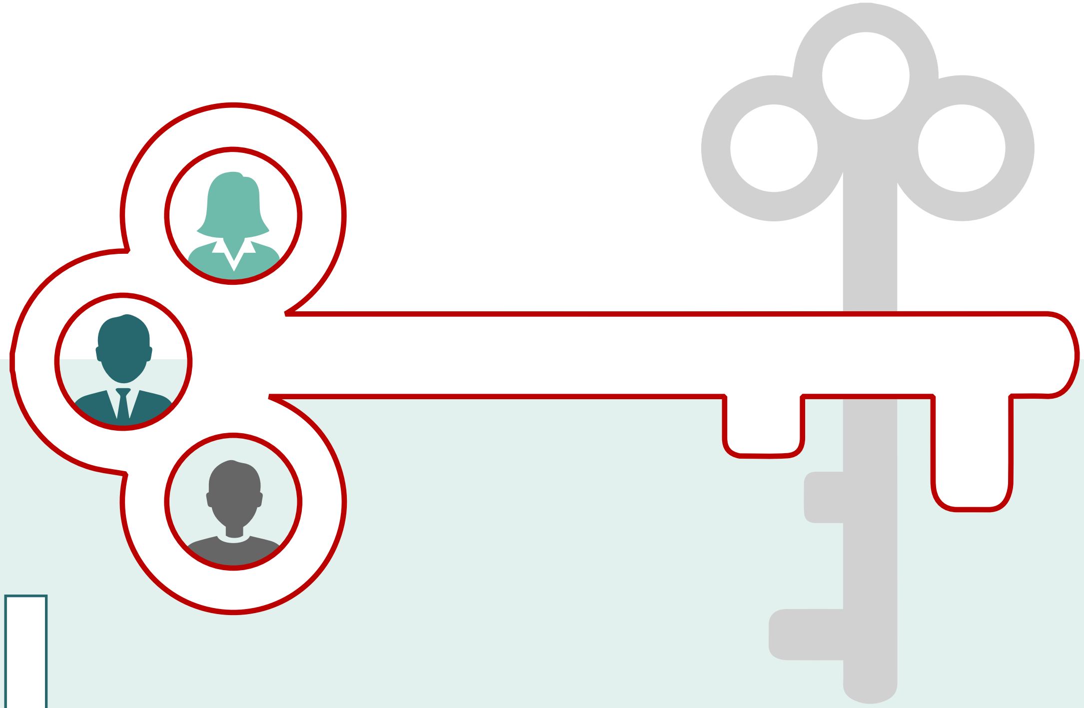
The **RISK INSTITUTE**

Enterprise Risk, Insurance, Capital Management



FIFTH ANNUAL SURVEY *on Integrated Risk Management*

THE OHIO STATE UNIVERSITY
FISHER COLLEGE OF BUSINESS

SPRING 2019

About The Risk Institute

The Risk Institute operates at the intersection of risk research and risk management practice. Focused on an integrated, interdisciplinary approach to risk management, the conversation about risk starts here. Collaboration between academia and practice equips risk practitioners with leading-edge strategies to leverage risk into value.

The RISK INSTITUTE
Enterprise Risk, Insurance, Capital Management

Rooted in
RESEARCH
Dedicated to
EDUCATION
Committed to
COLLABORATION

Founding members of The Risk Institute are recognized for their extensive expertise in enterprise risk management.

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THE CONVERSATION ABOUT RISK *starts here.*

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The Evolution of

Risk Management into Corporate Structure

The Risk Institute Fifth Annual Survey on Integrated Risk Management highlights results proving that risk management efforts over the last year in U.S. firms continue to evolve. More firms are centralizing their risk management functions. This work needs to continue in order to help firms recognize risk management as a tool to create value.

ORGANIZATIONAL STRUCTURE AND TONE AT THE TOP

Financial firms are more likely than nonfinancial firms to recognize risk management as a tool to create value across the firm, mostly in a fully integrated approach.
40 percent of nonfinancial firms outsource a part of their risk management function.

INTEGRATION OF RISK MANAGEMENT INTO DECISION MAKING

Firms indicated that integrating risk management into business processes allowed them to improve business results.

The Evolution of Risk Management into Corporate Structure (continued)

SCOPE OF RISK MANAGEMENT

Legal/Compliance is the business unit with the highest involvement in identification, qualitative or quantitative measurement, and management of major risks impacting the firm.

RISK MANAGEMENT PROCESS

A large percentage of firms not only maintain minimum cash holdings as a precautionary measure, but also take extensive steps to limit sales-at-risk or cash-flow-at-risk.

HUMAN RESOURCES VIEW OF RISK MANAGEMENT

In almost one third of firms, the risk management team does not reach out to human resources sufficiently.

About

The Research

The fifth annual survey* by The Risk Institute at The Ohio State University Fisher College of Business was conducted to further our understanding of how U.S. companies view the role of risk management in their firms, how they structure their risk management functions, and how they integrate risk management in business decisions. Additionally, this year we sought to understand how governance and culture influence the firm's risk management.

The survey is comprised of 18 questions (some with multiple parts) that focus on five key areas:

- **PART A** Organizational Structure and Tone at the Top
- **PART B** Integration of Risk Management into Decision Making
- **PART C** Scope of Risk Management
- **PART D** Risk Management Process
- **PART E** Human Resources View of Risk Management

**This survey was administered by RTI Research and was conducted during Q4 of 2018.*

There are many nuanced interpretations of the terms 'risk management' and 'risk integration.' Therefore, we asked participants to keep the following definitions in mind while completing the survey.

Risk management

In this survey, risk management is a broadly defined concept that deals with the management of various risks to the firm. Considerations include, but are not necessarily limited to: risks entailed in strategy, quality, compliance, regulatory requirements, financial, logistics/supply chain and legal aspects.

Risk integration

Risk integration is the firm's recognition of risks faced by the firm and how they are incorporated into the decision-making process at the functional level.

This report is based on survey responses from 505 senior executives from U.S. firms. Figure 1 reports the industry distribution for the responding firms.

FIG. 1 The final sample of respondents by total revenue

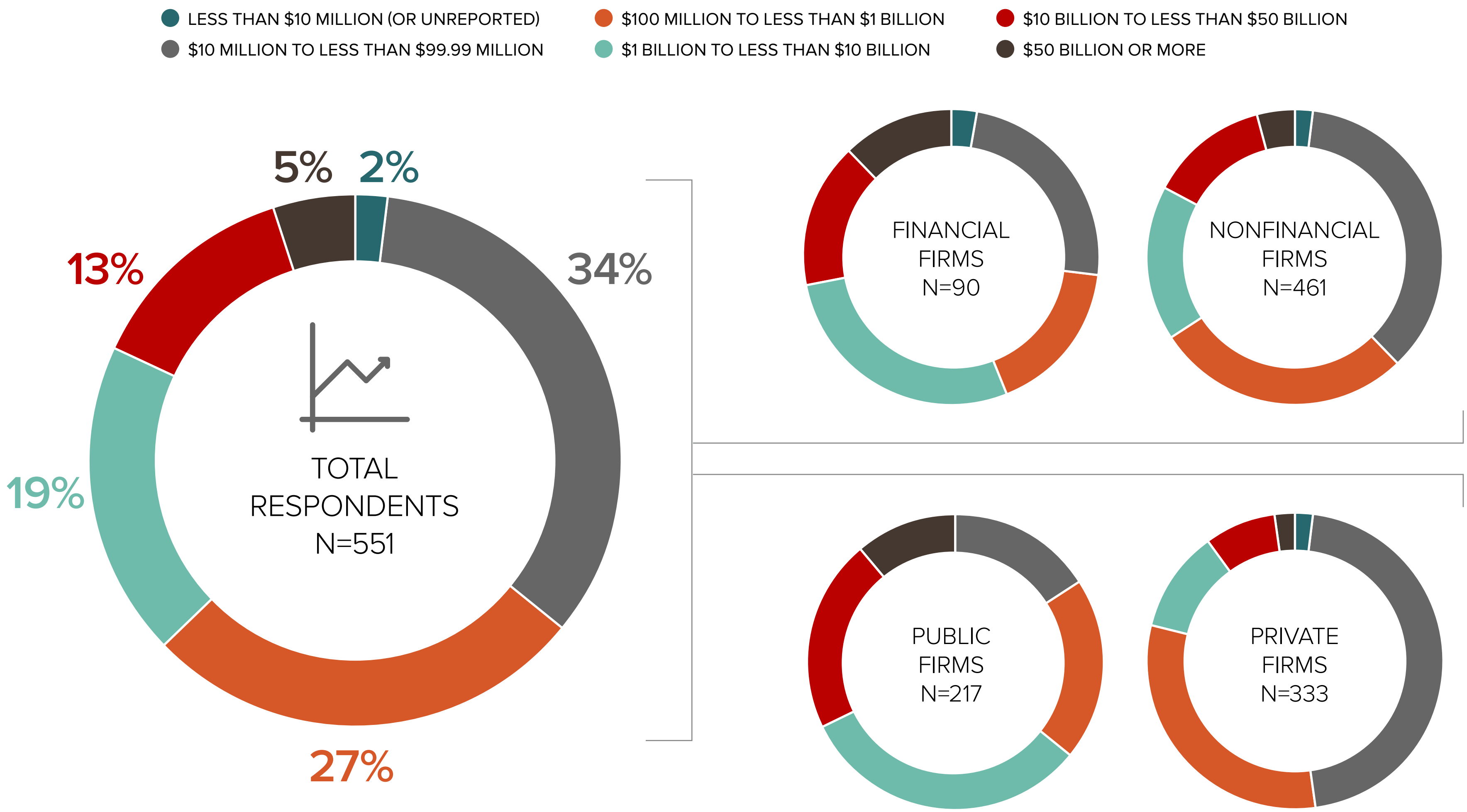
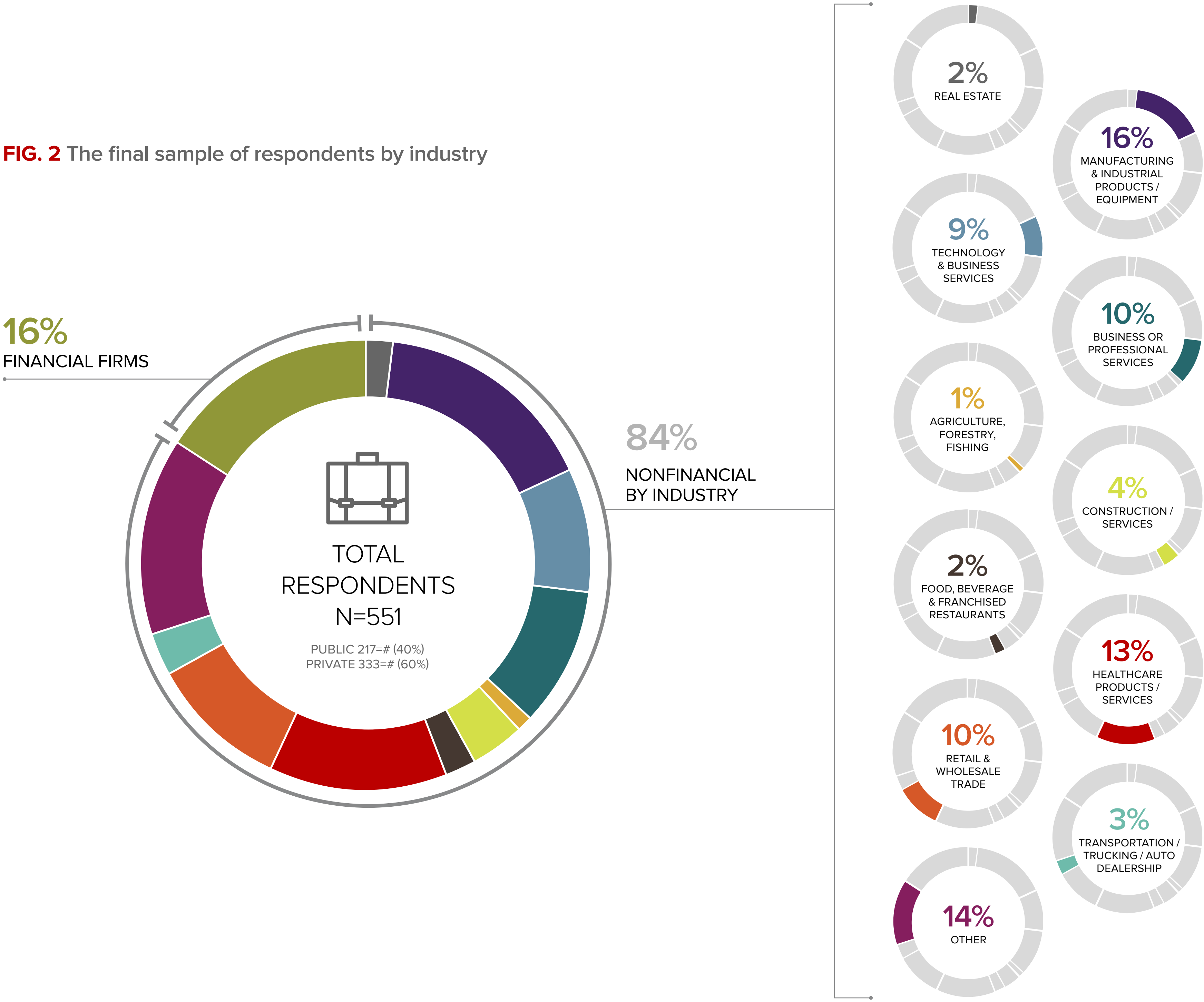


FIG. 2 The final sample of respondents by industry



Executive
Summary

Risk management policies are playing an increasingly integral role in a firm's ability to create value and remain competitive. Volatility in the current economic environment, economic nationalism, and continuously increasing cyber risk lead to a more vulnerable business environment, making the role of risk management more integral. Over the past few years, firms have been discovering that using a comprehensive and integrated risk management approach, which leverages collaboration across business functions, increases their ability to achieve corporate objectives and enhance shareholder value.

