board uses risk information provided to it by management.

We Suggest These Questions to Assess Board Reporting and Monitoring Activities:

1. How frequently does management prepare formal risk reports for the board?
2. How many top risk exposures does management generally share with the board?
3. To what extent does the board consider risk information as part of the board’s engagement in strategic planning and oversight?
4. How are public disclosures of risks to external stakeholders changing over time?
BOARD REPORTING AND MONITORING

FORMAL REPORT ON TOP RISKS TO BOARD

A major responsibility of the board of directors is to oversee the nature of risk taking on the part of management. As part of their governance responsibilities, boards engage in discussion with management about risks on the horizon. While those discussions are ongoing with boards, we are especially interested in the nature and types of risk reporting by management to the board. We asked a series of questions to better understand the nature of risk reporting.

We asked respondents whether management provides a formal report describing the entity’s top risk exposures to a committee of the board of directors or the full board at least annually.

KEY INSIGHTS

• Management reporting to the board about top risks has been increasing over the past decade.

• Almost two-thirds of the full sample prepare a formal report on top risks to the board at least annually, with the percentage highest in 2020.

• The percentages of organizations providing a formal report of top risks to the board increased in 2020 for all types of organizations.

• Annual formal reporting of risks to the board is done in almost all public companies surveyed.

• Formal risk reporting to the board is least common for not-for-profit organizations.
**BOARD REPORTING AND MONITORING**

**FORMAL REPORT ON TOP RISKS TO BOARD**

For those that report top risks to the board at least annually we also asked respondents to indicate the frequency of that reporting.

<table>
<thead>
<tr>
<th>How often is the report of top risks reported to the board?</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>46%</td>
<td>50%</td>
<td>43%</td>
<td>30%</td>
<td>60%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>40%</td>
<td>41%</td>
<td>49%</td>
<td>57%</td>
<td>31%</td>
</tr>
<tr>
<td>At every meeting</td>
<td>14%</td>
<td>9%</td>
<td>8%</td>
<td>13%</td>
<td>9%</td>
</tr>
</tbody>
</table>

**KEY INSIGHTS**

- Generally the frequency of reporting top risk exposures to the board is somewhat similar for annual reporting and quarterly reporting for the full sample.
- Public companies and financial services organizations are more likely to report quarterly versus annually whereas not-for-profit organizations are more likely to report annually rather than quarterly.
- Almost 15% of organizations report top risk exposures to the board at every board meeting.
While management teams generally formally present a report of top risks to the board at least annually, we also wanted to get a sense for how often the board sets aside agenda time at a specific meeting of the board to talk about the top risk exposures. Most ERM processes engage management in an annual process to identify and prioritize the top risks. We are interested in understanding if the board explicitly focuses a meeting of the board on these top risks.

KEY INSIGHT
• The majority of boards set aside a specific meeting to discuss the aggregate report of top risk exposures facing the organization, particularly for public companies.
It is management’s responsibility to manage risks impacting an organization’s achievement of objectives. While the board does not need to be apprised of all the risks being tracked by management, generally boards prioritize their efforts on the most important risks. We asked respondents to indicate the number of risk exposures formally presented to the board.

### PERCENTAGE OF RESPONDENTS

<table>
<thead>
<tr>
<th>Percentage of organizations reporting the following number of risk exposures to the board of directors or one of its committees:</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 risks</td>
<td>30%</td>
<td>7%</td>
<td>2%</td>
<td>12%</td>
<td>33%</td>
</tr>
<tr>
<td>Between 5 and 9 risks</td>
<td>30%</td>
<td>27%</td>
<td>31%</td>
<td>35%</td>
<td>32%</td>
</tr>
<tr>
<td>Between 10 and 19 risks</td>
<td>29%</td>
<td>48%</td>
<td>50%</td>
<td>37%</td>
<td>27%</td>
</tr>
<tr>
<td>20 or more risks</td>
<td>11%</td>
<td>18%</td>
<td>17%</td>
<td>16%</td>
<td>8%</td>
</tr>
</tbody>
</table>

### KEY INSIGHTS

- There is noticeable variation in the number of top risk exposures reported to the board across different types of organizations.
- For the full sample, 60% of organizations report nine or fewer risks to the board; however 81% of public companies report between five and 19 risk exposures to the board.
- Reporting 20 or more risks to the board is least common.
BOARD REPORTING AND MONITORING
RISK DISCUSSIONS AS PART OF BOARD’S STRATEGY DISCUSSIONS

A primary objective of an ERM process is to help management and the board identify, assess, manage, and monitor risks that might impact the organization’s strategic success. Risk information should inform both management and the board on issues that might affect the success of that plan and it should also help them identify opportunities for increased risk taking.

