

THE IIA'S GLOBAL INTERNAL AUDIT SURVEY

What's Next for Internal Auditing?

**The IIA's Global Internal Audit Survey:
A Component of the CBOK Study**

What's Next for Internal Auditing?

Report IV

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Disclosure

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The Institute of Internal Auditors' (IIA's) International Professional Practices Framework (IPPF) comprises the full range of existing and developing practice guidance for the profession. The IPPF provides guidance to internal auditors globally and paves the way to world-class internal auditing.

The mission of The IIARF is to expand knowledge and understanding of internal auditing by providing relevant research and educational products to advance the profession globally.

The IIA and The IIARF work in partnership with researchers from around the globe who conduct valuable studies on critical issues affecting today's business world. Much of the content presented in their final reports is a result of IIARF-funded research and prepared as a service to The Foundation and the internal audit profession. Expressed opinions, interpretations, or points of view represent a consensus of the researchers and do not necessarily reflect or represent the official position or policies of The IIA or The IIARF.

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Dedication

William G. Bishop III, CIA, served as president of The Institute of Internal Auditors from September 1992 until his untimely death in March 2004. With a motto of “I’m proud to be an internal auditor,” he strived to make internal auditing a truly global profession. Bill Bishop advocated quality research for the enhancement of the stature and practice of internal auditing. To help enhance the future of this profession, it is vital for the profession to document the evolution of the profession worldwide.

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Acknowledgments

The 21st century presents unprecedented growth opportunities for the internal audit profession. Advances in technology, the confluence of the Information and the Internet Age, and the sheer speed and expansion of communications capabilities have significantly accelerated the pace of globalization. Governance, risk, controls, and compliance processes within organizations have undergone significant change to manage the increasing complexity and sophistication of global business operations. All of these developments offer a huge opportunity for internal audit functions, whether in-sourced, co-sourced, or outsourced, including the potential to add even greater value to their respective organizations.

To ensure that a body of knowledge is systematically built up, developments in practice in a dynamically changing environment must be carefully monitored and continually analyzed to reveal critically important insights. Key lessons learned from the experience of the profession must constitute part of the historical record and be transmitted to current and future generations of internal audit professionals for optimal outcomes. Not only must we strive to secure a robust portrayal of the current state of the profession, but encourage practice-relevant research to inform and push the boundaries of practice.

We are fortunate that under the auspices of the William G. Bishop III, CIA, Memorial Fund, administered by The IIA Research Foundation, it is possible to undertake large-scale studies of the global internal audit profession. We sincerely appreciate Mary Bishop's passion and commitment to further the internal audit profession while honoring Bill Bishop's legacy. The inaugural Common Body of Knowledge (CBOK) survey under William Taylor's leadership occurred in 2006; this is the second iteration. Based on the responses from The IIA's Global Internal Audit Survey from 2006 and now in 2010, it is possible to compare results and perform high-level trending.

Five reports cover the full spectrum of a wide range of the survey questions (carefully designed to allow for comparison between the 2006 and 2010 survey data). These reports cover topical content from characteristics of an internal audit activity to implications for charting the future trajectory of the profession. The cooperation and sharing among the five report-writing teams representing the Americas, Asia, Europe, and the Middle East have made this project a truly global and collaborative effort.

We hope that this collection of reports describing the expected influence of major themes about, and developments in, the profession as extracted from the survey will provide a comprehensive snapshot of the profession globally, offer helpful insights and actionable intelligence, and point the way forward to maintaining the profession's continued relevance and value-added contributions.

For a large global project such as The IIA's Global Internal Audit Survey, the list of individuals to thank is quite extensive. First of all, our special thanks go to IIA Research Foundation Trustee Marjorie Maguire-Krupp who was involved at the inception of the CBOK study in the fall of 2008, and soon thereafter, retired former IIA President David Richards who, along with Michelle Scott, provided the initial leadership to this significant project.

In addition, we must acknowledge William Taylor and Leen Paape, both advisors to the CBOK 2010 study co-chairs, and the following international members of the CBOK 2010 Steering Committee, as well as the Survey Design Subcommittee and the Deliverables Oversight Subcommittee, for their guidance and significant contributions to the survey design, administration, data collection, interpretation, and topic-specific reports: Abdullah Al-Rowais, AbdulQader Ali, Audley Bell, Sezer Bozkus, John Brackett, Ellen Brataas, Edouard Bucaille, Adil Buhariwalla, Jean Coroller, David Curry, Todd Davies, Joyce Drummond-Hill, Claudelle von Eck, Bob Foster, Michael Head, Eric Hespenheide, Greg Hill, Steve Jameson, Béatrice Ki-Zerbo, Eric Lavoie, Luc Lavoie, Marjorie Maguire-Krupp, John McLaughlin, Fernando Mills, Michael Parkinson, Jeff Perkins, Carolyn Saint, Sakiko Sakai, Patricia Scipio, Paul Sobel, Muriel Uzan, R. Venkataraman, Dominique Vincenti, and Linda Yanta.

Several members of these committees must be particularly thanked for their extended participation in what became a prolonged, three-year commitment for this large-scale undertaking. Each of these individuals contributed their leadership, wealth of knowledge and experience, time, and effort to the CBOK study and deserves our deepest gratitude.

Professor Mohammad Abdolmohammadi of Bentley University was key to the 2010 data analysis and preparation of summary tables of the survey responses, as he was for the CBOK study in 2006. Professor Sandra Shelton of DePaul University must be recognized for giving the reports a smooth flow and an overall consistency in style and substance.

The survey could not have succeeded without the unstinted and staunch support of the survey project champions at The IIA institutes worldwide. At The IIA's global headquarters in Altamonte Springs, Florida, United States, many staff members, especially Bonnie Ulmer and Selma Kuurstra, worked tirelessly and provided indispensable support and knowledge. Bonnie Ulmer, IIA vice president, David Polansky, IIA executive director, and Richard Chambers, IIA president and CEO (who simultaneously served as executive director for most of the project), provided the necessary direction for the successful completion of the project.

Last but not least, The IIA's 2010 CBOK study component — The Global Internal Audit Survey — and the resulting five reports owe their contents to thousands of IIA members and nonmembers all over the world who took the time to participate in the survey. In a sense, these reports are a fitting tribute to the contributions made by internal audit professionals around the globe.

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Georges M. Selim, PhD, FIIA, is Emeritus Professor of Internal Auditing, former head of the faculty of management, and former director of the Centre for Research in Corporate Governance at Cass Business School, City University London (United Kingdom). Recently, he has held the posts of nonexecutive member of the Ministerial Executive Board and independent chairman of the Ministry of Justice's Audit Committee. In addition, he has held equivalent posts at the Rural Payments Agency (RPA), an agency of the Department for Environment, Food, and Rural Affairs (DEFRA). Currently, he is an independent nonexecutive member of the audit committee of the University of London. He is a former member of The Institute of Internal Auditors' Executive Committee and Board of Directors (1993-1996) and a former president of The IIA-UK and Ireland (1991-92). Selim has written books and published papers on internal auditing, accounting, risk management, the role of internal auditors in mergers, acquisitions, and divestments, and corporate governance. He has also lectured extensively on these topics in Europe, the Far East, and the United States. He was elected the 1992 Educator of the Year by The IIA, and in 2000, he and co-author David McNamee were awarded the John B. Thurston Award for their article titled "The Next Step in Risk Management."