One of the key objectives of The Risk Institute is to create a greater understanding of how organizations can proactively leverage risk management to create shareholder value. Given the varied roles that risk management plays in different organizations, the objective in our fifth annual survey on integrated risk management was to gather opinions of leadership from financial and nonfinancial industries as well as public and private firms about:

- **How risk management's role is viewed in their organization;**
- **How, if at all, risk management is integrated into business decisions;**
- **How risk management as a function is organized in the firm;**
- **And, this year, how human resources interact with risk management.**

We surveyed risk executives from 551 firms, out of which 36 percent have total revenue less than 100 million and 18 percent have total revenue more than 10 billion, spanning a wide range of firms in terms of size and revenue. Out of these surveyed firms, 16 percent are financial firms and 40 percent are public firms. Business, Professional and Technology Services (19 percent), Manufacturing and Industrial Products/ Equipment (16 percent), Healthcare Products and Services (13 percent), and Retail & Wholesale Trade (10 percent) are the industries that are represented the most among nonfinancial firms. Responses lead to some interesting findings.

How is risk management evolving and being integrated in business decision making?

The structure of the risk management function continues to evolve. ***Over the past few years, financial firms and public firms have stabilized at 80-90 percent of them allocating a corporate function to risk management practices.*** Moreover, the fraction of nonfinancial firms and private firms that dedicate a corporate function to risk management has reached to 70 and 63 percent, respectively. Another good news is that 30 percent of these nonfinancial firms and private firms are planning to further increase the size of their risk management departments over the next year. ***We also asked whether firms outsource their risk-management function and find that 39 percent of respondents outsource it, with this ratio being higher for nonfinancial firms (40 percent) than for financial firms (32 percent).***

Following the trend from last year, the Chief Executive Officer (CEO) is again the executive in charge of risk management in 27 percent of firms overall, followed by Chief Financial Officer (CFO) in 16 percent of firms overall. The Chief Risk Officer (CRO) is in charge of risk management only in 11 percent of nonfinancial firms but in 32 percent of financial firms. Although many more firms now have a CRO directly reporting to the CEO, ***these results could be evidence for firms' centralizing their risk management function and further integrating risk management with financial decisions.*** Consistent with this interpretation, 56 percent of our respondents this year claimed that they have moved towards centralizing their risk management function, with this ratio being higher for public firms (63 percent).

The "Tone at the Top" also reflects this evolution of risk management.

Most firms still utilize risk management to protect their firms against negative outcomes, with only some recognizing it as a tool that can also create value. Compared to nonfinancial firms, financial firms are far more likely (24 percent) to recognize and emphasize risk management as a tool to create value across the firm in a fully integrated approach. ***Overall, more than half of firms see risk management as a reactive or defensive strategy. Instead, firms should recognize it as a tool to enhance the creation of value.***

Almost half of the surveyed firms have increased their risk management support and focus over the last year by allocating additional funds to both external and internal resources. Interestingly, again this year, no firm has decreased their dollar resources. ***The most important catalysts for their increased efforts have been external factors such as regulatory requirements and/or a general increase in the volatility of the business environment.*** The most important internal factor is the recognition of risk management as a tool for growth and value, but only with 17 percent overall.

Do firms integrate risk management into decision making?

Firms are selectively integrating risk management in business decision making and are experiencing improved business outcomes as a result. Firms indicate that their risk management functions recognize almost all key business processes in the firm, but to varying degrees. ***The leading business processes influenced by risk management functions are compliance, strategic planning, quality control, operational business planning & management, and audit planning.***

Incorporation of risks in the analysis of the business processes also changes risk management of the firm itself. In both financial and nonfinancial firms, over 30 percent of respondents identified compliance and strategic planning as the top practices, where this feedback happens.

When survey participants were asked if integration of risk management into business process improved results, about one third of the executives noted that they experienced exceptional improvement in the area of compliance and, also, in the quality control of nonfinancial firms. Both financial firms and nonfinancial firms indicated that they are able to improve corporate objectives when they integrate risk management into business processes.

How does human resources interact with risk management?

Respondents indicated that, in about half of our firms, HR is at least moderately involved in the enterprise risk management activity planning and execution, with this ratio being higher in financial firms (54 percent) and public firms (59 percent). When we asked why risk management is not more involved into the HR function, over 40 percent of respondents indicated that HR has other priorities that prevent them from focusing on risk management. And almost 30 percent of participants responded that the risk-management team does not reach out to human resources sufficiently. These responses show that many firms still fall behind in understanding the value of and establishing a framework for enterprise-level risk management.

Lastly, we asked about the effect of baby boomers retiring on the businesses. ***Almost all of the surveyed firms will be somewhat impacted by baby boomers retiring, with this fraction reaching to 64 percent for public firms. Customer Service, Information Technology, and Finance are the functions that will get affected the most.***

What do the results mean for The Risk Institute?

The Risk Institute is dedicated to bringing together leading academic scholars and practitioners to advance the adoption of leading risk management strategies. With this goal in mind, the survey results (which yield insights about overall corporate culture, how firms structure their risk management functions, and how they integrate risk management in business processes), also raised a number of questions. For example, would outsourcing risk management functions create new types of risks (e.g., third party risk, cyber risk, and human-resources-related risks) for firms? How will baby boomers retiring affect the workforce? Most importantly, how can we better educate firms to recognize risk management as a tool to create value? And how does centralizing the risk management function contribute to this value creation?

We look forward to continuing our conversation about risk management with you in the future as we work to provide insights into these questions through new areas of research, translations of completed academic research for practical business applications, and educational programs for business professionals, undergraduate, and graduate level students. Through these dialogues, we can collectively advance our knowledge of risk management and influence adoption of leading risk management practices.

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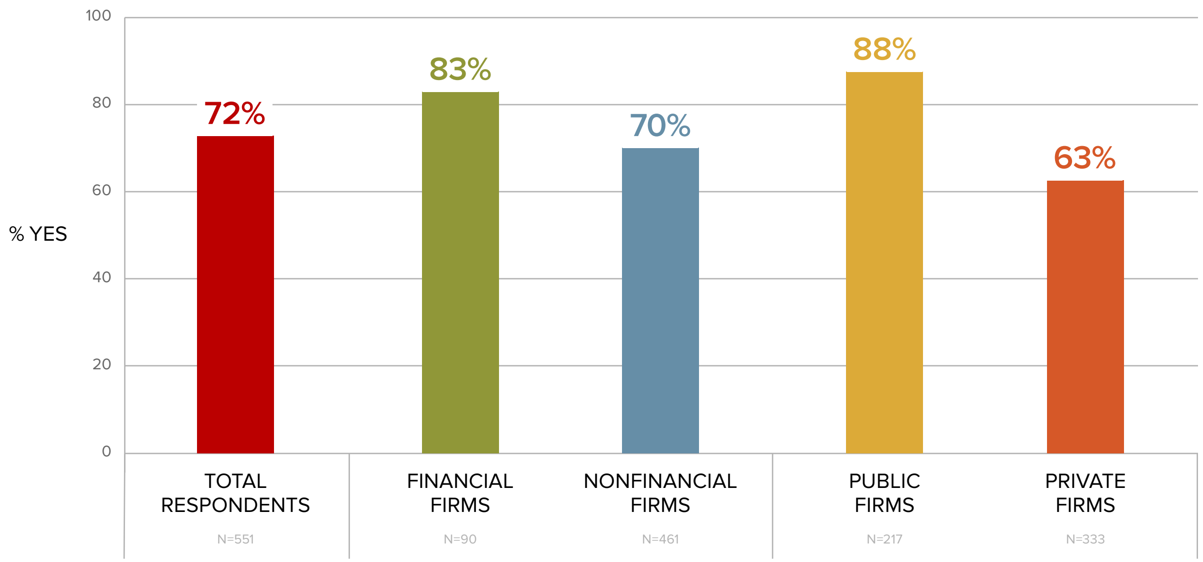
PART A:

Organizational Structure and Tone at the Top

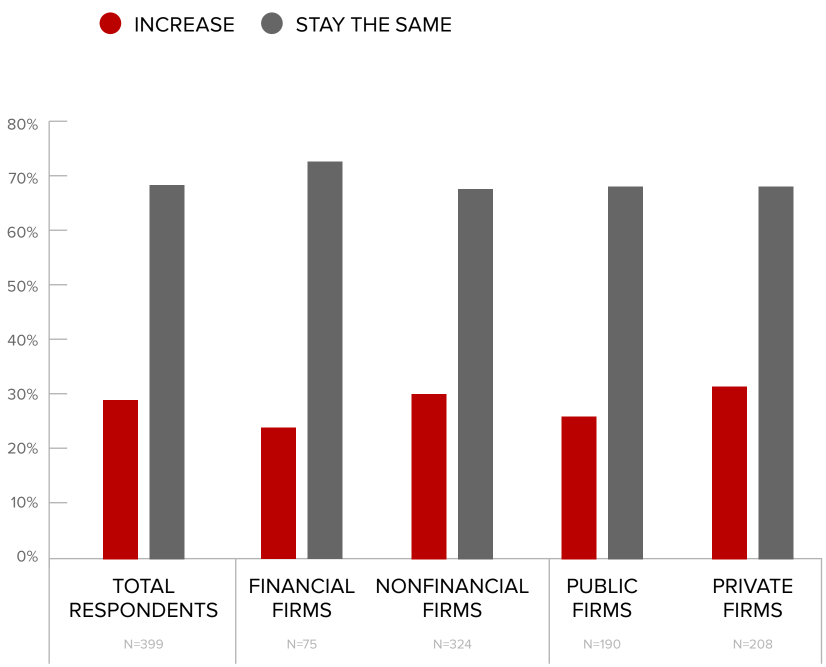
The fifth edition of our study has identified that a majority of firms sampled (72 percent) have a corporate unit that is primarily responsible for risk management. Overall, we see that past few years' steady increase in the percentage of nonfinancial firms and private firms having a corporate unit responsible for risk management continues. However, **financial firms and public firms have stabilized with 80-90 percent of them reporting a corporate unit responsible for risk management.**

FIG. 3 Firm Has a Corporate Unit Primarily Responsible for Risk Management



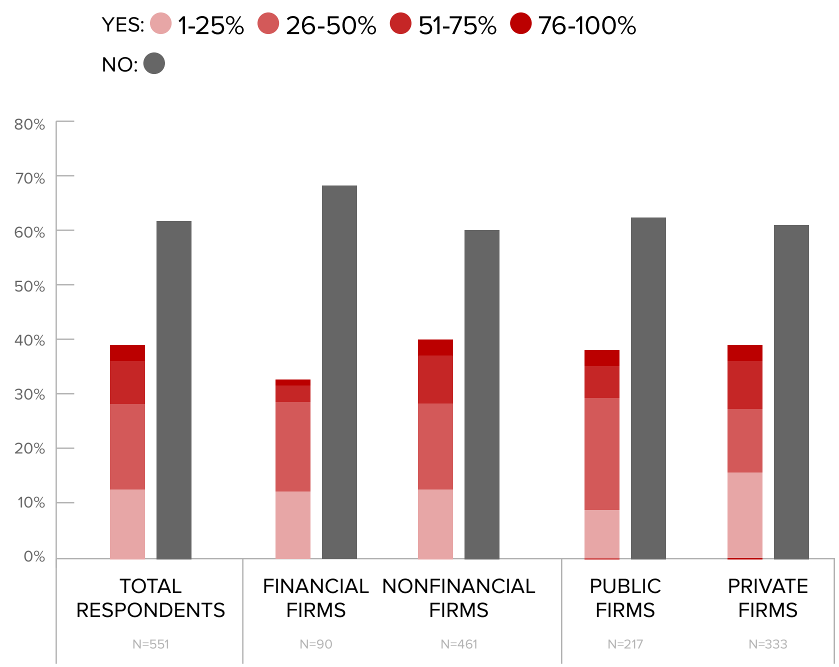
83 percent of financial firms reported having a function that is primarily responsible for risk management. It drops to 70 percent in nonfinancial firms. Almost all public firms (88 percent), likely due to regulation and disclosure requirements, allocate a corporate function to risk-management practices. However, only 63 percent of private firms, likely due to their size constraints, dedicate a corporate function to risk management. These ratios have increased, though, from last year for nonfinancial firms (from 65% to 70%) and for private firms (from 60% to 63%).