We asked about the extent that the board formally discusses the top risk exposures facing the organization when the board discusses the organization’s strategic plan.

<table>
<thead>
<tr>
<th>Extent that top risk exposures are formally discussed by the Board of Directors when they discuss the organization’s strategic plan</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>14%</td>
<td>6%</td>
<td>4%</td>
<td>4%</td>
<td>16%</td>
</tr>
<tr>
<td>Minimally</td>
<td>23%</td>
<td>22%</td>
<td>20%</td>
<td>25%</td>
<td>23%</td>
</tr>
<tr>
<td>Combined</td>
<td>37%</td>
<td>28%</td>
<td>24%</td>
<td>29%</td>
<td>39%</td>
</tr>
</tbody>
</table>

KEY INSIGHTS

- The integration of risk information with discussion of the strategic plan is not occurring in about one-third of organizations.
- There may be opportunities to enhance the integration of risk information with strategic planning information for most organizations.
BOARD REPORTING AND MONITORING

IMPACT ON RISK FACTOR DISCLOSURES

Public companies are required by the United States Securities and Exchange Commission (SEC) to discuss the top risks facing the entity in its Item 1.A. of the Form 10-K filed with the SEC annually. An ERM process should inform management of the risks that should be included in the Form 10K disclosure. While other non-public organizations are not subject to similar requirements, there may be other pressures for more public disclosure about top risks to external stakeholders. We asked respondents to indicate the extent their organization's public risk disclosures have increased in the past five years.

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Full Sample</th>
<th>Largest Organizations (Revenues &gt;$1B)</th>
<th>Public Companies</th>
<th>Financial Services</th>
<th>Not-for-Profit Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To what extent has your organization's public disclosures of risk to external stakeholders increased in the past five years?</td>
<td>20%</td>
<td>31%</td>
<td>47%</td>
<td>36%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**KEY INSIGHTS**

- Organizations of all types are perceiving an increase in the public disclosure of risk information to external stakeholders.
- Public companies are especially increasing the extent of public disclosures of risk information to external parties.
CALLS TO ACTION

This report provides extensive benchmarking information that executives can use to assess the overall state of their organization's approach to risk oversight. While the findings in this study indicate some progress in how organizations are proactively managing risks on the horizon, many of the findings suggest boards of directors and senior executives may still need to engage in robust and honest assessments regarding their organization's current capabilities for managing the ever-changing landscape of risks on the horizon.

This final section highlights a number of calls to action executives can consider to strengthen their organization's approach to enterprise-wide risk management.

We Suggest These Questions to Assess Your Organization’s Overall Approach to Risk Management:

1. What about our organization’s approach to risk management is working well?
2. What aspects of our organization's approach need to be enhanced?
3. What are the top action-items for strengthening the integration of risk information into strategic decision making for our enterprise?
4. What should be tackled first?
IS THERE CONSENSUS ABOUT THE MOST SIGNIFICANT ENTERPRISE RISKS?

Many executives believe the uncertainties associated with the rapid pace of change in the global business environment is triggering an ever-evolving and expanding portfolio of risks on the horizon for most organizations. If executives fail to stay in constant dialogue about emerging risk issues, they may find themselves chasing after the wrong risks or they may actually be creating risks for other parts of the organization as they manage risks within their area of responsibility.

QUESTIONS TO CONSIDER

• To what extent is the senior executive team engaging in dialogue about the top enterprise-level risks and reaching consensus about those most critical to the organization?
• Is ownership and accountability for managing enterprise level risks clear to those involved?
• Does the senior executive team understand how the organization is responding to top risk exposures and are they confident those responsibilities are actually implemented and effective?
• How often is management engaging in robust discussion with the board of directors about the top risks and is there agreement between management and the board about the most critical risks to the organization?
CALLS TO ACTION

HOW IS THE OUTPUT FROM RISK MANAGEMENT USED IN STRATEGIC PLANNING?

Most executives understand the reality that the organization must be willing to take risks in order to generate higher returns. But unfortunately, our survey results find that only a small percentage of organizations view their risk management activities as providing important strategic value. Less than half of the organizations formally consider existing risk exposures when evaluating new possible strategic opportunities and less than one-fourth of the organizations have their boards of directors formally discuss risk exposures when they discuss the strategic plan.