Foreword

The IIA's Global Internal Audit Survey: A Component of the CBOK Study

The 2010 IIA Global Internal Audit Survey is the most comprehensive study ever to capture the current perspectives and opinions from a large cross-section of practicing internal auditors, internal audit service providers, and academics about the nature and scope of assurance and consulting activities on the profession's status worldwide. This initiative is part of an ongoing global research program funded by The Institute of Internal Auditors Research Foundation (IIARF) through the William G. Bishop III, CIA, Memorial Fund to broaden the understanding of how internal auditing is practiced throughout the world.

A comprehensive database was developed, including more than 13,500 useable responses from respondents in more than 107 countries. The five reports derived from analysis of the survey responses provide useful information to internal audit practitioners, chief audit executives (CAEs), academics, and others to enhance the decision-making process involving staffing, training, career development, compliance with The IIA's *International Standards for the Professional Practice of Internal Auditing (Standards)*, competencies, and the emerging roles of the internal audit activity.

- ❑ ***Characteristics of an Internal Audit Activity (Report I)*** examines the characteristics of the internal audit activity, including demographics, staffing levels, and reporting relationships.
- ❑ ***Core Competencies for Today's Internal Auditor (Report II)*** identifies and discusses the most important competencies for internal auditors. It also addresses the adequacy, use, and compliance with The IIA's *Standards*.
- ❑ ***Measuring Internal Auditing's Value (Report III)*** focuses on measuring the value of internal auditing to the organization.
- ❑ ***What's Next for Internal Auditing? (Report IV)*** provides forward-looking insight identifying perceived changes in the roles of the internal audit activity over the next five years.
- ❑ ***Imperatives for Change: The IIA's Global Internal Audit Survey in Action (Report V)*** contains conclusions, observations, and recommendations for the internal audit activity to anticipate and match organizations' fast-changing needs to strategically position the profession for the long term.

The 2010 survey builds upon the baseline established in prior Common Body of Knowledge (CBOK) studies (i.e., 2006), allowing for comparison, analysis, and trends as well as a baseline for comparison when The IIA's Global Internal Audit Survey is repeated in the future.

PRIOR IIA CBOK Studies

The IIA has sponsored five prior CBOK studies. The table on the following page compares the number of participating countries and usable questionnaire responses used in each CBOK study. While CBOK studies I through IV were offered only in English, the 2006 and 2010 surveys were available in 17 and 22 languages, respectively.

CBOK's Number of Respondents and Countries Over the Years

| CBOK Number | Year | Number of Countries | Number of Usable Responses |
|-------------|------|---------------------|----------------------------|
| I | 1972 | 1 | 75 |
| II | 1985 | 2 | 340 |
| III | 1991 | 2 | 1,163 |
| IV | 1999 | 21 | 136 |
| V | 2006 | 91 | 9,366 |
| VI | 2010 | 107 | 13,582 |

The 2010 IIA Global Internal Audit Survey — Benefits to the Profession

Maximizing the internal audit function is imperative to meet the challenges of today's business environment. Globalization and the rapid pace of change have in many ways altered the critical skill framework necessary for success at various levels of the internal audit function. Internal auditing's value will be measured by its ability to drive positive change and improvement. It is imperative for internal auditing to examine current trends within the profession and thus be able to make recommendations for changes within the internal audit activity. This should help internal auditing to:

- Deliver the greatest value to its organization.
- Anticipate and meet organizations' needs.
- Strategically position the profession for the long term.

Research Teams

The following researchers, selected from the responses to the Request for Proposal, were involved in writing the reports and worked closely with Mohammad J. Abdolmohammadi (Bentley University, United States) who provided general data analysis from the 2006 and 2010 survey databases as well as additional analysis based on researchers' request.

Report I

Yass Alkafaji, Munir A. Majdalawieh, Ashraf Khallaf (American University of Sharjah, United Arab Emirates) and Shakir Hussain (University of Birmingham, United Kingdom).

Report II

James A. Bailey (Utah Valley University, United States).

Report III

Jiin-Feng Chen and Wan-Ying Lin (National Chengchi University, Taiwan, Republic of China).

Report IV

Georges M. Selim and Robert Melville (Cass Business School, United Kingdom), Gerrit Sarens (Université Catholique de Louvain, Belgium), and Marco Allegrini and Giuseppe D'Onza (University of Pisa, Italy).

Report V

Richard J. Anderson (De Paul University, United States) and J. Christopher Svare (Partners in Communication, United States).

Executive Summary

Report IV provides insight identifying perceived changes in the roles of the internal audit activity over the next five years to adapt to changes in stakeholder expectations. This report presents emerging trends in the internal audit profession, taking into consideration governance, risks, controls, compliance, and technology issues. This analysis is based on 13,582 responses of IIA members and nonmembers in more than 107 countries. Salient responses from chief audit executive (CAEs), internal audit staff, and managers are presented in this report.

Regulatory and Governance, and Internal Control Context

There is a clear expected convergence trend when it comes to the governance and internal control contexts. More specifically:

- The governance and internal control contexts are expected to improve most significantly in regions with a higher representation of emerging countries that are represented in this study. Organizations in these countries are projected to be attempting to catch up with those in more developed countries.
- Respondents from privately held firms are anticipating that their firms will be attempting to catch up with their listed counterparts.
- Respondents from smaller organizations are likewise projecting that their organizations will be seeking to catch up with their larger counterparts.

Expected Evolution of the Roles of the Internal Audit Activity

The role of the internal audit activity in risk management and governance will continue to increase to become accepted from the perspective of internal audit practitioners as the two most important cornerstones of the profession.

Respondents expect an increase in the next five years in the role of the internal audit activity in:

- Training audit committee members.
- An advisory role in strategy development.
- An education role for the organization's personnel.

The proportion of CAEs and managers that expect increases in involvement in strategy development and training to audit committee members is higher than in the other groups of respondents.

Respondents indicate that adopting a more intensive role in risk management and governance necessitates the allocation of additional resources to the internal audit activity (i.e., increase in staff size, audit tools, and techniques).

The top five activities that respondents' internal audit activities performed in 2010 were:

- ❑ Operational auditing (89 percent of respondents).
- ❑ Audits of compliance with regulatory code (including privacy) requirements (75 percent of respondents).
- ❑ Auditing of financial risks (72 percent of respondents).
- ❑ Investigations of fraud and irregularities (71 percent of respondents).
- ❑ Evaluating the effectiveness of control frameworks (i.e., using COSO and COBIT) (69 percent of respondents).