FIG. 4 Change in Size of the Risk Department – Next 12 Months



Compared with the last year, firms' plans for increasing the size of their risk management departments have risen, with 29 percent of firms planning for an increase compared with last year's 18 percent. This result is due to a jump in the ratio of nonfinancial firms and private firms (from about 20 percent to 30 percent for both) that are planning to increase their corporate risk management unit. **For financial firms, after multiple years of post-crisis expansion, sizes of risk departments appeared to have reached a target size, as this is the second year in a row that 73 percent of them plan to keep the size of their risk department the same over the next year.**

FIG. 5 Firms Outsourcing Risk-Management Functions

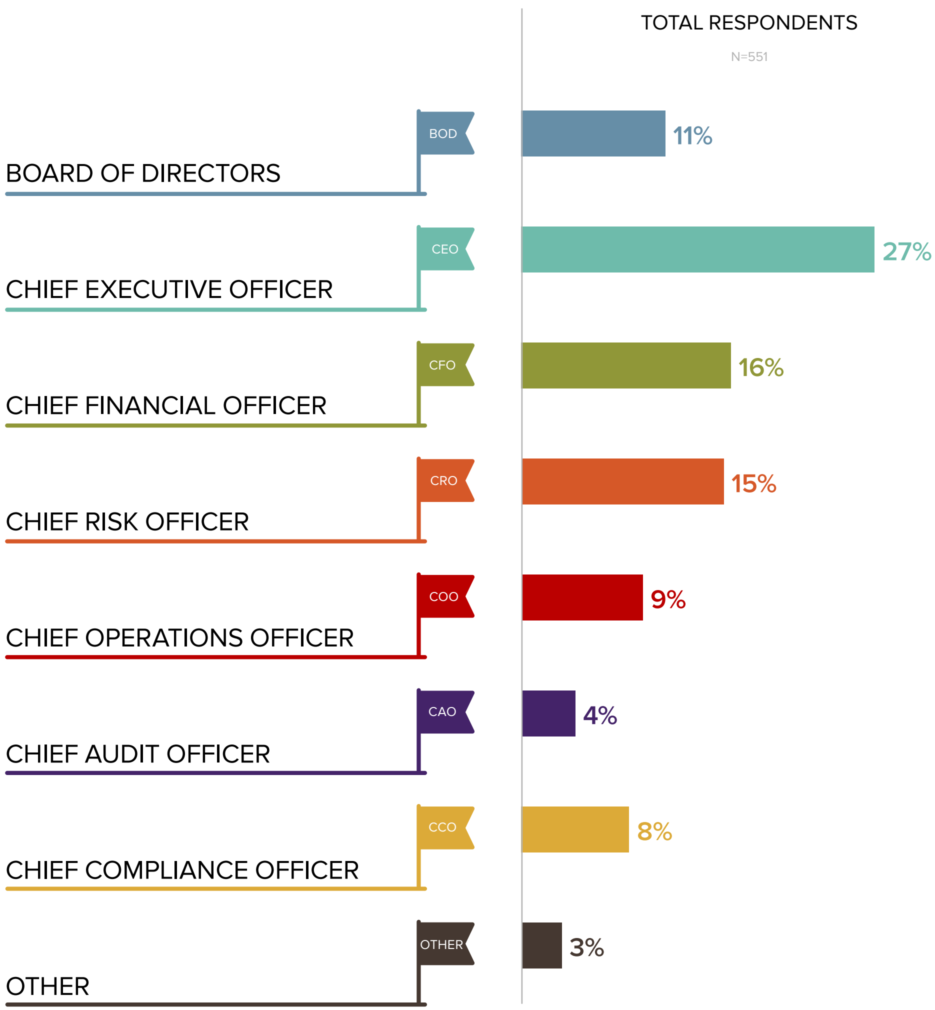


This year we continued asking our sample firms whether they outsource their risk-management functions and, if they do, what percentage of the function they outsource. **We identified that 39 percent of all firms outsource their risk management function, with this ratio significantly higher (40 percent) for nonfinancial firms than (32 percent) for financial firms.** Same as last year, there is no difference in outsourcing of their risk management functions for public and private firms.

1 *Leading Risk Management*

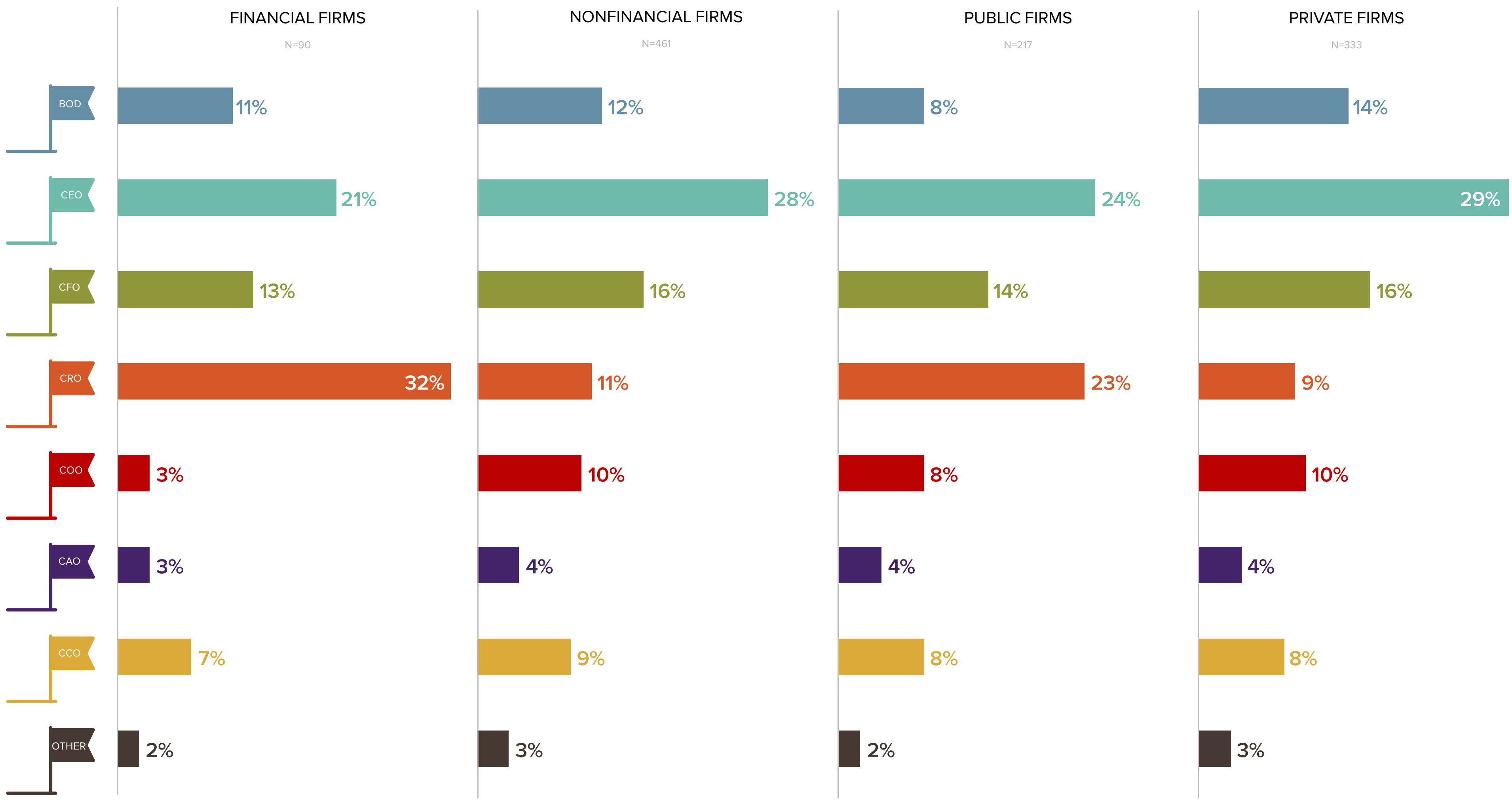
Variation in the level of senior leadership having responsibility for the risk management function has been reported. Following the trend of the last few years, the Chief Executive Officer (CEO) tends to be the executive in charge of risk management. In the current survey, respondents indicate that the **CEO is the executive in charge in 27 percent of all firms,** followed by Chief Financial Officer (CFO) in 16 percent of firms overall. These ratios are consistent with firms' efforts in centralizing the risk management function and integrating it with financial decisions. **While this ratio is consistent in financial firms, the difference comes from the CRO, being in charge in 32 percent of financial firms and in only 11 percent of nonfinancial firms.** In public firms, CEO and CRO share risk management responsibility with 24 percent and 23 percent, respectively, while the CEO leads it with 29 percent in private firms.

FIG. 6 Executives in Charge of Risk Management



NOTE: Other includes division/business unit leaders and "other" category

FIG. 6 Executives in Charge of Risk Management (continued)



NOTE: Other includes division/business unit leaders and "other" category

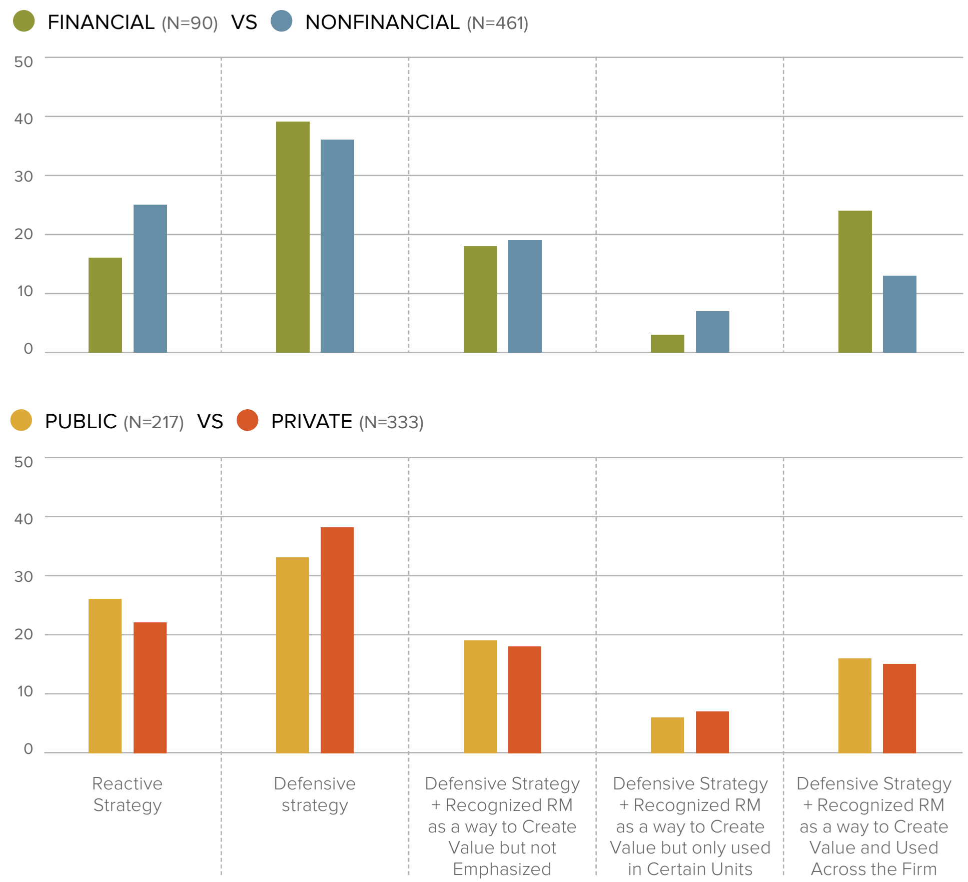
2 *Tone at the Top*

When asked what best describes the 'Tone at the Top' regarding risk management at their company, only 23 percent of respondents, overall, report that it is a *reactive* strategy, defined as "reflecting a necessity for meeting mandated requirements." Most firms overall report a *defensive* strategy, defined as "being used to protect against negative outcomes," with some also recognizing it as a tool to create value. However, **in nonfinancial firms, only about 13 percent of respondents recognize risk management as a value-creation tool used across the firm in a fully integrated way.** This ratio increases to 24 percent in financial firms. Differences between respondents in public and private firms are not that significant.

Overall, approximately 60 percent of respondents see risk management as a purely reactive or purely defensive strategy. The *tone at the top* regarding risk management, for especially nonfinancial firms, should shift more towards recognizing risk management as a tool to create value across the firm.

> *Reactive strategy*
>
> *Reflecting a necessity for meeting mandated requirements.*
>
> *Defensive strategy*
>
> *Being used to protect against negative outcomes; a tool to create value.*

FIG. 7 The "Tone at the Top" regarding Risk Management (RM)



3 *Risk Management Efforts*

Almost half of the surveyed firms have increased their risk management efforts over the last year by allocating additional funds to both external *and* internal resources. This ratio is larger for financial firms, with 54 percent, than for nonfinancial firms, with 45 percent. However, we note that the steady increase in financial firms over the past few years has slowed down with the percentage of firms that have increased their efforts declining from 64 percent last year to 54 percent this year. The ratio is similar for public firms (48 percent) and private firms (45 percent). The remaining firms kept their risk management efforts constant, rather than decreasing them.