QUESTIONS TO CONSIDER

- Why is the organizations’ risk management process failing to provide important strategic information about risks on the horizon?
- Is the current risk management process focused too heavily on operational or compliance issues?
- Are the top risks identified by the risk management process mapped to the most important strategic initiatives?
- To what extent is the risk management process prompting management to look outside the entity for external events that might trigger risks for the enterprise?
- Does the existing risk management process frame the task of identifying risks from the organization’s core value drivers and new strategic initiatives in the strategic plan?
- How frequently do risk management leaders and those leading the strategic planning process interact?
- Would most employees describe the organization’s risk management process as bureaucratic and non-value adding?

DOES MANAGEMENT HAVE ACCESS TO ROBUST KEY RISK INDICATORS?

Our survey results find that a relatively small percentage of organizations have a robust set of metrics included in their management dashboards to help them keep an eye on shifting risk conditions. Most organizations have a tremendous amount of key performance indicators (KPIs) to help them monitor the performance of the business. However, it is important to remember that KPIs are historical in nature and they tend to focus on things internal to the enterprise.

QUESTIONS TO CONSIDER

- To what extent does management have metrics that are forward looking and that are based on monitoring both internal and external trends?
- How would management know that one of its top risk concerns is escalating?
- What would the warning signs be?
- Who among the management team is monitoring those signals?
- Are there clear “trigger points” that signal when action must be taken?
- How easy would it be for executives to override pre-established trigger points?
CALLS TO ACTION

IS OUR ENTITY SUFFICIENTLY PREPARED TO MANAGE A SIGNIFICANT RISK EVENT?

The worst time for an organization to discover a lack of risk management preparedness is during the risk event itself. Unfortunately, there are a number of events impacting large, well-known organizations that seem to suggest that management was ill-prepared to navigate the risk event, causing tremendous brand and reputational harm. While a robust enterprise-wide risk management process cannot be expected to prevent all types of risks that might emerge, organizations that invest time and resources in engaging senior executives and boards in more robust risk management discussions and dialogue on an ongoing basis find that they are in a better position to deal with a significant risk event should one emerge.

QUESTIONS TO CONSIDER

• How confident are senior executives in their ability to navigate a significant risk event? What is the basis for that confidence?
• To what extent might management be “blindsided” by unexpected risk events? How vulnerable is the organization to blind-spots similar to those that led to other organizations’ risk management failures?
• Does management and the board have a detailed “playbook” of how they will respond should one of the organization’s top risk exposures emerge in a significant way?
• To what extent is the entity prepared to navigate a risk event that has gone viral over social medial platforms?
SUMMARY

These questions are just a sampling of the kinds of issues senior executives and boards of directors should consider as they evaluate the robustness of their entity's approach to managing a rapidly evolving portfolio of risks. Honest answers to the above will hopefully prompt objective assessment and discussion about the effectiveness of those processes. The time to strengthen an organization's risk management processes is before a significant event occurs. You may want to ask others in your organization to individually consider responses to these questions. To facilitate that, we have compiled the calls to action into a short questionnaire that is available in Appendix B of this report.

There are a number of barriers that inhibit progress in risk management improvements in organizations. Perceptions that investing in risk management is a competing priority relative to other organizational initiatives or perceptions that managing risks lacks value may signal a lack of understanding about how effective risk oversight may actually improve the organization's ability to proactively and resiliently navigate emerging risks.

There are a number of resources available to executives and boards to help them understand their responsibilities for risk oversight and effective tools and techniques to help them in those activities (see for example, the NC State ERM Initiative's web site and the AICPA's ERM web site). As expectations for more effective enterprise-wide risk oversight continue to unfold, it will be interesting to continue to track changes in risk oversight procedures over time.
APPENDIX A: OVERVIEW OF RESPONDENT DEMOGRAPHICS

This is the twelfth year we have conducted this study to identify trends across a number of organizations related to their enterprise risk management (ERM) processes. This study was conducted by research faculty who lead the Enterprise Risk Management Initiative (the ERM Initiative) in the Poole College of Management at North Carolina State University (for more information about the ERM Initiative please see http://www.erm.ncsu.edu). The research was conducted in conjunction with the American Institute of Certified Public Accountants’ (AICPA) Management Accounting - Business, Industry, and Government Team. Data was collected during the fall of 2020 through an online survey instrument sent to members of the AICPA’s Business and Industry group who serve in chief financial officer or equivalent senior executive positions. In total, we received 420 fully completed surveys. This report summarizes our findings.

DESCRIPTION OF RESPONDENTS

Respondents completed an online survey consisting of over 40 questions that sought information about various aspects of risk oversight within their organizations. Most of those questions have been the same across all twelve editions of the surveys that we have conducted each year from 2009 - 2020. This approach provides us an opportunity to observe any shifts in trends in light of more recent developments surrounding board and senior executive's roles in risk oversight.