The top seven activities that respondents expect to be performed in the next five years are:

- ❑ Corporate governance reviews (23 percent of respondents).
- ❑ Audits of the enterprise risk management process (ERM) (20 percent of respondents).
- ❑ Reviews addressing linkage of strategy and company performance (e.g., balanced scorecard — 20 percent of respondents).
- ❑ Ethics audits (19 percent of respondents).
- ❑ Social and sustainability audits (19 percent of respondents).
- ❑ Migration to International Financial Reporting Standards (IFRS) (19 percent of respondents).
- ❑ Disaster recovery testing and support (18 percent of respondents).

When compared with internal audit staff (not managers or supervisory level staff), a higher percentage of CAEs have expectations that all seven activities will be performed in the next five years.

Audit Tools and Techniques

The top five audit tools and techniques that are predicted to be used more in the next five years are:

- ❑ Computer-assisted audit techniques (CAATs) (63 percent of respondents).
- ❑ Electronic workpapers (55 percent of respondents).
- ❑ Continuous/real-time auditing (54 percent of respondents).
- ❑ Data mining (52 percent of respondents).
- ❑ Risk-based audit planning (52 percent of respondents).

The top five responses indicate an expected trend to improve the efficiency of internal audit work consistent with the growing importance of risk management as one of the two cornerstones of the profession. In line with the need to optimize internal audit resources, those internal audit activities that expect an increase in their staff size in the next five years also expect the highest increase in the use of all five tools and techniques. This report provides a portrait of emerging trends in the internal audit profession by understanding the functions internal auditors perform today and expectations for the future.

Chapter 1

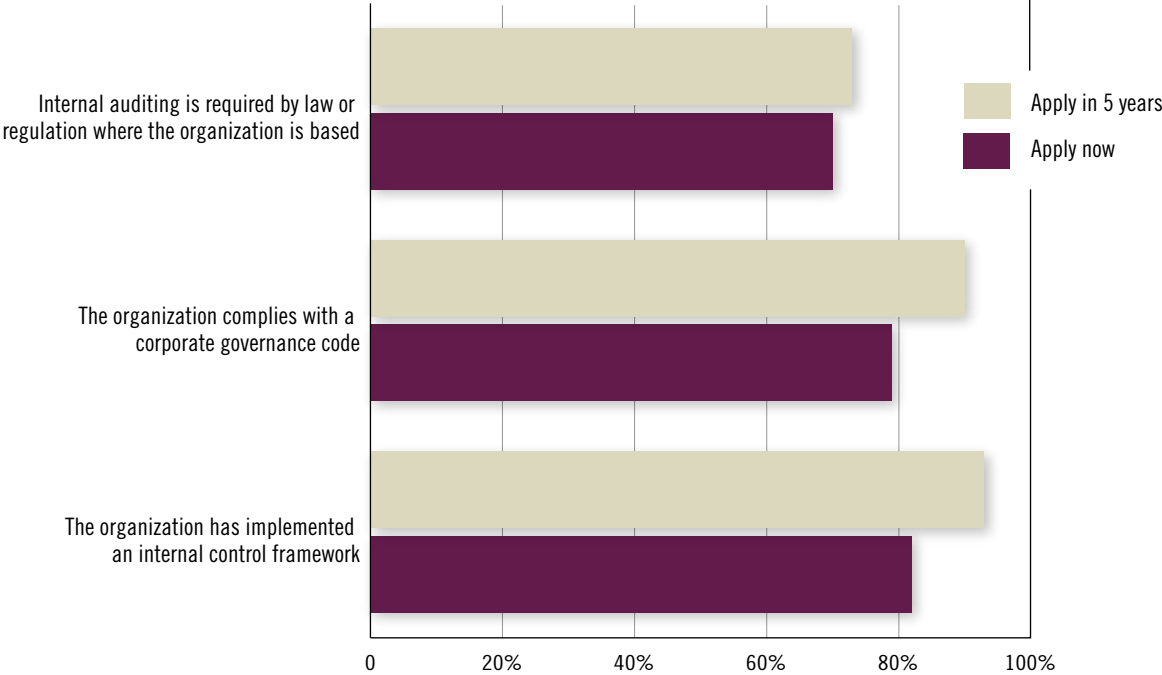
Legal, Regulatory and Governance, and Internal Control Context

This chapter analyzes responses to the following questions:

- Is the internal audit activity¹ required by law or regulation where the organization is based?
- Do organizations comply with a corporate governance code?
- Has the organization implemented an internal control framework?

These questions are discussed in two sections titled *Is the Internal Audit Activity Required by Law or Regulation?* and *Governance and Internal Control Context of the Organization*. In a wide-ranging international survey of this size, there is always likely to be a risk that the differences that exist in the legislation that applies to countries, industries, and the type of organization will influence the way responses are made and affect the overall results. While the responses mostly accurately reflect the opinions of individual respondents, any potential ambiguities or misleading findings are highlighted in the discussion. An overview of responses is shown in **Figure 1–1**.

Figure 1–1: Overall Results (Now Versus in Five Years)



¹ The term internal audit activity replaces the terms originally used in the 2006 study. This is current accepted practice (cf. the Glossary in the 2011 reissue of the *International Standards for the Professional Practice of Internal Auditing*).

Is the Internal Audit Activity Required by Law or Regulation?

Overall Analysis

Results of the 2010 survey show that 70 percent of the respondents currently work for an organization in which the internal audit activity is required by law (i.e., through government decrees or parliamentary acts) and/or by regulation (i.e., stock listing rules, central banking regulations.) This percentage is expected to increase to 73 percent in the next five years. Given the current business environment and the pressures for increased governance, there is a strong probability that in many cases internal audit activities will be introduced voluntarily.

In the 2006 survey, 62 percent of the respondents indicated that they worked for an organization in which the internal audit activity is required by law or regulation. At that time, 14 percent of the respondents expected this regulatory requirement to be put in place before 2009.

Analysis by Region

Table 1–1 highlights significant differences between the seven geographical areas. The Middle East is the region where the most significant change in the regulatory context is expected, as it has the lowest percentage of respondents indicating the existence of specific regulatory requirements for setting up an internal audit activity (64 percent), and it is also the area with the highest expectation (83 percent) that this kind of regulatory requirement will be introduced in the next five years. There are two main drivers for this potential change. First, there has been rapid growth of formal corporate governance guidance in this region in a very short period (from none at all in 2001 to 11 pronouncements by 2008), and second, the development of guidance for Islamic banking.² Two organizations in particular have a significant role to play in audit and governance in this region: the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and Hawkamah, which is a major provider of guidance on governance issues for the Middle East North Africa (MENA) region.³ These organizations provide advice and direction on implementing effective corporate governance and auditing (both internal and external). It must be noted that only Islamic scholars have the power to promulgate guidance for practice, and although both AAOIFI and Hawkamah have strong government support in the region, they cannot, by nature of the system, make mandatory or legal judgments.⁴

² Islamic banking by its nature requires compliance with detailed guidance provided by scholars. Unlike the traditional Western banking system where profit may be gained through charging interest on loans and banks are able to invest in any area that is legal according to national laws, Islamic banking does not allow interest to be charged, and investments by banks must follow prescribed models that all Muslims are exhorted to follow. While the framework for Islamic banking is rooted in principles laid down over many centuries, interpretations of specific issues and questions about practice are the responsibility of scholars. Implementation and interpretation of the scholarly decisions and directives have historically been managed on an ad hoc basis, but given the growth of the sector, advisory bodies have been established recently.