The most important catalysts for their increased effort have been **external factors** such as regulatory requirements (with 23 percent) and/or the general increase in the volatility of the business environment (with 22 percent). Regulatory requirements are significantly more important for financial firms, with 43 percent ranking it as the most important factor. This finding is expected, given the extensive focus on regulatory requirements within the financial sector. For nonfinancial firms, an increase in the volatility of the business environment plays the most important role (with 22 percent).

The most important **internal factor** is the recognition of risk management as a tool for growth and to create value (with 17 percent). Availability of better risk management tools (with 10 percent) follows.

FIG. 8 How Risk Management Efforts Have Changed Over the Last Year

	TOTAL RESPONDENTS N=551	FINANCIAL FIRMS N=90	NONFINANCIAL FIRMS N=461	PUBLIC FIRMS N=217	PRIVATE FIRMS N=333
INCREASED	**46%**	**54%**	**45%**	**48%**	**45%**

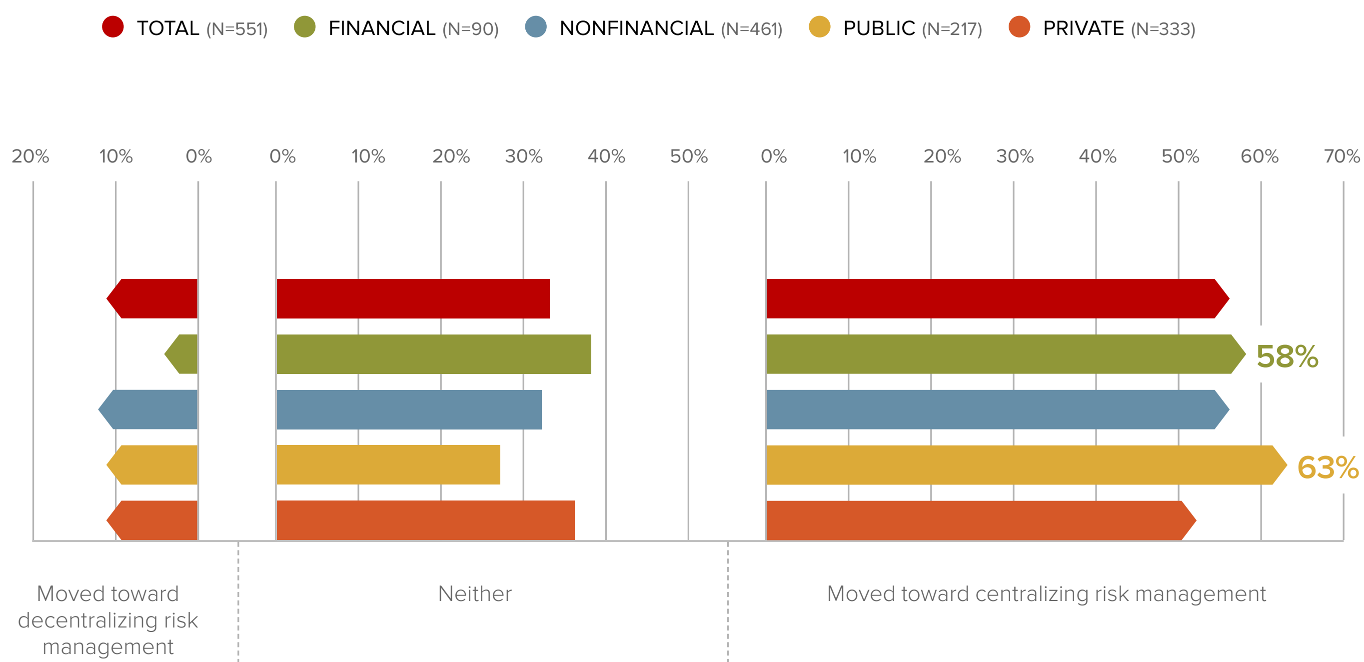
FIG. 9 Catalysts Ranked 1st for Increased Emphasis on Risk Management

	TOTAL RESPONDENTS N=244	FINANCIAL FIRMS N=70	NONFINANCIAL FIRMS N=174	PUBLIC FIRMS N=91	PRIVATE FIRMS N=153
EXTERNAL FACTORS (NET)	**61%**	**63%**	**61%**	**57%**	**64%**
A catastrophic incident	8	4	8	7	8
The general increase in volatility of business environment	22	20	22	19	24
Shareholder pressures	4	4	4	5	4
Regulatory requirements	23	33	20	24	22
Customer pressure	5	2	6	3	7
INTERNAL FACTORS (NET)	**36%**	**33%**	**36%**	**38%**	**34%**
Change in leadership	9	6	9	9	9
Recognition of risk management as a tool for growth and/or to create value	17	18	17	18	17
Availability of better risk management tools	10	8	10	11	9
Other	3	4	3	5	1

4 *Organizing Risk Management*

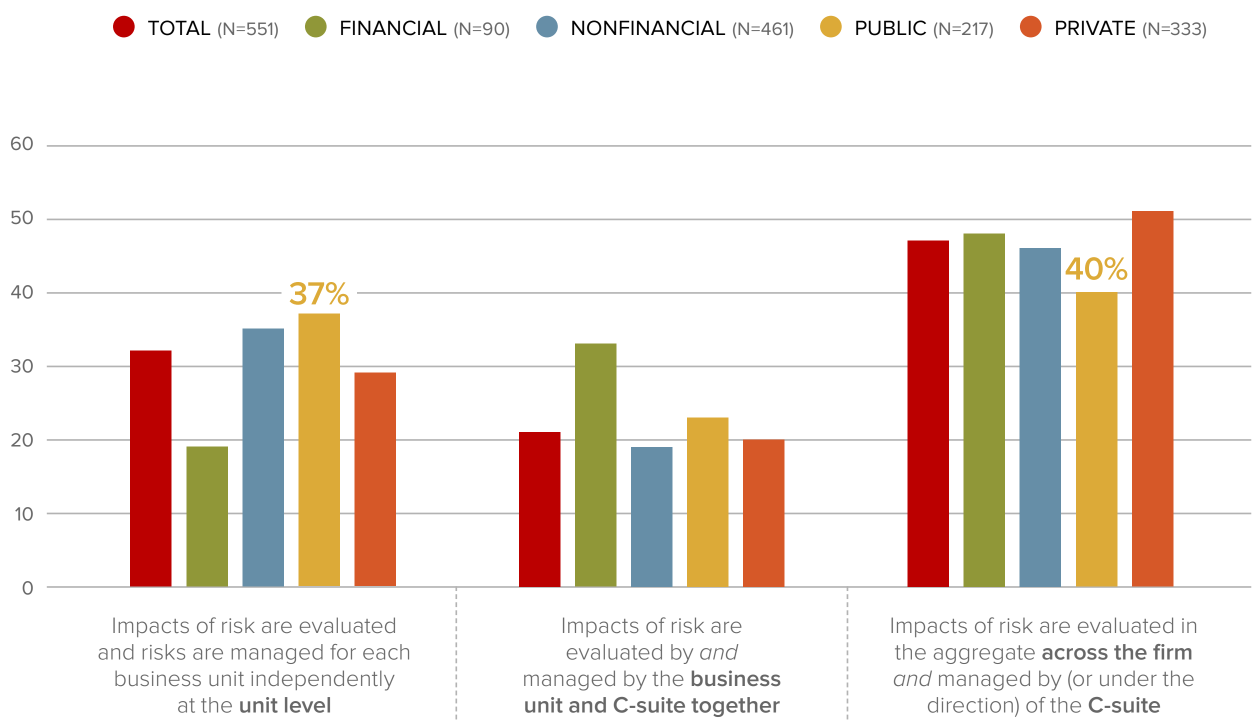
More than half of the firms in our sample have made the decision to move toward centralization of the risk management function. For example, 63 percent of public companies and 58 percent of financial firms have made this decision. **Given the increasing complexity of the risks that both financial and nonfinancial firms face, a move toward centralization makes sense from a strategic viewpoint.**

FIG. 10 Firms Centralizing / Decentralizing Risk Management



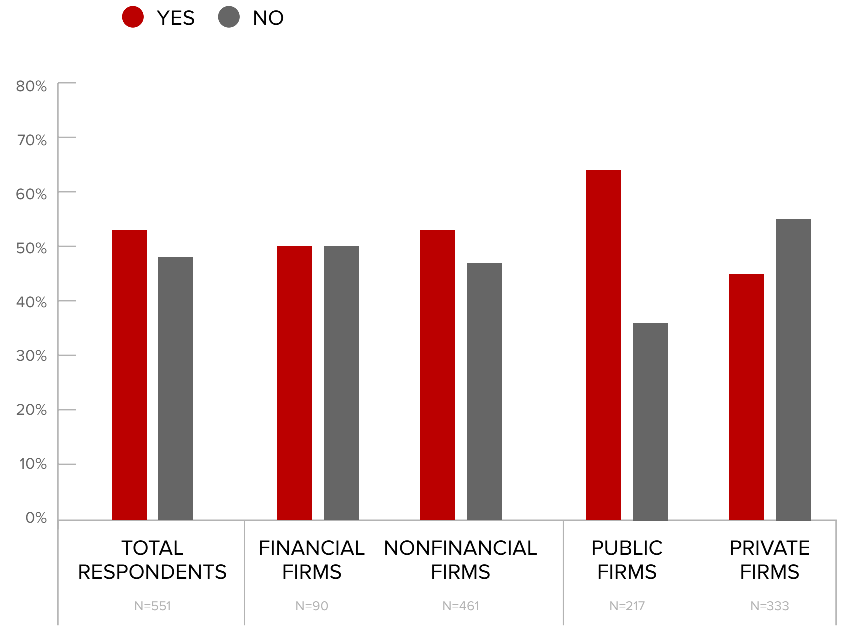
About half of our respondents indicated that the evaluation of the impacts of risks are done in aggregate across the firm are managed by (or are under the direction of) the C-suite. In public firms, however, business units seem to be as influential in managing risks (with 37 percent) as the C-suite (with 40 percent).

FIG. 11 How Risks in Different Units are Evaluated and Managed



This year, we again asked whether firms have a process in place for measuring value added by the risk management function. 53 percent of firms responded "yes," and there was no difference between financial firms and nonfinancial firms. In public and private firms, the difference was noticeable, with 64 percent "yes" and 45 percent "yes," respectively. These results confirm our earlier conclusion that nonfinancial and/or private firms have significant room for improvement on their risk management practices.

FIG. 12 Process in Place For Measuring Value Added by Risk Management Function



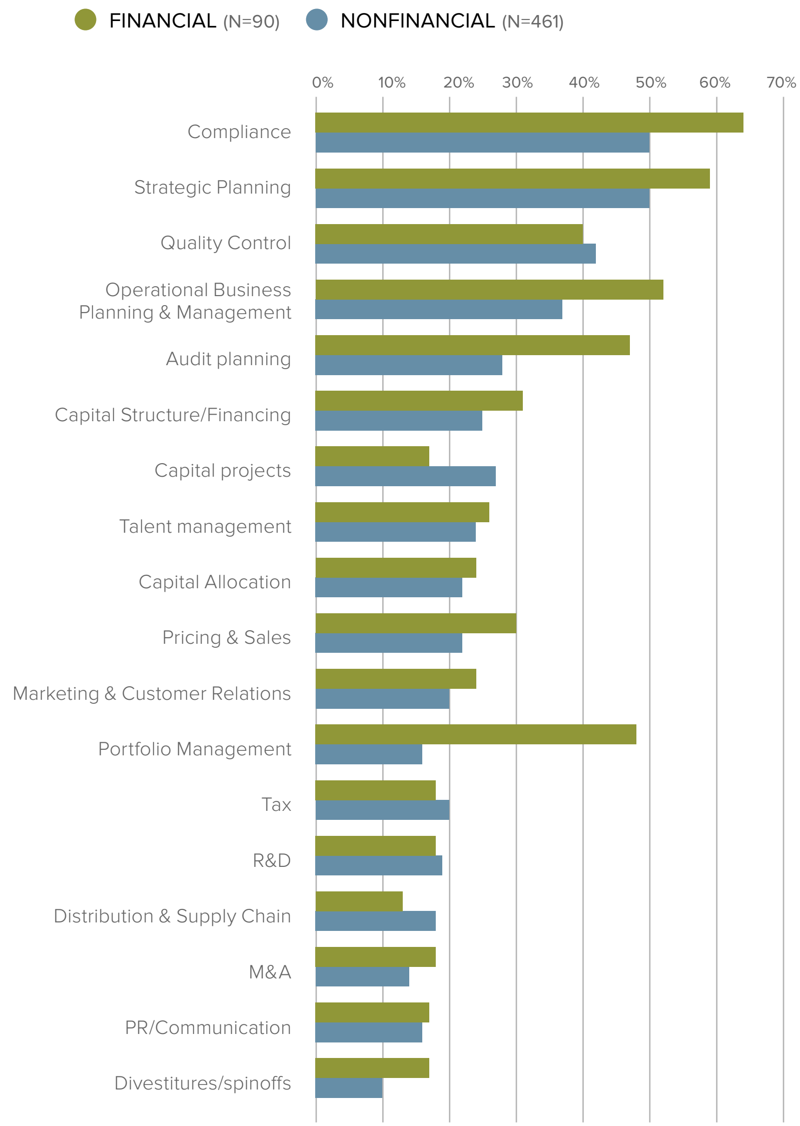
PART B:
Integration of Risk Management into Decision-Making

Survey participants were asked how risk management was integrated into various business processes, specifically how:

1. Risk management influences process
2. Risk management of firm is changed by process
3. Risk management improves business process

Most firms reported that the leading five business processes influenced by risk management are: Compliance, Strategic Planning, Quality Control, Operational Business Planning & Management and Audit Planning. Portfolio Management has high risk management recognition in financial firms (with 48 percent), while it is much less influenced relatively, than by risk management in nonfinancial firms (with 16 percent). Lower-ranked units in business process recognition of risk management are also different in financial and nonfinancial firms. For example, Capital Projects has a higher ranking in being influenced by risk management in nonfinancial firms, while Pricing and Sales units have a relatively higher ranking in financial firms.