Because the completion of the survey was voluntary, there is some potential for bias if those choosing to respond differ significantly from those who did not respond. Our study’s results may be limited to the extent that such bias exists. Furthermore, there is a high concentration of respondents representing financial reporting roles. Possibly, there are others leading the risk management effort within their organizations whose views are not captured in the responses we received. Despite these limitations, we believe the results reported herein provide useful insights about the current level of risk oversight maturity and sophistication and highlight many challenges associated with strengthening risk oversight in many different types of organizations.

A variety of executives participated in our survey, with 21% of respondents having the title of chief financial officer (CFO), 17% serving as chief risk officer (CRO), 13% as controller, and 9% leading internal audit, with the remainder representing numerous other executive positions.

The respondents represent a broad range of industries. Consistent with our prior year survey, the four most common industries responding to this year’s survey were finance, insurance, and real estate (26%), followed by not-for-profit (28%), manufacturing (12%), and services (12%). The mix of industries is generally consistent with the mix in our previous reports.

The respondents represent a variety of sizes of organizations. As shown in the table on the next page, 36% of organizations have revenues $100 million or lower while 34% have revenues over $1 billion. So, there is nice variation in organization size in our sample. Almost all (88%) of the organizations are based in the United States.

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1 Throughout this report we have rounded the reported percentages to the nearest full percent for ease of discussion.
## APPENDIX A: OVERVIEW OF RESPONDENT DEMOGRAPHICS

Throughout this report, we highlight selected findings that are notably different for the 130 largest organizations in our sample, which represent those with revenues greater than $1 billion. Additionally, we also provide selected findings for the 113 publicly traded companies, 108 financial services entities, and 116 not-for-profit organizations included in our sample.

<table>
<thead>
<tr>
<th>RANGE OF REVENUES IN MOST RECENT FISCAL YEAR</th>
<th>PERCENTAGE OF RESPONDENTS²</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 &lt; x &lt; $10 million</td>
<td>14%</td>
</tr>
<tr>
<td>$10 million &lt; x &lt; $100 million</td>
<td>22%</td>
</tr>
<tr>
<td>$100 million &lt; x &lt; $500 million</td>
<td>17%</td>
</tr>
<tr>
<td>$500 million &lt; x &lt; $1 billion</td>
<td>13%</td>
</tr>
<tr>
<td>$1 billion &lt; x &lt; $2 billion</td>
<td>7%</td>
</tr>
<tr>
<td>$2 billion &lt; x &lt; $10 billion</td>
<td>15%</td>
</tr>
<tr>
<td>x &gt; $10 billion</td>
<td>12%</td>
</tr>
</tbody>
</table>

² Thirty-one of the 420 respondents did not provide information about revenues. The data reported in this table reflects the percentages based on the 389 that provided revenue information.
APPENDIX B: TEMPLATE OF QUESTIONS TO CONSIDER

Consider having several members of management or the board of directors individually answer the following questions. Ask them to think about the organization’s enterprise-wide approach to risk management as they answer each question. Then, have them meet to discuss differences in answers to facilitate a conversation about the effectiveness of the organization’s approach to risk oversight.