³ The MENA region comprises Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank and Gaza, and Yemen.

⁴ Pierce, C., *A Guide of Corporate Governance in the Middle East and North Africa* (London, U.K.: GMB Publishing, 2008).

Table 1–1
Results per Region (Now and Five Years from Now)

| Item | Apply now | Africa | Asia Pacific | Eastern Europe- Central Asia | Latin America and Caribbean | Middle East | United States and Canada | Western Europe | Overall Average |
|--|-----------------------|--------|--------------|---------------------------------|--------------------------------|-------------|-----------------------------|----------------|--------------------|
| | Apply in 5 years | | | | | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 73% | 70% | 68% | 73% | 64% | 66% | 71% | 70% |
| | Will apply in 5 years | 80% | 72% | 76% | 77% | 83% | 67% | 75% | 73% |
| The organization complies with a corporate governance code | Applies now | 80% | 86% | 72% | 73% | 67% | 84% | 78% | 79% |
| | Will apply in 5 years | 94% | 92% | 88% | 91% | 91% | 91% | 90% | 90% |
| The organization has implemented an internal control framework | Applies now | 79% | 86% | 77% | 86% | 80% | 83% | 79% | 82% |
| | Will apply in 5 years | 95% | 94% | 92% | 96% | 94% | 91% | 94% | 93% |

For the other regions, the percentage of respondents employed in an organization subject to legal requirements to establish an internal audit activity ranges from 66 percent (United States and Canada) to 73 percent (Africa and Latin America/Caribbean). The majority of respondents from the United States and Canada do not expect the regulatory context to change in the upcoming five years. In contrast, all the other regions expect a regulatory requirement for an internal audit activity to become more important in the future. Further analysis of the data revealed that a significant group of respondents from the United States and Canada work for organizations that are already subject to this kind of regulation: 44 percent work for listed firms (where, for example, the New York Stock Exchange listing requirements were introduced in 2003 coincident with the U.S. Sarbanes-Oxley Act of 2002) and 22 percent work for an organization in the public sector.

Analysis by Industry

The 2010 survey shows that a regulatory requirement for an internal audit activity is most prevalent in the financial services industry (84 percent) and least prevalent in the wholesale and retail trade industry (46 percent) (see **Table 1–2**).

**Table 1–2
Results per Industry (Five Years from Now)**

| Item | Now | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|--|-----------------------|--|------------------------------|------------------------------|------------------------------|---------|---|----------------------------|-----------------|
| | 5 Years from Now | | | | | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 84% | 62% | 78% | 70% | 59% | 63% | 46% | 70% |
| | Will apply in 5 years | 87% | 66% | 80% | 73% | 66% | 65% | 51% | 73% |
| The organization complies with a corporate governance code | Applies now | 84% | 81% | 71% | 82% | 75% | 79% | 78% | 79% |
| | Will apply in 5 years | 94% | 93% | 82% | 89% | 88% | 91% | 89% | 90% |
| The organization has implemented an internal control framework | Applies now | 86% | 83% | 78% | 85% | 79% | 82% | 74% | 82% |
| | Will apply in 5 years | 95% | 94% | 92% | 94% | 91% | 93% | 91% | 93% |

This finding confirms the general global requirement for banks to have an internal audit activity. International bodies such as the Bank for International Settlements (BIS) have played a vital role in the development and harmonization of national banking legislation for many years. The Basel Committee of the BIS first published this type of guidance in 1999 and most recently updated it in 2010 in their Principles for Enhancing Corporate Governance.⁵ This guidance states that “a bank should have a risk management function, a compliance function, and an internal audit function, each with sufficient authority, stature, independence, resources, and access to the board.”

Regulatory requirements are also common within the public sector/government (78 percent). This indicates a growing recognition of internal auditing within that sector, often reflected in a mandatory requirement to establish an internal audit activity.⁶ All industries expect a slight increase in regulatory requirements in the next five years. Within service industries, there is a high expected increase of regulatory requirements (7 percent), which might be explained by the fact that a majority of these

⁵ Available at <http://www.bis.org/publ/bcbs176.pdf>

⁶ Sterck, M., B. Scheers, and G. Bouckaert, “The Modernization of the Public Control Pyramid: International Trends. Report from the Research Group Financial Management, Performance Measurement and Performance Management,” Leuven: Policy Research Centre – Governmental Organization in Flanders, 2005. Sterck, M., and G. Bouckaert, “International Audit Trends in the Public Sector.” *Internal Auditor*, Vol. 63, No. 4 (2006): 49–53

organizations fall within the group of smallest organizations, for which a clear trend to catch up with their larger counterparts is expected.

Analysis by Ownership Structure

Regulatory requirements to have an internal audit activity are most common within the public sector/government group (77 percent) and listed companies (77 percent). This is consistent with the 2006 survey (see **Table 1–3**). Neither of these groups expects significant changes to the regulatory context in the next five years; this could be explained by the fact that these organizations have already been impacted by significant changes in legal/regulatory requirements over the past decade, where a large number of listing requirements and corporate governance codes have been published both nationally and internationally. Conversely, respondents who work for privately owned organizations expect an increase in the regulatory requirement to implement an internal audit activity. These results suggest that privately owned firms are moving toward the same legal/regulatory requirements to set up an internal audit activity as their listed counterparts and the current gap between private and listed firms is expected to be reduced in the next five years.

Table 1–3
Results by Ownership Structure (Five Years from Now)

| Item | Now | Privately Held (Nonlisted) Company | Publicly Traded (Listed) Company | Public Sector/ Government | Not-for-profit Organization/ Non Government Organization | Other | Overall Average |
|--|-----------------------|---------------------------------------|-------------------------------------|------------------------------|---|-------|--------------------|
| | 5 Years from Now | | | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 58% | 77% | 77% | 46% | 74% | 70% |
| | Will apply in 5 years | 67% | 77% | 80% | 53% | 78% | 73% |
| The organization complies with a corporate governance code | Applies now | 72% | 90% | 72% | 74% | 76% | 79% |
| | Will apply in 5 years | 89% | 95% | 85% | 85% | 90% | 90% |
| The organization has implemented an internal control framework | Applies now | 77% | 89% | 79% | 70% | 81% | 82% |
| | Will apply in 5 years | 92% | 96% | 93% | 86% | 95% | 93% |

Analysis by Organizational Size

Analysis of the regulatory context according to the organization's size clearly shows that a legal requirement to have an internal audit activity is significantly more common within the largest organizations (77 percent) (see **Table 1–4**). Within that group, 35 percent are operating in the financial services industry (and are therefore subject to international authorities such as the Basel Committee and central/national banking regulations) and 55 percent are listed companies (subject to listing requirements and relevant corporate governance codes). In smaller organizations, there is evidence that more respondents (a 5 percent increase between now and in five years) expect further legal/regulatory requirements in the next five years. Despite an apparent difference in current practice, there appears to be a trend toward convergence. It should be noted that, generally speaking, organizational size is related to industry and ownership structure. This result is consistent with other findings.