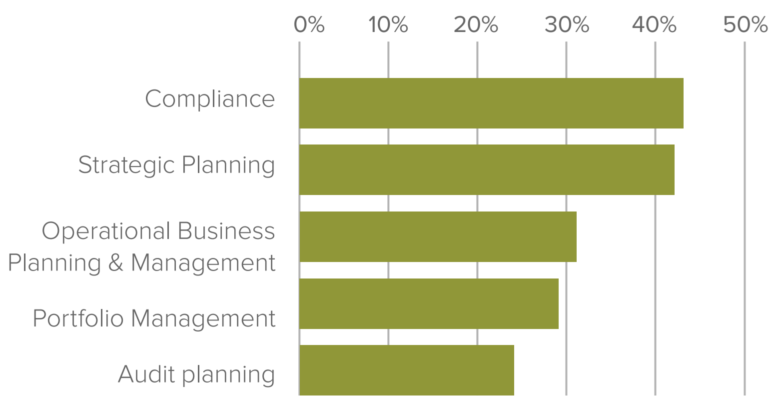
FIG. 13 Business Processes Influenced by Firm's Risk Management



a *Financial Firms*

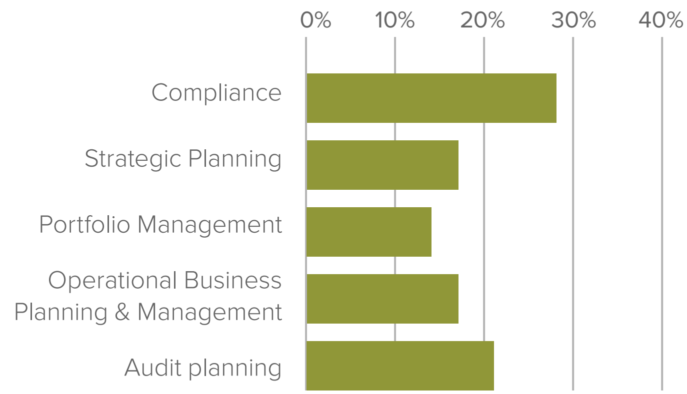
In business processes where risk management is incorporated, we see significant feedback into risk management. In financial firms, 43 percent of the respondents identified Compliance as the top practices where this feedback happens. Strategic Planning, Operational Business Planning & Management, Portfolio Management, and Audit Planning follow in effective feedback into risk management of the firm itself.

FIG. 14 Business Practices for which the Incorporation for Risk in the Analysis of the Business Process Changes Risk Management of the Firm Itself



When asked if integration of risk management into these business processes improved results, 28 percent of the executives of financial firms noted that they experienced exceptional results in Compliance.

FIG. 15 Exceptional Improvement in the Business Results for which Firm Integrates Risk Management



Integrating risk management
protects your customers, your clients and your brand.

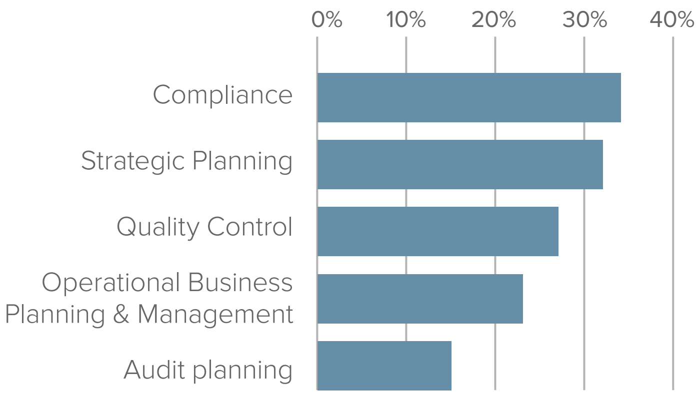
Firms also indicated that when they **integrated Risk Management** into business processes they are able to **improve business results.** About 24 percent of financial firms reported an "exceptional improvement" in their ability to meet regulatory and compliance requirements when they integrated risk management to improve achieving corporate objectives. 21 percent of the surveyed financial firms also reported exceptional improvement in avoiding operating losses or litigation and protecting customers and clients.

FIG. 16 Impact of Integration of Risk Management on Business Processes: Exceptional Improvement

b *Nonfinancial Firms*

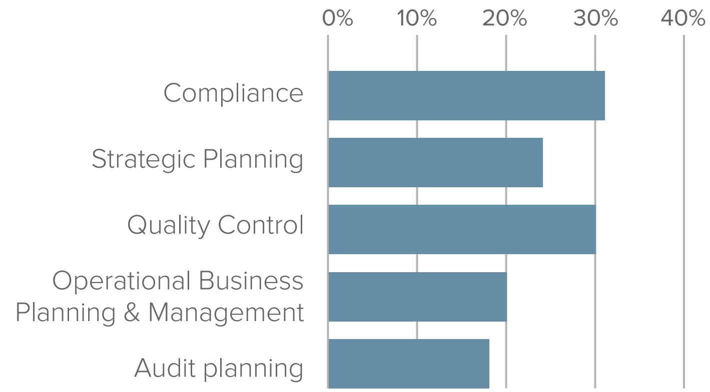
In nonfinancial firms, over 30 percent of respondents identified ‘Compliance’ and ‘Strategic Planning’ as the top practices where the feedback into risk management happens. ‘Quality Control’ and ‘Operational Business Planning & Management’ follow in effective feedback into risk management of the firm itself. However, compared with financial firms (with, for example, 43 percent for Compliance and 42 percent for Strategic Planning), there is significant room for improvement for nonfinancial firms.

FIG. 17 Business Practices for which the Incorporation of Risk in the Analysis of the Business Process Changes Risk Management of the Firm Itself



When asked if integration of risk management into these business process improved results, more than 20 percent of the executives noted that they experienced exceptional improvement in the Quality Control, Strategic Planning, and Compliance.

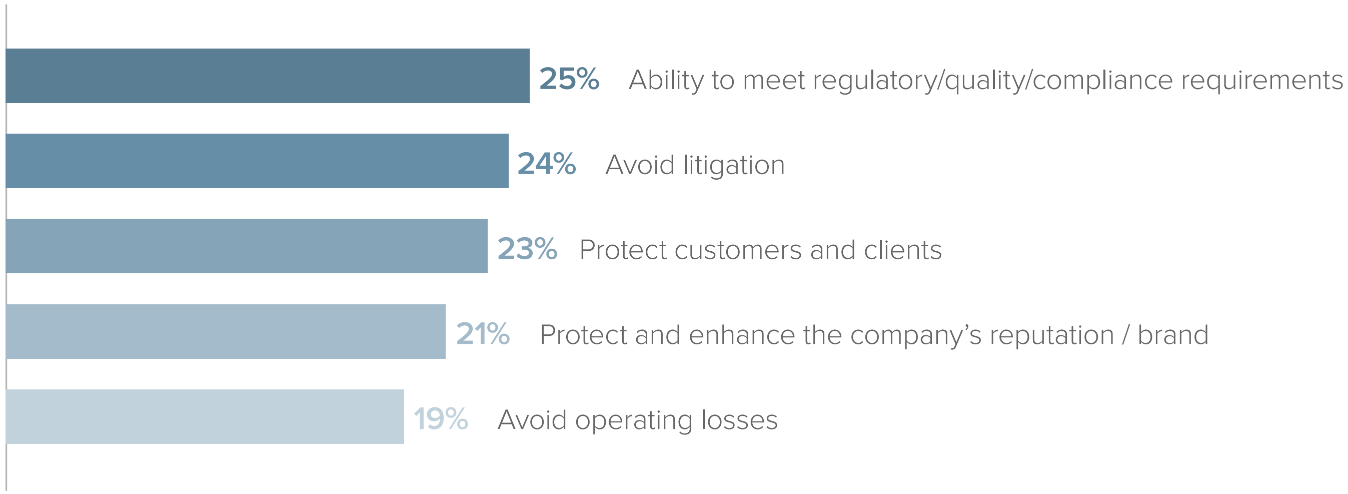
FIG. 18 Exceptional Improvement in the Business Results for which Firm Integrates Risk Management



Integrating risk management improves corporate objectives.

Firms also indicated that when they **integrated Risk Management** into business process they are able to **improve business results.** Nonfinancial firms reported 'ability to meet regulatory/quality/compliance requirements' (with 25 percent), 'avoiding litigation' (with 24 percent), and 'protecting customers' (with 23 percent) as having exceptional improvement. Also, survey results indicated that 'protecting and enhancing the company's reputation/brand' stands out, with 21 percent of nonfinancial firms reporting exceptional improvement. These results are consistent with most firms viewing risk management as a defensive strategy.

FIG. 19 Impact of Integration of Risk Management on Business Processes: Exceptional Improvement



PART C:

Scope of Risk Management

We asked how involved various business functions are in the following Risk Management processes:

- Risk Identification
- Qualitative or Quantitative Measurement
- Management of Major Risks Impacting the Firm

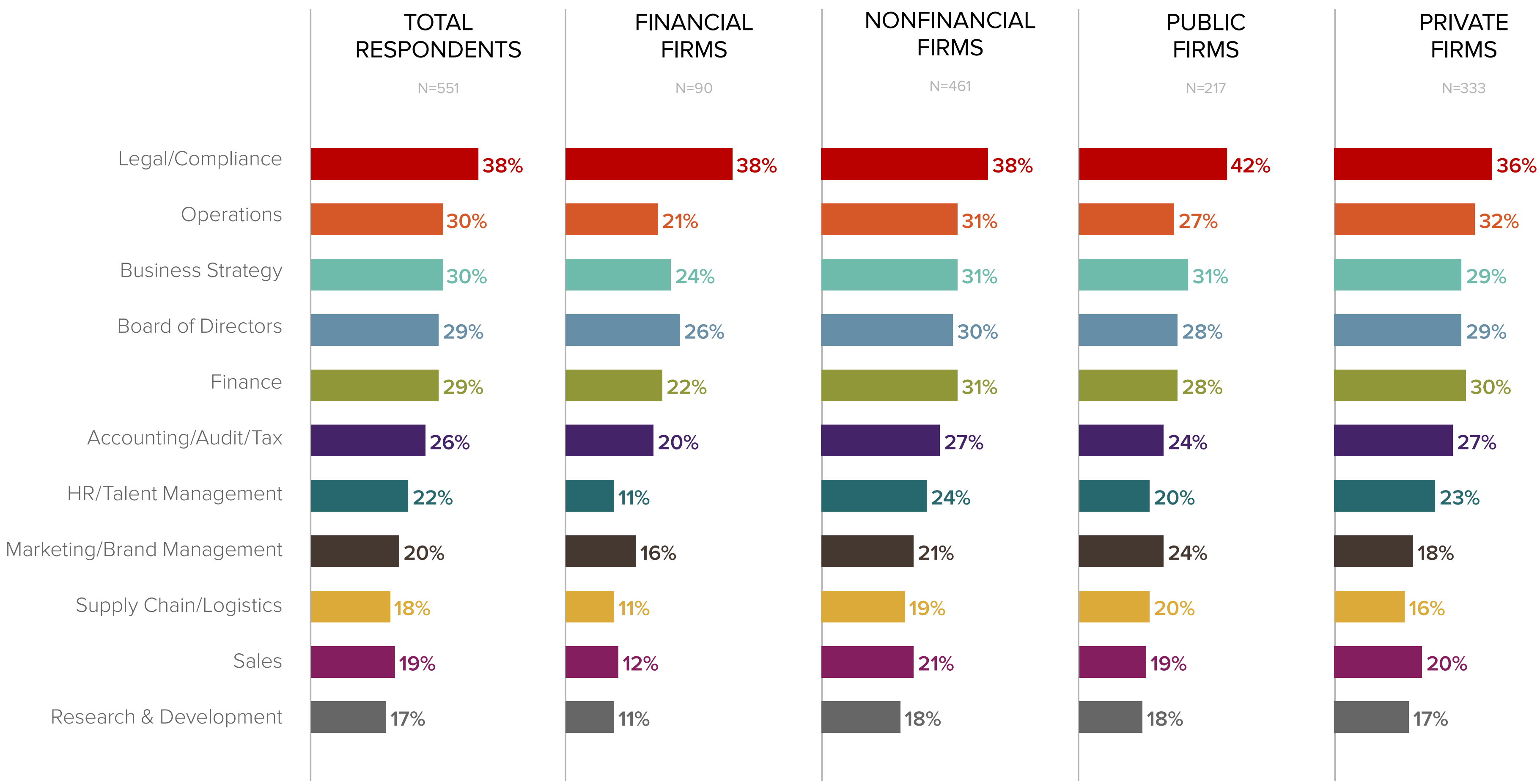
1 *Risk Identification*

Within Risk Identification, survey respondents reported highest involvement by the following units:

- Legal Compliance (38 percent of respondents)
- Operations and Business Strategy (30 percent of respondents each)
- Board of Directors and Finance (29 percent of respondents each)
- Accounting/Tax/Audit (26 percent of respondents)

Although percentages of respondents indicating highest involvement differ for financial vs. nonfinancial firms or public vs. private firms, rankings of units in terms of being very involved in the identification of major risks are similar. **In both financial and nonfinancial firms, Legal/Compliance is the top-ranked unit, with 38 percent.** However, second ranked is board of directors (with 26 percent) in financial firms, while it is Operations, Business Strategy, or Finance (with 31 percent each) in nonfinancial firms. There is also a significant difference in HR/Talent Management unit's involvement in the identification of major risks between financial firms (with 11 percent) and nonfinancial firms (with 24 percent). **Legal/Compliance is the top unit in both public and private firms followed by Business Strategy in public firms (with 31 percent) and by Operations in private firms (with 32 percent).**

FIG. 20 Functions/Units *Very Involved* in the Identification of Major Risks Impacting Firms



2 *Qualitative or Quantitative Measurement of Risk*

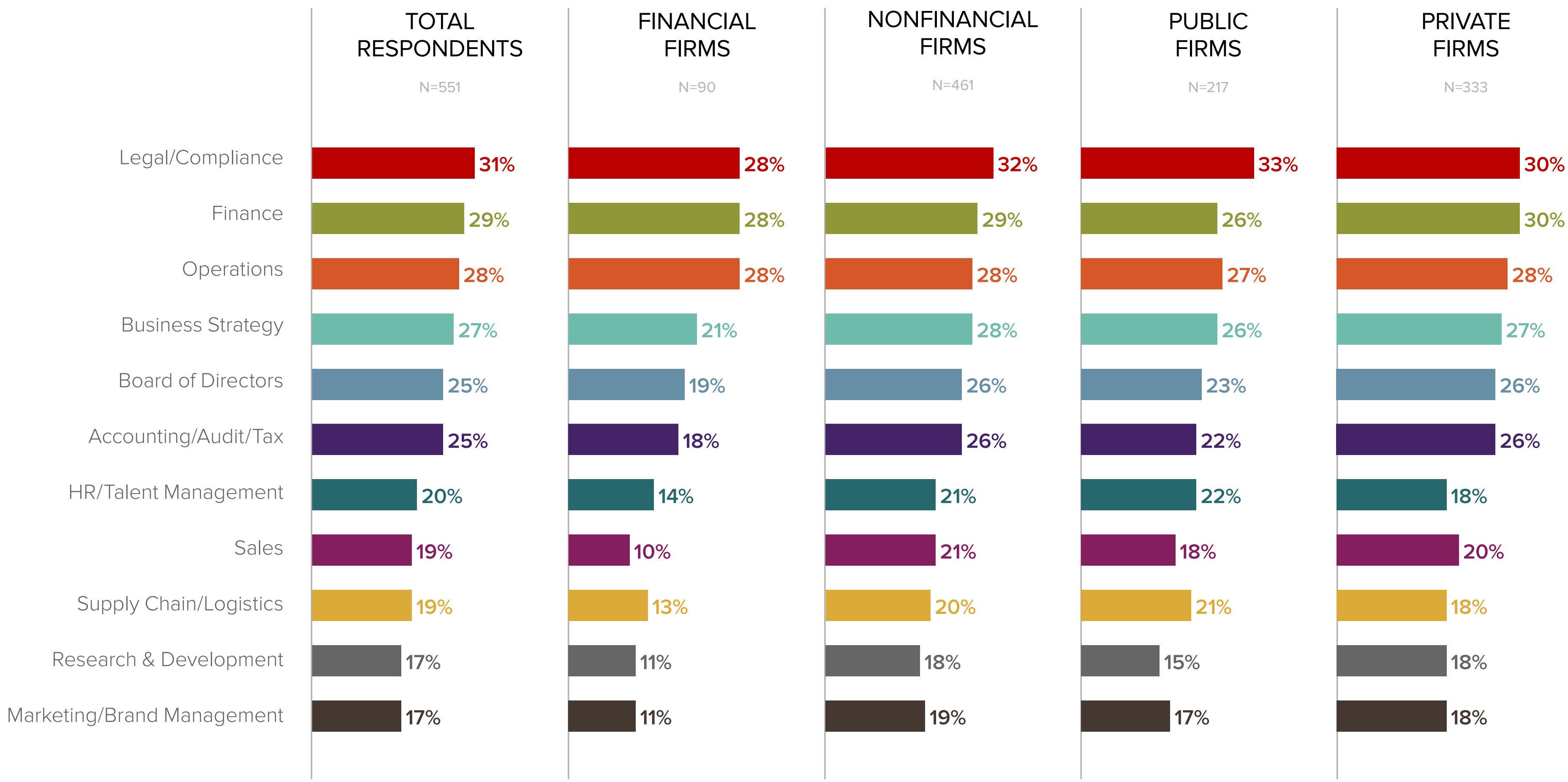
The following functions have been very involved in qualitative or quantitative measurement of risks impacting their firms:

- Legal/Compliance (31 percent of Respondents)
- Finance (29 percent of Respondents)
- Operations (28 percent of Respondents)
- Business Strategy and Operations (27 percent of Respondents)
- Board of Directors and Accounting/Audit/Tax (25 percent of Respondents each)

Although percentages of respondents indicating the highest involvement differ for financial vs. nonfinancial firms or public vs. private firms, rankings of units in terms of being 'very involved' in the qualitative or quantitative measurement of risk are similar. Focusing on the lower ranked units: Research and Development and Marketing/Brand Management units of financial firms are less involved in measuring risks (with 11percent) than same units of nonfinancial firms (with 18-19 percent).

Risk management is
everyone's responsibility.

FIG. 21 Functions/Units *Very Involved* in Qualitatively or Quantitatively Measurement of Risks



3 *Management of Major Risks Impacting Firms*

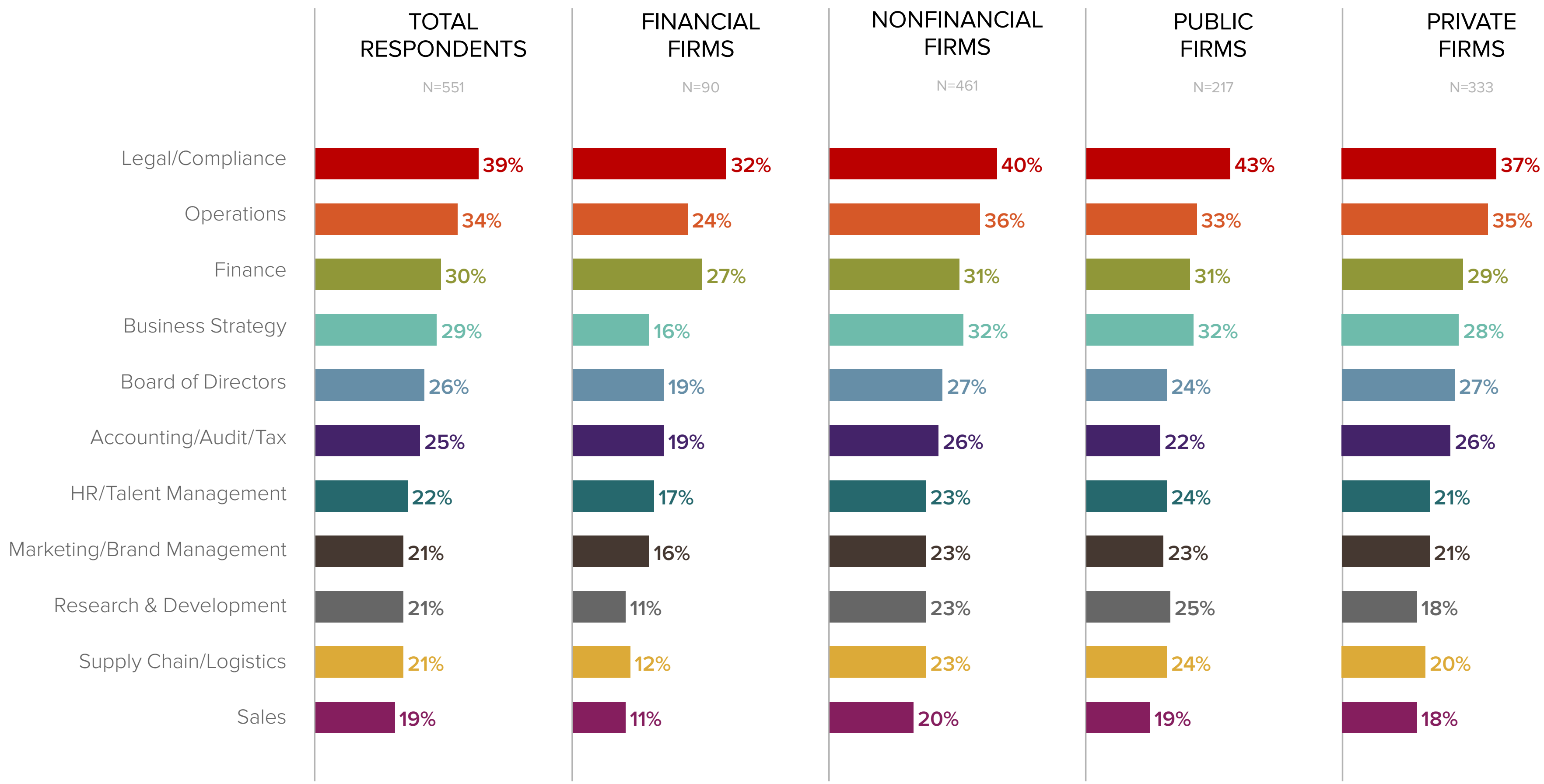
Firms reported the following five key functions as being 'very involved' in the management of risks impacting their firms:

- Legal Compliance (39 percent of Respondents)
- Operations (34 percent of Respondents)
- Finance (30 percent of Respondents)
- Business Strategy (29 percent of Respondents)
- Board of Directors (26 percent of Respondents)
- Accounting/Audit/Tax (25 percent of Respondents)

Although percentages of respondents indicating highest involvement differ for financial vs. nonfinancial firms or public vs. private firms, rankings of functions in terms of being 'very involved' in the identification of risk are similar. However, it is worth noting that percentages are generally significantly higher for nonfinancial firms and public firms. Top functions in terms of involvement in risk identification are similar to last year's with similar involvements.

Every unit in a firm should be taking some **responsibility for risk.**

FIG. 22 Functions/Units *Very Involved* in Management of Major Risks Impacting Firms



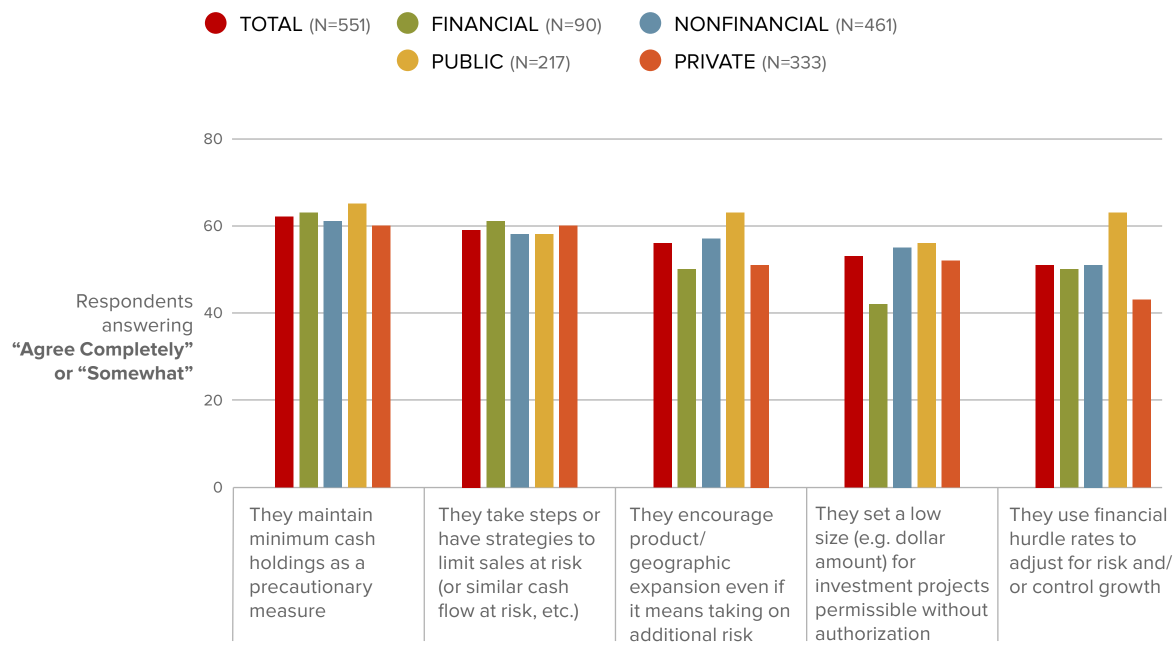
PART D:
Risk Management Process

This section is about mechanisms in place to set the scope of risk-taking within the firm. We asked participants to think about their firm's culture and senior managements' attitude towards risk. Then they were asked to indicate how much they agree or disagree with the following statements about their senior management:

- *They set a low or generous size (e.g. dollar amount) for investment projects permissible without authorization;*
- *They allow generous use of derivative/ financial instruments to exploit opportunities or require that these instruments be used as hedges;*
- *They encourage or restrict product/ geographic expansion even if it means aking on additional risk;*
- *They ignore sales/cash flow at risk or take steps or have strategies to limit sales/cash flow at risk;*
- *They maintain minimum cash holdings as a precautionary measure or they use financial hurdle rates to adjust for risk and/or control growth.*

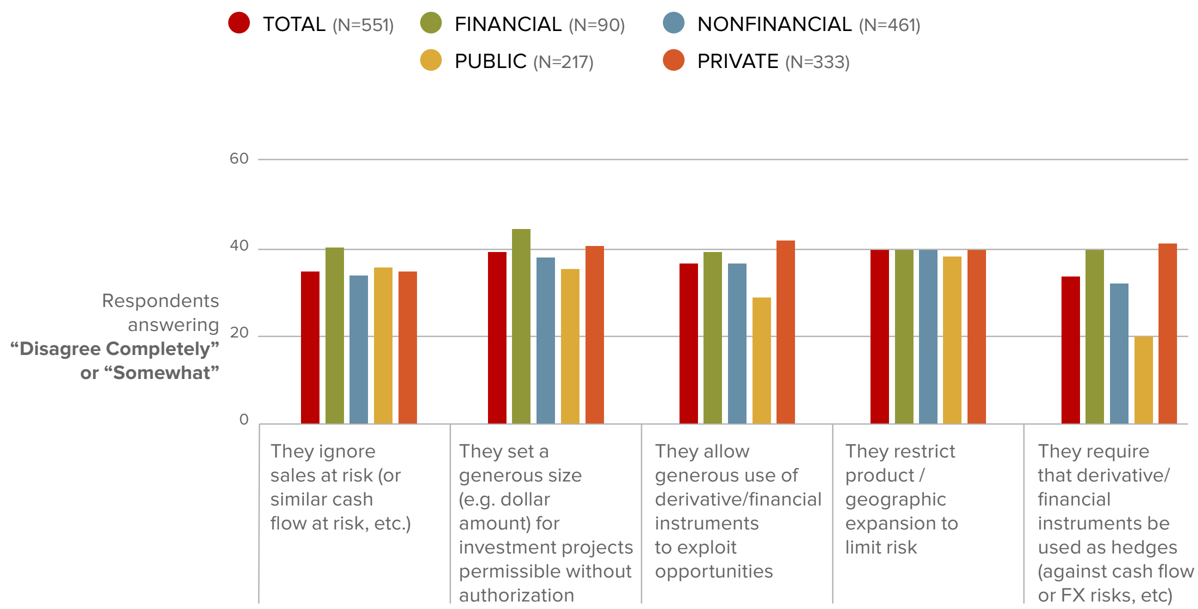
Over 60 percent of all types of firms agree that they maintain cash holdings as a precautionary measure and also take steps or have strategies to limit sales-at-risk or cash-flow-at-risk. A large fraction of senior management (59 percent) encourages product and/or geographic expansion, even if it means taking on additional risk. However, about half of nonfinancial firms also *agree* that they set a *low* size (e.g. dollar amount) for investment projects permissible without authorization. Also, 63 percent of public firms use financial hurdle rates to adjust for risk and/or control growth.

FIG. 23 Senior Management's Attitude Towards Risk



About 38 percent of all firms *disagree* that senior management *ignores* sales-at-risk/cash-flow-at-risk. Moreover, about 30 percent of respondents *disagree* that senior management sets a *generous* size for investment projects permissible without authorization or that management *allows* generous use of derivative/financial instruments to exploit opportunities.

FIG. 24 Senior Management's Attitude Toward Risk



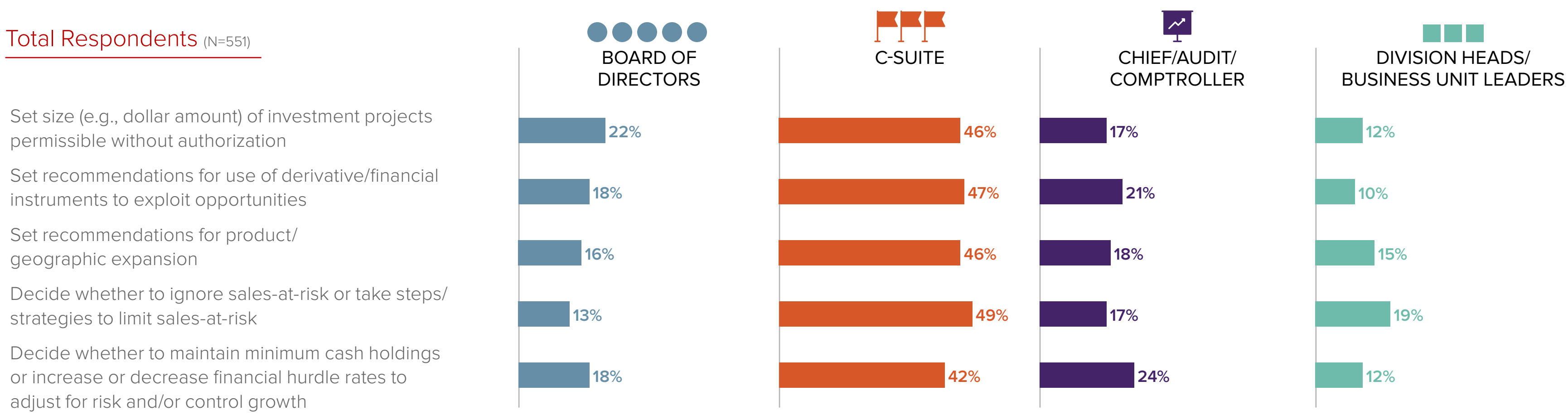
Most firms encourage expansion
even if it means taking on more risk.

Next, we asked participants who holds responsibility for reviewing mechanisms in place to set the scope of risk-taking within the firm. They focus on the following five distinct areas for responsibility:

- Set size (e.g., dollar amount) of investment projects permissible without authorization,
- Set recommendations for use of derivative/financial instruments to exploit opportunities,
- Set recommendations for product/geographic expansion,
- Decide whether to ignore sales-at-risk or take steps/strategies to limit sales-at-risk, and
- Decide whether to maintain minimum cash holdings or increase/decrease financial hurdle rates to adjust for risk and/or control growth.

Overall, about half of respondents indicated that the C-suite is responsible for the review of all of these areas, although the Board of Directors, Auditors, and Division/Unit heads also contribute some in this review process.

FIG. 25 Division Responsible for Review Process



Financial and nonfinancial firms show similar patterns in that the C-Suite is responsible for the review of risk management processes in half of these firms. However, the involvement of Division Heads and Business Unit leaders is larger in financial firms than in nonfinancial firms.

FIG. 26 Division Responsible for Review Process

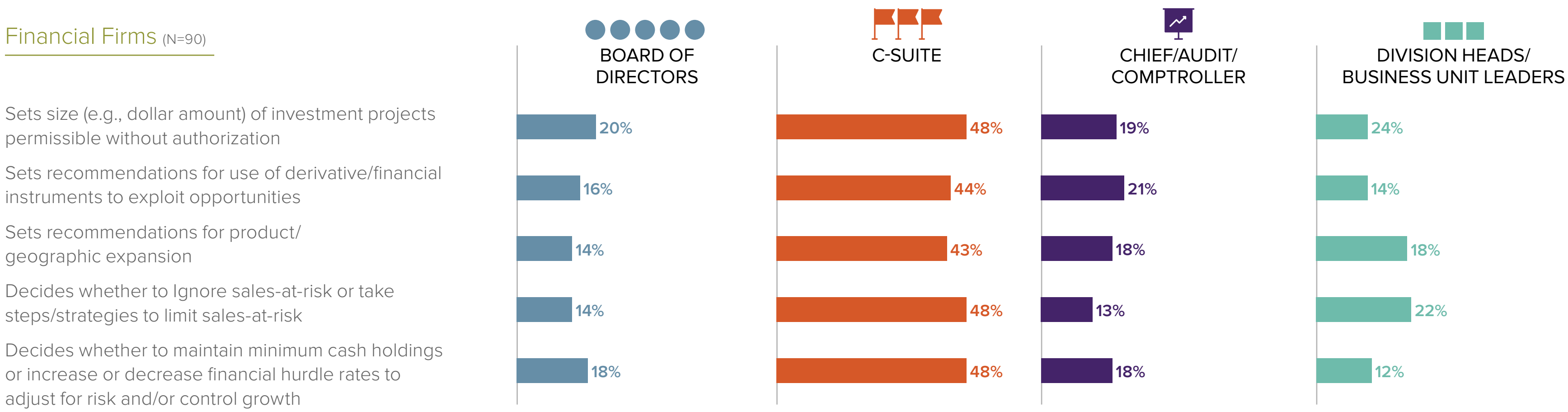
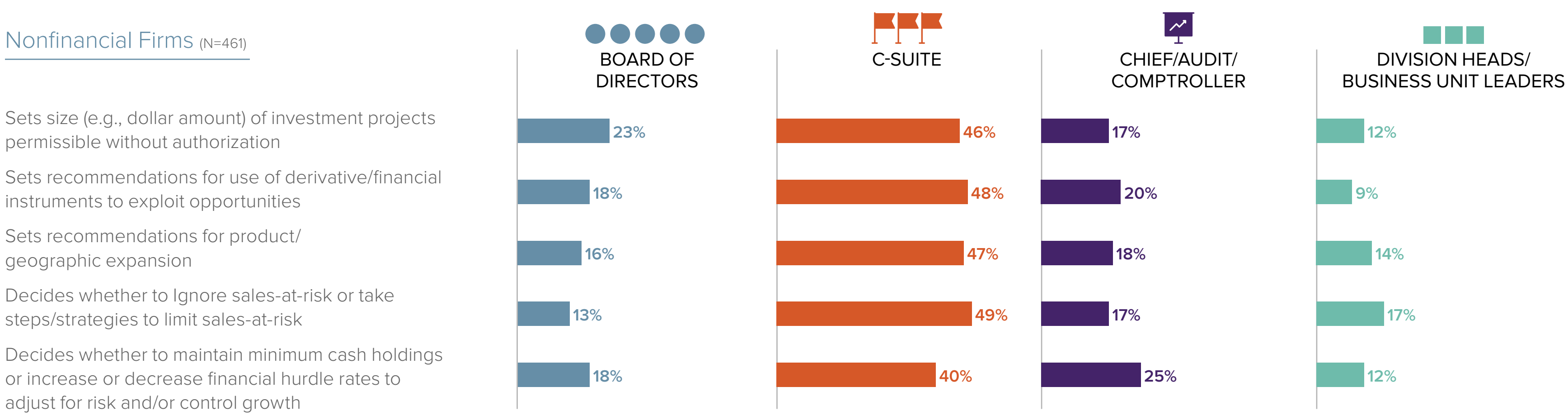


FIG. 27 Division Responsible for Review Process



PART E:
Human Resources View of Risk Management

In this year's survey, we included a section on the views of the Human Resources (HR) professionals on risk management, which types of risks they focus on, and the possible impact of baby boomers' retirements on their businesses.

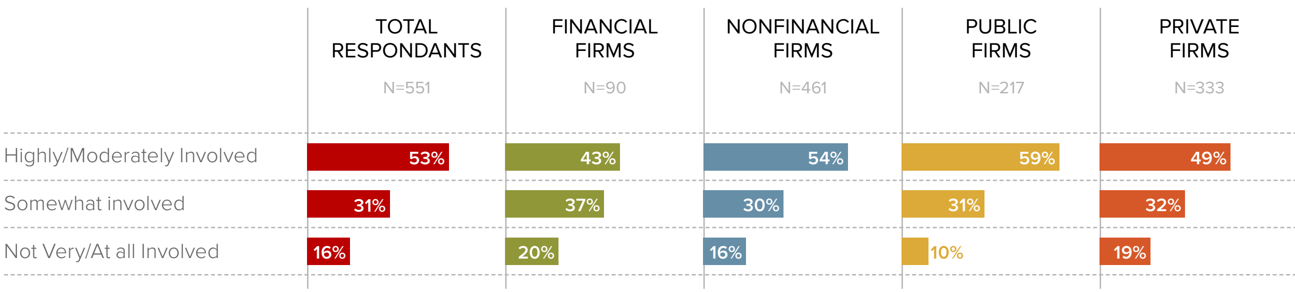
We started by asking how important some risk management aspects are for human resources professionals at their firms, and saw that responses were overwhelmingly positive. Especially important were aspects related to 'ensuring employees are trained,' 'key roles are filled,' and 'employees do high quality work.'