<table>
<thead>
<tr>
<th>Does the organization’s risk management process mostly focus on pockets or silos of risks impacting particular business functions or operations without leading to a top-down, holistic view of the entity’s most critical risks impacting its strategic objectives?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the coordination and implementation of risk management activities across the organization mostly ad hoc or informal?</td>
</tr>
<tr>
<td>Does the organization’s risk management process help executives and boards see related risks emerging across different silos of the business that might snowball into bigger, enterprise-wide issues?</td>
</tr>
<tr>
<td>Does the existing risk management process tend to focus on already known risks mostly linked to internal operations and compliance issues?</td>
</tr>
<tr>
<td>Would most employees describe the organization’s risk management process as bureaucratic and non-value adding?</td>
</tr>
<tr>
<td>Is that process effective in prompting management to think outside the status quo to pinpoint unknown, but knowable risks?</td>
</tr>
<tr>
<td>Does the senior executive team engage in dialogue about the top enterprise-level risks and reaching consensus about those most critical to the organization?</td>
</tr>
<tr>
<td>Is ownership and accountability for managing enterprise level risks clear to those involved?</td>
</tr>
<tr>
<td>Does the senior executive team understand how the organization is responding to top risk exposures and are they confident those responses are actually implemented and effective?</td>
</tr>
<tr>
<td>Does the board of directors engage in robust discussion about the top risks and is there agreement between management and the board about the most critical risks to the organization?</td>
</tr>
<tr>
<td>Is the organizations’ risk management process providing important strategic information about risks on the horizon?</td>
</tr>
<tr>
<td>Is the current risk management process focused too heavily on operational or compliance issues?</td>
</tr>
<tr>
<td>Are the top risks identified by the risk management process mapped to the most important strategic initiatives?</td>
</tr>
<tr>
<td>Does the risk management process prompt management to look outside the entity for external events that might trigger risks for the enterprise?</td>
</tr>
<tr>
<td>Does the existing risk management process frame the task of identifying risks from the organization’s core value drivers and new strategic initiatives in the strategic plan?</td>
</tr>
<tr>
<td>Do risk management leaders and those leading the strategic planning process interact frequently?</td>
</tr>
<tr>
<td>Does management have metrics that provide forward looking insights about emerging risks that are based on both internal and external trends?</td>
</tr>
<tr>
<td>Does management’s dashboard include data to help them know that one of the entity’s top risk concerns is escalating?</td>
</tr>
<tr>
<td>Are key members of management assigned responsibility for monitoring those emerging risk signals?</td>
</tr>
<tr>
<td>Are there clear emerging risk “trigger points” that signal when action must be taken?</td>
</tr>
<tr>
<td>Can pre-established risk limits or risk trigger points be easily overridden by executives?</td>
</tr>
<tr>
<td>Are senior executives adequately prepared to navigate a significant risk event?</td>
</tr>
<tr>
<td>Does management have “blindspots” that are keeping them from recognizing vulnerabilities that would lead to significant risk events for the organization?</td>
</tr>
<tr>
<td>Does management and the board have a detailed “playbook” of how they will respond should one of the organization’s top risk exposures emerge in a significant way?</td>
</tr>
<tr>
<td>Is the organization adequately prepared to navigate a risk event that has gone viral overnight over social media platforms?</td>
</tr>
<tr>
<td>Does the board challenge senior management by asking probing questions about competence, internal controls, incentives, labor relations, regulations, sustainability and other related issues and trends?</td>
</tr>
<tr>
<td>Does management have a process in place to assess risk proactively as significant changes, such as entering new markets, disruptive innovations, regulatory, economic/geopolitical shifts, and other events occur?</td>
</tr>
<tr>
<td>Does the entity design the ERM process to proactively address emerging significant risk areas (i.e. sustainability)?</td>
</tr>
</tbody>
</table>
AUTHOR BIOS

All three authors serve in leadership positions within the Enterprise Risk Management (ERM) Initiative at NC State University (http://www.erm.ncsu.edu) The ERM Initiative provides thought leadership about ERM practices and their integration with strategy and corporate governance. Faculty in the ERM Initiative frequently work with boards of directors and senior management teams helping them link ERM to strategy and governance.

Mark S. Beasley, CPA, Ph.D., is KPMG Professor and Director of the ERM Initiative at NC State University. He specializes in the study of enterprise risk management, corporate governance, financial statement fraud, and the financial reporting process. He completed over seven years of service as a board member of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and has served on other national-level task forces related to risk management issues. Currently, he is a member of the United Nation's Internal Control Advisory Group. He consults with boards and senior executive teams on risk governance issues, is a frequent speaker at national and international levels, and has published over 100 articles, research monographs, books, and other thought-related publications. He earned his Ph.D. at Michigan State University.

Bruce C. Branson, Ph.D., is an Alumni Distinguished Professor of Accounting and Associate Director of the ERM Initiative in the Poole College of Management at NC State University. His teaching and research is focused on enterprise risk management and financial reporting, and includes an interest in the use of derivative securities and other hedging strategies for risk reduction/risk sharing. He also has examined the use of various forecasting and simulation tools to form expectations used in financial statement audits and in earnings forecasting research. He earned his Ph.D. at Florida State University.

Bonnie V. Hancock, M.S., is the Executive Director of the ERM Initiative at NC State University where she also teaches graduate and undergraduate courses in the Poole College of Management. Her background includes various executive positions at Progress Energy where she has served as president of Progress Fuels (a Progress Energy subsidiary with more than $1 billion in assets), senior vice president of finance and information technology, vice president of strategy and vice president of accounting and controller. She currently serves on the board of directors of AgFirst Farm Credit Bank where she has chaired the risk policy, credit and governance committees. Previously, she served on the board of the Office of Mortgage Settlement Oversight and Powell Industries, a publicly traded company based in Houston, Texas.

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