Table 1–4
Results by Organizational Size (Five Years from Now)

| Item | Now | Less than \$1B | \$1B-\$15B | More than \$15B | Overall Average |
|--|-----------------------|----------------|------------|-----------------|-----------------|
| | 5 Years from Now | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 68% | 66% | 77% | 69% |
| | Will apply in 5 years | 73% | 68% | 79% | 73% |
| The organization complies with a corporate governance code | Applies now | 74% | 82% | 88% | 79% |
| | Will apply in 5 years | 88% | 91% | 94% | 90% |
| The organization has implemented an internal control framework | Applies now | 78% | 81% | 91% | 81% |
| | Will apply in 5 years | 93% | 93% | 96% | 93% |

Analysis by Scope of Operations

A regulatory requirement to have an internal audit activity is most common in organizations where the scope of operations is national (73 percent) and international/multinational (69 percent) and least common where organizations operate at a local level (66 percent). Respondents' expectations for the next five years reveal a similar pattern (see **Table 1–5**). This might be explained by existing high regulatory requirements as further analysis shows that most of the national and international/multinational organizations are listed companies (88 percent) that operate in the financial services industry (63 percent).

Table 1–5
Results by Scope of Operations (Five Years from Now)

| Item | Now | Local | State/ Provincial/ Regional | National | International/ Multinational | Overall Average |
|--|-----------------------|-------|-----------------------------------|----------|---------------------------------|--------------------|
| | 5 Years from Now | | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 66% | 69% | 73% | 69% | 70% |
| | Will apply in 5 years | 71% | 72% | 76% | 72% | 73% |
| The organization complies with a corporate governance code | Applies now | 72% | 75% | 77% | 85% | 79% |
| | Will apply in 5 years | 88% | 88% | 89% | 93% | 90% |
| The organization has implemented an internal control framework | Applies now | 76% | 77% | 81% | 86% | 82% |
| | Will apply in 5 years | 90% | 91% | 94% | 94% | 93% |

Governance and Internal Control Context of the Organization

Overall Analysis

As shown in **Figure 1–1**, a large majority of respondents work for organizations that currently comply with a corporate governance code (79 percent) and have implemented an internal control framework (82 percent). While these percentages are higher than in 2006 (where they were 67 percent and 72 percent, respectively), and it can be concluded that while the governance and internal control context has gained in importance in the past four years, the gains are less significant than expected by respondents four years ago. In the 2006 survey, respondents were still likely to have been influenced by the relatively recent introduction of Sarbanes-Oxley and other guidance instituted in the aftermath of the financial scandals of a few years earlier.

These events brought governance and internal control issues to the forefront and might have led to positive expectations of these issues. In contrast, in 2010, the financial and economic crisis exposed weaknesses in governance and control (mainly within the highly regulated financial services industry), and this may have had a significant negative impact on the expectations of internal audit practitioners in general. Despite the relatively low gain of the past four years, respondents still expect compliance with a corporate governance code and implementation of an internal control framework to increase further in the next five years (90 percent and 93 percent, respectively).

Analysis by Region

A comparison of the governance and internal control context based on responses from respondents in different regions highlights three key differences (see **Table 1–1**).

Compliance with a corporate governance code is least common in the Middle East (67 percent) and most common in the Asia Pacific region (86 percent). The most likely reason for this response is that such codes did not exist in the Middle East until very recently. For example, the United Arab Emirates did not publish its corporate governance code until 2009, whereas in the Asia Pacific region, a number of countries have had governance codes since the late 1990s (Australia and South Korea) or early years of this century (Singapore and China).

The smallest proportion of organizations that have already implemented an internal control framework is found in Eastern Europe/Central Asia (77 percent). This can be explained by the fact that the former Soviet bloc countries in Eastern Europe and Central Asia gained economic independence only comparatively recently, hence they are still in the process of developing and implementing internal control practices. While the Organization for Economic Cooperation and Development (OECD) generic guidance for Southern and Eastern Europe (1999) was used as a basis for further guidance in Eastern Europe, in 2003, countries that had applied for European Union membership were given specific conditions to improve their corporate governance systems.

Finally, the region with the largest proportion that has already implemented an internal control framework is Asia Pacific (86 percent). The most likely reason for this is that three countries that are highly represented in the survey results for the Asia Pacific region (Chinese Taiwan, Japan, and Malaysia) have a long history of corporate governance codes that stress the importance of governance and internal control.

An expected trend of improvement of the governance and control context is clear in responses from Africa and Latin America/Caribbean. This finding is consistent with studies that found emerging countries are catching up with best practices in corporate governance.⁷

Analysis by Industry

Compliance with a corporate governance code and the implementation of an internal control framework are most common in the financial services industry (84 percent and 86 percent, respectively), raw material and agriculture industry (82 percent and 85 percent, respectively), and the manufacturing and construction industry (81 percent and 83 percent, respectively) (see **Table 1–2**). As noted previously with the example of the Basel principles, regulation has an important impact on the governance and internal control context of banks and other financial institutions. The results for the raw material and agriculture industry as well as the manufacturing and construction industry can be explained by the fact that at least half of these organizations are listed (50 percent and 63 percent, respectively) and operate on an international scale (52 percent and 71 percent, respectively). Organizations in the public sector/government comply least with corporate governance codes (71 percent). This is most likely because corporate governance codes are seen as being less relevant to the public sector because the conflicts between the owners of an organization and its management that underpin traditional agency theory and from which corporate governance codes originate are less likely to be found outside the private sector. In

⁷ An in-depth discussion of this topic falls outside the scope of this report. The results of several empirical studies on this topic can be found in a special issue of the *Journal of Business Ethics* published in 2002 (Vol. 37, No. 3). For those readers who are interested in comparing international corporate governance codes, the European Corporate Governance Institute (ECGI) maintains a listing that can be found at www.ecgi.org/codes.

addition, the majority of codes address such issues as board composition and shareholder rights which, while partially relevant to the public sector, are not immediately applicable.

Organizations in the public sector/government report below average current implementation of an internal control framework (from 78 percent currently to 92 percent in five years where the overall average is 82 percent currently and 93 percent in five years). This result is consistent with studies that have found the public sector is in an early stage of setting up a basic internal control system.⁸ For the next five years, the financial services sector (from 86 percent currently to 95 percent in five years) and raw material and agriculture industry (from 85 percent to 94 percent) expect the lowest future increase in implementation. In the public sector, the expectation for implementing an internal control framework is above the average (from 78 percent to 92 percent). Again, this could be due to the lower level of maturity of the governance and internal control context from which they start.