FIG. 28 Importance of Risk Management Aspects to HR – Summary Table – Very/Extremely Important

	TOTAL RESPONDANTS N=551	FINANCIAL FIRMS N=90	NONFINANCIAL FIRMS N=461	PUBLIC FIRMS N=217	PRIVATE FIRMS N=333
Ensuring employees are properly trained	80%	79%	81%	81%	79%
Ensuring key roles are filled	78%	79%	78%	78%	77%
Ensuring employees do high quality work	77%	77%	77%	77%	77%
Preventing the loss of key employees	73%	69%	74%	74%	74%
Preventing employee shortage	68%	61%	70%	70%	67%
Succession planning	68%	71%	67%	67%	63%
Encouraging employees to take on additional responsibility	62%	66%	62%	62%	59%

Then, we asked about the extent of HR involvement in ERM activity planning and execution. **In about half of our firms, HR is at least moderately involved in ERM activity planning and execution. This ratio is higher in nonfinancial firms (with 54 percent) than in financial firms (with 43 percent) and in public firms (with 59 percent) than in private firms (49 percent).** Similarly, among firms with no/low involvement, financial firms and private firms rank the highest with about 20 percent.

FIG. 29 Extent of the HR Involvement in The ERM Activity Planning and Execution



In half of our firms,

HR is moderately involved in ERM activity.

When we asked why risk management is not more involved into the HR function, over 40 percent of respondents indicated that HR has other priorities that prevent them from focusing on risk management. And almost 30 percent of participants responded that the risk management team does not reach out to human resources sufficiently. We hope (with a more integrated approach to risk management) this response will change over time.

FIG. 30 Reasons Why Risk Management Practices are Not More Integrated into HR Function

	TOTAL RESPONDANTS N=551	FINANCIAL FIRMS N=90	NONFINANCIAL FIRMS N=461	PUBLIC FIRMS N=217	PRIVATE FIRMS N=333
Human resources has other priorities that prevent them from focusing on Risk management	43%	46%	42%	44%	42%
The Risk management team does not reach out to human resources sufficiently	28%	33%	27%	39%	23%
Human resources does not see the benefits of Risk management	21%	21%	21%	23%	20%
Human resources does not recognize the importance of Risk management	18%	21%	17%	26%	14%
Human resources don't feel they can have a positive impact on Risk management	16%	10%	17%	17%	15%
Other	8%	5%	8%	7%	8%

Baby Boomers Retiring:

Almost all firms, irrespective of financial or nonfinancial, public or private, will be somewhat impacted by baby boomers retiring. Almost 60 percent of all these firms will be moderately/highly impacted, with this ratio reaching to 64 percent for public firms.

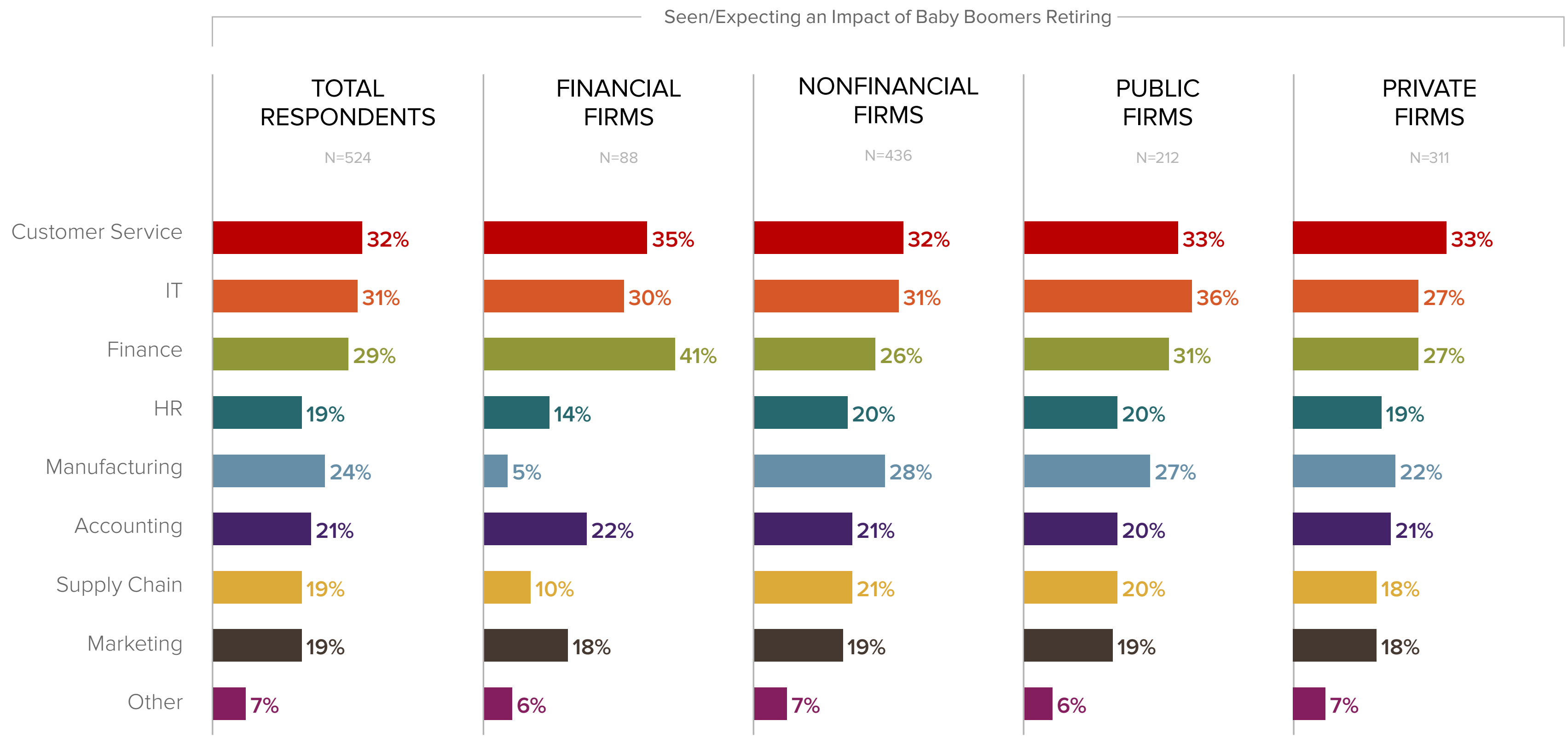
FIG. 31 Current/Future Perceived Impact on Business of Baby Boomers Retiring

	TOTAL RESPONDANTS N=551	FINANCIAL FIRMS N=90	NONFINANCIAL FIRMS N=461	PUBLIC FIRMS N=217	PRIVATE FIRMS N=333
High/Moderate Impact	58%	59%	58%	64%	54%
No impact at all	5%	2%	5%	2%	7%

Almost all firms will be **impacted by baby boomers retiring.**

Baby boomers retiring will significantly affect many business functions. Overall, Customer Service, IT, and Finance are the functions that will get affected the most while there is some variation between different types of firms in terms of the most affected. **Finance is the top function in financial firms (with 41 percent), while IT is the top in public firms (with 36 percent).**

FIG. 32 Business Functions Experiencing Greatest Short-Term Impact of Baby Boomers Retiring



Conclusion

Philip S. Renaud, II
Executive Director, The Risk Institute

The Fifth Annual Survey on Integrated Risk Management has once again not disappointed. From risk management being firmly established as a mature discipline, firms continuing to outsource a significant portion of the risk function, and the importance of building an effective risk culture, this annual survey continues to offer interesting and applicable results.

CONTINUED GROWTH

As expected (given risk management as a more mature discipline with both financial and nonfinancial firms), 72 percent of total respondents reported having a corporate unit responsible for the function. Firms continue to support Risk Management as a discipline, building upon last year's 70 percent of firms reported having a unit. This three-year trend began in 2016 when 66 percent of firms reported having a functional Risk Management unit. More significantly, however, firms have indicated an increase in the size of the functional departments. We noted in our 2018 findings that 18 percent of firms expected to see an increase in department size. This year, 29 percent of the firms surveyed expected to see an increase in the functional staff within Risk Management Departments. By way of contrast, in 2015, firms reported that 40 percent expected a growth in department size. The 2015 number may reflect firms rebounding from The Great Recession and having a willingness to staff functions that may have been diminished due to economic circumstances. As such, the results may have been distorted toward the high side. While comforting to see that the functional support continues to grow and staffing support moving in a positive line, we are concerned that many firms continue to report that they will rely more heavily on outsourcing as support for Risk Management.

OUTSOURCING ON THE RISE

Firms have told us that, on average, 39 percent of them are expecting to outsource all or a portion of their risk management function. While only a small percentage (3 percent on average), expect to outsource the entire function, 29 percent reported expecting to outsource between 1 percent to 50 percent of the function. This is a very significant finding. Further, 40 percent of nonfinancial firms expect to outsource some and or all of the function. What is leading this trend? Are firms not comfortable with the skill set of the current internal staff? Do firms expect a deeper enterprise risk level skill that is not represented within the current internal staff? In future surveys, we will explore the specific risk functions for which firms are looking for outsourcing support. More to come on this very interesting observation.

CREATING A CULTURE

Building an effective Risk Culture in an organization is of paramount importance for practicing risk professionals. With that in mind, we added a section to the 2019 survey to determine what risks Human Resource Professionals focus on. Overall, HR professionals identified training, key roles being filled, and quality of work as the leading indicators. We then asked how involved HR was in the Enterprise Risk Management planning and execution. Surprisingly, 47 percent of those surveyed indicated that they were 'somewhat' and/or 'not very involved at all.' We then asked why Risk Management was not more integrated into the HR function. 49 percent of those surveyed indicated that the 'Risk Management team does not reach out to HR' and/or 'HR does not see the benefits of Risk Management' as the reason. These findings are significant because they strike at the very heart of the need for risk professionals to build an effective risk culture within their respective firms. A coalition of functions and departments must be established in order for the firm to see risk as a value. Risk in the 21st century is not stable, steady or unchanging, but rather energetic, robust and vital. Risk is everyone's responsibility in 21st century organizations. For the risk function to thrive and flourish, an effective culture must be built.

THE FUTURE OF RISK

Risks that firms face in the 21st century are much different than anyone has seen. Practitioners face cyber risk and third-party risk expanding as firms utilize more external partners to support key functions and tasks within the firm. In addition, the ever-expanding weather and climate risks affecting firms add a heightened sense of urgency to building adequate business continuity and resilience plans. Risks that firms face develop at a much-accelerated pace and require a deeper understanding of complex business disciplines in order to define and develop a proper risk mitigation strategy.
As such, our roles as educators must continue to keep pace with this change and prepare students with deeper and broader enterprise risk management skills that firms are identifying. As practitioners, we must continue to seek as much knowledge and information regarding the changing risk landscape. No longer is a risk management role isolated to risk transfer via insurance. Firms appear to be saying that they are willing to devote corporate resources to the risk function, but are not growing the function internally, instead seeking subject matter expertise via an outsourced route. When departments such as HR respond that ERM is not more integrated because they did not see the benefits of risk management and/or the risk management team does not reach out, some fundamental culture challenges to an effective ERM strategy become visible. This finding may also indicate why leadership has embarked on an outsourcing strategy.

We have seen ERM emerge from its early stages as a financial and operational focused approach, to compliance-based given the financial crisis of 2009 and beyond. Moving forward, we clearly need to be much more proactive in anticipating risk than we have ever been. As such, relying on lagging indicators (as the discipline has for many years) will be replaced by development of more and more reliable leading indicators.

Global Risk Reports 2019, the World Economic Forum, identified ten global risks with the greatest **potential likelihood:**

1. Extreme Weather Events
2. Failure of climate change mitigation
3. Natural disasters
4. Data Fraud or Theft
5. Cyber Attacks
6. Man-made environmental disasters
7. Large scale involuntary migration
8. Biodiversity loss and ecosystem collapse
9. Water crises
10. Asset bubbles in a major economy

Examples of virtually every risk mentioned have befallen society in recent months. As seen within our survey, risk is a dynamic set of exposures to a firm. **The expectation that one function within a firm has responsibility for risk is antiquated. Risk should be embedded into all aspects of a firm, supported by an integrated risk assessment, and decision analytics should support actions.** The statements made by our survey respondents bear this out. Management is committed to allocating additional funding to both internal and external resources in support of risk management, but it is evident that effective risk culture must be established for risk management to flourish in a firm. **Risk must be seen as a value. For that to occur, a coalition of engaged participants must be formed. It is incumbent of risk professionals to actively seek out business partners that highlight collaboration.**

As firms become more global in scope and size, the common thread is that all industries are impacted by risk positively and/or negatively. When we include the risk of cyber impact on businesses and government, and the recent waves of data fraud and theft, risk management must emerge from a defensive, reactionary focus to a focus that is taking the lead on a proactive basis to create value for an organization. As indicated within our study, risk is a continuous process, not an isolated one-dimensional operational function. The ability to fully integrate risk into decision making is paramount. Likewise, the opportunity to improve awareness to employees outside of the immediate function is key to building risk management as a value proposition within an organization.

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