Analysis by Ownership Structure

Complying with a corporate governance code and implementing an internal control framework are most common within listed companies (90 percent and 89 percent, respectively) (see **Table 1–3**). Research shows that listed organizations with their more dispersed ownership structure have better corporate governance mechanisms in place in accordance with the need to protect their stakeholders.⁹ In the future, privately held organizations expect the most improvement of their governance and internal control context, with listed organizations expecting the least improvement. This matches the trend, discussed earlier, that privately held organizations expect to catch up with their listed counterparts in the future.

Analysis by Organizational Size

Responses clearly show that the largest organizations have the most developed governance and internal control context (88 percent and 91 percent, respectively) (see **Table 1–4**). Therefore, it is reasonable to see that this group of largest organizations expects a lower improvement in the next five years (from 88 percent to 94 percent for compliance with a corporate governance code and from 91 percent to 96 percent for implementation of an internal control framework). Nevertheless, the results show that smaller organizations expect to catch up with their larger counterparts in the next five years (from 74 percent to 88 percent for compliance with a corporate governance code and from 78 percent to 93 percent for implementing an internal control framework). This can be explained by institutional theory that suggests smaller organizations consider practices of larger organizations as providing a good example and thus try to imitate them.¹⁰

Analysis by Scope of Operations

Responses show that the larger the range of operations, the more the governance and internal control context is developed: 85 percent and 86 percent, respectively, for international/multinational organizations

⁸ Pollitt, C., and G. Bouckaert, *Public Management Reform: A Comparative Analysis* (Oxford: Oxford University Press, 2004).

⁹ La Porta, R., F. Lopez-de-Salines, A. Shleifer, and R.W. Vishny, "Investor Protection and Corporate Governance." *Journal of Financial Economics* 58 (1-2) (2000): 3–27.

¹⁰ DiMaggio, P. J., and W. W. Powell, "The Iron Cage Revised: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review*, Vol. 48, No. 2 (1983): 147–60.

compared to 72 percent and 76 percent, respectively, for local organizations (see **Table 1–5**). According to basic agency theory arguments, organizations with a wider range of operations are characterized by a corresponding greater information asymmetry problem, which in turn leads to more monitoring mechanisms.¹¹ This might explain why their governance and internal control context is more developed. Differences between local and international/multinational organizations in terms of the governance and internal control context are expected to become smaller over the next five years. This finding is consistent with the previous argument that smaller organizations are catching up with larger counterparts as 69 percent of these local and regional organizations fall into the category of the smallest organizations.

Analysis by Age of the Internal Audit Activity

There is a significant positive relationship between the current degree of development of the governance and internal control context (as measured by the two questionnaire items) and the current age of the internal audit activity (see **Table 1–6**). These results show that mature internal audit activities are more commonly found in organizations with a more highly developed governance and internal control context (70 percent and 73 percent, respectively, for the youngest internal audit activity compared to 87 percent and 91 percent, respectively, for the mature internal audit activity). This finding confirms that when studying internal audit practices, the maturity of the governance and control context should be taken into account.¹² The future view clearly shows that the highest improvements to the governance and internal control contexts are expected in those organizations with a young internal audit activity. Again, this finding is consistent with the previous argument that smaller organizations are catching up with larger counterparts given that further analysis of the data highlights the fact that 68 percent of organizations with a young internal audit activity are also smaller in terms of size.

Table 1–6
Governance/Control Context by Internal Audit Activity Age
(Difference Between Now and the Next Five Years)

| Item | Now | Up to 4 Years | 5-10 Years | 11-50 Years | More than 50 Years | Overall Average |
|--|-----------------------|---------------|------------|-------------|--------------------|-----------------|
| | 5 Years from Now | | | | | |
| Internal auditing is required by law or regulation where the organization is based | Applies now | 56% | 70% | 74% | 82% | 70% |
| | Will apply in 5 years | 64% | 73% | 76% | 81% | 73% |
| The organization complies with a corporate governance code | Applies now | 70% | 78% | 83% | 87% | 80% |
| | Will apply in 5 years | 88% | 89% | 92% | 95% | 90% |
| The organization has implemented an internal control framework | Applies now | 73% | 80% | 84% | 91% | 82% |
| | Will apply in 5 years | 93% | 93% | 93% | 95% | 93% |
| The organization has implemented a knowledge management system | Applies now | 35% | 42% | 49% | 60% | 46% |
| | Will apply in 5 years | 68% | 69% | 73% | 73% | 71% |

¹¹ Jensen, M. C., and W. H. Meckling, Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3 (1976): 305–360.

¹² Sarens G., Editorial note – Internal Auditing Research: Where Are We Going? *International Journal of Auditing*, Vol. 13, No. 1 (2009): 1–7.

Chapter 2

Changing Roles of the Internal Audit Activity

Introduction

The responses to survey questions regarding existing legal/regulatory requirements to have an internal audit activity and about the governance and internal control contexts of the organizations represented in this study were analyzed in the previous chapter. It also looked at how respondents expected these issues to evolve in the forthcoming five years.

This chapter presents an analysis of respondents' answers to the following two questions:

- As an internal auditor, do you perceive likely changes in the following roles¹³ of the internal audit activity over the next five years?
 - Review of financial processes
 - Risk management
 - Governance
 - Regulatory compliance
 - Operational auditing
- Please indicate whether the following statements apply to your organization now, in the next five years, or will not apply in the foreseeable future:
 - Internal auditors in the organization have an advisory role in strategy development.
 - The internal audit activity has provided training to the audit committee members.
 - The internal audit activity assumes an important role in the integrity of financial reporting.
 - The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues.
 - The internal audit activity places more emphasis on assurance than on consulting activities.

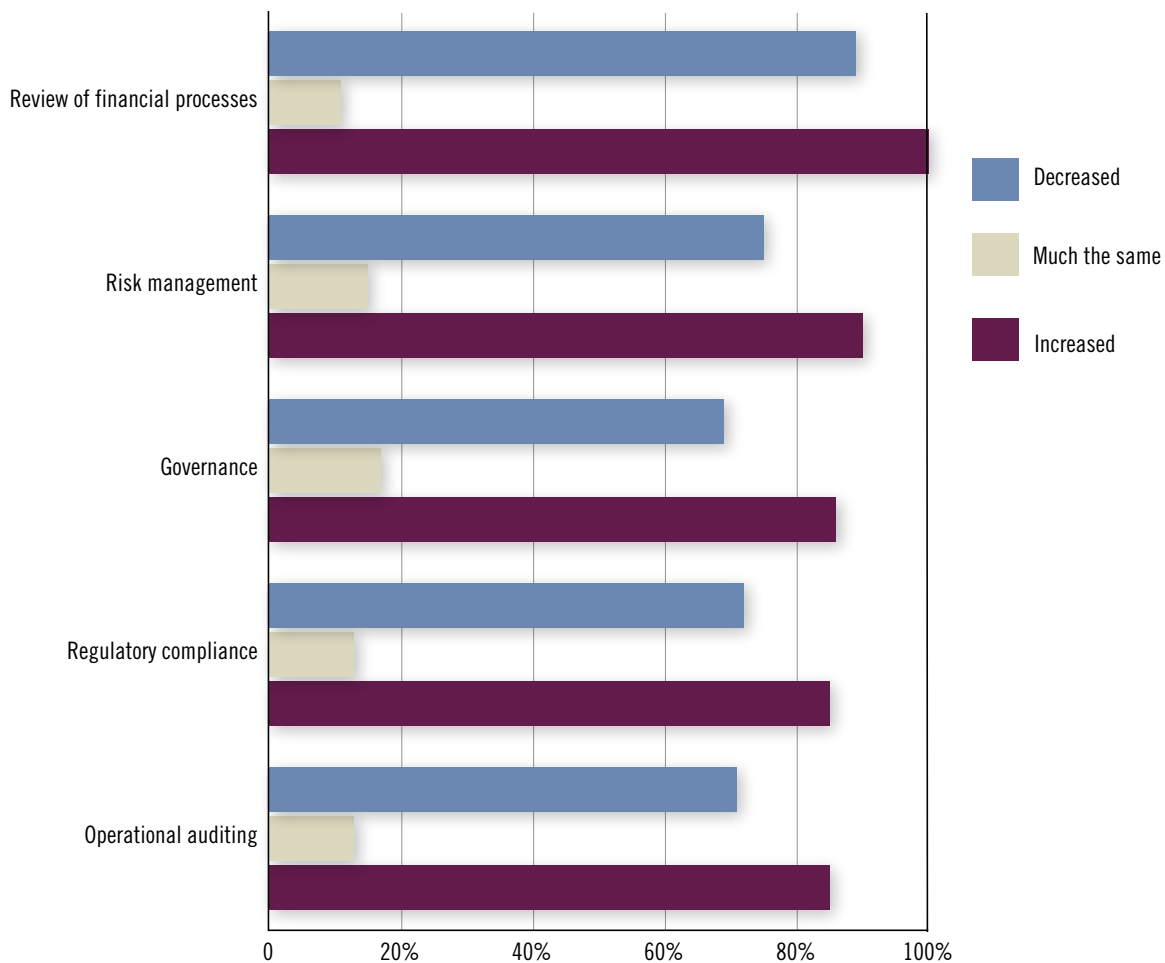
These questions are discussed in two sections titled Expected Evolution of the Five Roles of the Internal Audit Activity and Additional Internal Audit Activity Roles. The first section covers the expected evolution of these internal audit activity roles in the context of the governance and internal control culture of organizations that were analyzed in Chapter 1. An overview of responses is shown in **Figure 2–1**.

¹³ For more information, please see question 48.

Expected Evolution of the Five Roles of the Internal Audit Activity¹⁴

Two areas in particular are expected to increase in importance over the next five years: risk management (80 percent) and governance (65 percent) (see **Figure 2–1**), and results from the 2006 survey show very similar expectations at that time (80 percent and 63 percent, respectively). The consistency of these responses shows that respondents believe that the role of the internal audit activity in risk management and governance will continue to increase to become accepted from the perspective of internal audit practitioners as the two most important cornerstones of the profession.¹⁵ In contrast the internal audit activity's role in reviewing financial processes and operational auditing is expected to remain stable in the next five years (54 percent and 48 percent, respectively), though it should be noted that the proportion of respondents that expect a decrease in these five internal audit activity roles is very small (ranging from 1 percent to 6 percent).

Figure 2–1: Expected Increase in the Five Roles of the Internal Audit Activity (Overall Results)



¹⁴ The five roles discussed are those included in question 48.

¹⁵ It should be noted that the 2010 survey questionnaire does not ask for data relating to the actual roles carried out by the internal audit activity.

Analysis by Region

Analysis of the expected changes in the five internal audit activity roles per region (**Table 2–1**) shows that:

- The highest expectation of an increase in the review of financial processes was reported by the Middle East (60 percent), Latin America/Caribbean (59 percent), and Africa (57 percent). The overall average was 40 percent.
- The lowest expectation of an increase in the internal audit activity's role in risk management was reported by the United States/Canada and Western Europe (both 74 percent). The overall average was 80 percent.
- The lowest expected increase in the internal audit activity's role in governance was reported by the United States/Canada (59 percent), Eastern Europe/Central Asia (61 percent), and Western Europe (62 percent). The overall average was 65 percent.
- The highest expected increase in regulatory compliance was reported by Africa (63 percent), the Middle East (63 percent), and Latin America/Caribbean (58 percent). The average response was 50 percent.
- The highest expected increase in operational auditing was reported by the Middle East (59 percent), Africa (57 percent), Eastern Europe/Central Asia (55 percent), and Latin America (53 percent). The average response was 47 percent.

These results indicate that the roles of the internal audit activity in the next five years will not follow a uniform trend across the world. This can, to some extent, be related to the relative age and maturity of the profession in the defined regions. In regions where the internal audit profession is younger (Africa,¹⁶ Latin America/Caribbean,¹⁷ and the Middle East¹⁸ the internal audit activity is expected to evolve in the next five years toward roles that are already well established in more mature regions. In Western Europe¹⁹ and the United States/Canada,²⁰ where the profession has been established for a longer period, the role of the profession in risk management and governance is more established than in other regions. Chapter 1 highlighted that the governance and internal control contexts of respondents' organizations in emerging countries are catching up with those of the developed world and that the Middle East in particular is characterized by important expected changes that may lead to making an internal audit activity a legal requirement. These factors are likely to have a positive impact on the maturity of the internal audit activity, which should then have an impact on the future roles of activities in these regions. More longitudinal research will be needed to confirm this proposition, although archival data from The IIA suggests that in Western Europe and the United States/Canada, the role of the profession in risk management and governance is more highly developed than in other regions.

¹⁶ In Africa, the countries of Algeria, Botswana, Cameroon, Ethiopia, Kenya, and Malawi established their local IIA institute less than 15 years ago.

¹⁷ In the Latin America and Caribbean region, the countries of Chile, Guatemala, Haiti, Honduras, and Paraguay established their local IIA institute less than 10 years ago.

¹⁸ In the Middle East, the countries of Egypt, Lebanon, and Oman established their local IIA Institute less than 10 years ago.

¹⁹ Most Western European countries established their local IIA institute more than 25 years ago.

²⁰ The profession has the longest history in this region given that The IIA was founded in the United States in 1941.

Table 2–1
Expected Increase in the Five Roles of the Internal Audit Activity per Region (Percentage of Respondents)

| | Africa | Asia Pacific | Eastern Europe-Central Asia | Latin America and Caribbean | Middle East | United States and Canada | Western Europe | Overall Average |
|-------------------------------|--------|--------------|-----------------------------|-----------------------------|-------------|--------------------------|----------------|-----------------|
| Review of financial processes | 57% | 43% | 42% | 59% | 60% | 33% | 30% | 41% |
| Risk management | 87% | 86% | 84% | 86% | 87% | 74% | 74% | 80% |
| Governance | 83% | 73% | 61% | 70% | 79% | 59% | 62% | 65% |
| Regulatory compliance | 63% | 50% | 34% | 58% | 63% | 52% | 47% | 50% |
| Operational auditing | 57% | 52% | 55% | 53% | 59% | 43% | 38% | 47% |

Analysis by Industry

Review of Financial Processes

Review of financial processes is expected to increase most in the financial services industry (42 percent) and least in the public sector/government (35 percent).

Risk Management and Governance

The internal audit activity's role in risk management and governance is expected to increase most by respondents in the financial services industry (81 percent and 68 percent, respectively) and the raw material and agriculture industry (82 percent and 69 percent, respectively). The average of responses was 80 percent and 65 percent, respectively. It could be assumed that the recent serious control breakdowns in the financial services industry and the resulting cascade of governance failures have influenced the internal audit activity's expectation that its future role in risk management and governance will increase as a method of reducing these risks. As discussed in Chapter 1, the governance and internal control contexts for financial services are strongly influenced by regulation, which leads to more formal requirements in terms of risk management and governance. This in turn increases the opportunities for the internal audit activity to play a role in these domains. Chapter 1 also noted that organizations within the raw material and agriculture industry are often listed on stock exchanges and these entities generally operate on an international scale. These characteristics can be used to explain the more highly developed governance and internal control contexts.

Within the public sector/government, less than the average number of respondents expects the role of the internal audit activity in risk management and governance (73 percent and 62 percent, respectively) to increase (overall average of 80 percent and 65 percent, respectively). As reported in Chapter 1, in the public sector/government, the current governance and internal control contexts are currently less highly developed compared to listed companies, though this situation is expected to improve in the future, in particular with the implementation of internal control frameworks. While the data from this study do not allow us to perform an in-depth analysis of the internal audit activity roles in the public sector, this is an important area for future research. Taking these findings together, it may be inferred that in organizations or even industries with more developed governance and internal control contexts, the internal audit activity is expected, by internal auditors, to play an increased role in risk management and governance in the next five years than in those with less developed contexts. This tends to confirm that the internal audit activity's role is influenced by the governance and internal control contexts.²¹

Regulatory Compliance and Operational Auditing

In the financial services industry, more than the average number of respondents expects an increase in the internal audit activity's role in regulatory compliance (57 percent compared to 50 percent). This might be explained by the fact that these organizations are already obliged to comply with international, national, and industry codes and regulations. Responses also suggest that in this sector, four out of the five internal audit activity roles are expected to increase in the next five years. This means that the internal audit activity appears to be highly pressured to deliver value and could also explain why a less than average number of respondents expect the internal audit activity's role in operational auditing (43 percent compared to 50 percent) to increase, as they are likely to already have a high level of this activity.

Within the raw material and agriculture industry, operational auditing (55 percent) is expected to increase by more than the average number of responses (47 percent) in the next five years. In the public sector, responses suggest that regulatory compliance (42 percent) is likely to increase by less than the average number of responses (50 percent). It should be noted that in the public sector/government industry, the expectations of increase are lower than the average for all five internal audit activity roles, suggesting that the internal audit activity is expected to be less subject to change within this sector (see **Table 2–2**).

²¹ Chapter 1 discusses the factors related to this inference; also cf., Sarens, G., Editorial note – Internal Auditing Research: Where Are We Going? *International Journal of Auditing*, Vol. 13, No. 1 (2009): 1–7.

Table 2–2
Expected Increase in the Five Roles of the Internal Audit Activity per Industry (Percentage of Respondents)

| | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|-------------------------------|--|------------------------------|---------------------------|------------------------------|---------|---|----------------------------|-----------------|
| Review of financial processes | 42% | 37% | 35% | 40% | 40% | 38% | 40% | 41% |
| Risk management | 81% | 80% | 73% | 82% | 78% | 80% | 78% | 80% |
| Governance | 68% | 64% | 62% | 69% | 65% | 63% | 57% | 65% |
| Regulatory compliance | 57% | 47% | 42% | 50% | 53% | 45% | 43% | 50% |
| Operational auditing | 43% | 50% | 46% | 55% | 51% | 48% | 46% | 47% |

Analysis by Ownership Structure

Table 2–3 shows that especially for privately held organizations, a larger than average proportion of respondents expect that the internal audit activity’s roles will increase in the next five years in reviewing financial processes (43 percent compared to an average of 40 percent), risk management (81.0 percent compared to an average of 79 percent), and regulatory compliance (53.0 percent compared to an average of 50 percent). As discussed in Chapter 1, privately held organizations (which also tend to be smaller, according to the data) are expected to continue to catch up with their listed counterparts in terms of their governance and internal control contexts. This is likely to create more opportunities and challenges for the internal audit activity to increase its role in this type of organization. It should also be noted that benefiting from these opportunities and challenges will inevitably depend on the availability of resources (human resources as well as audit tools and techniques).

Table 2–3
Expected Increase in the Five Roles of the Internal Audit Activity per
Ownership Structure (Percentage of Respondents)

| | Privately Held (Nonlisted) Company | Publicly Traded (Listed) Company | Public Sector/ Government | Not-for-profit Organization/ Nongovernment Organization | Other | Overall Average |
|-------------------------------------|--|-------------------------------------|------------------------------|--|-------|--------------------|
| Review of financial processes | 43% | 37% | 40% | 38% | 44% | 40% |
| Risk management | 81% | 80% | 77% | 76% | 82% | 79% |
| Governance | 65% | 65% | 64% | 64% | 68% | 65% |
| Regulatory compliance | 53% | 49% | 45% | 54% | 59% | 50% |
| Operational auditing | 48% | 46% | 50% | 44% | 53% | 47% |

Analysis by Organizational Size

As noted in **Table 2–4** within the group of smallest organizations (those with total revenues/budget less than US \$1 billion), a greater than average proportion of respondents expects that in the next five years there will be an increase in the internal audit activity roles in the review of financial process (42 percent compared to an average of 39 percent), risk management (80 percent compared to an average of 79 percent), and operational auditing (50 percent compared to an average of 47 percent). This finding is consistent with the expectation that smaller organizations expect to catch up with their larger counterparts, not only with respect to their governance and internal control contexts, but also to their internal audit activity roles. In smaller organizations, respondents expect the role of their internal audit activity to expand but it has to be noted that as with the case of privately held organizations, putting these expectations into practice may require additional or realigned resources.

Table 2–4
Expected Increase in the Five Roles of the Internal Audit Activity
per Organizational Size (Percentage of Respondents)

| | Less than \$1B | \$1B-\$15B | More than \$15B | Overall Average |
|-------------------------------|----------------|------------|-----------------|-----------------|
| Review of financial processes | 42% | 35% | 38% | 39% |
| Risk management | 80% | 78% | 77% | 79% |
| Governance | 65% | 64% | 64% | 65% |
| Regulatory compliance | 50% | 46% | 52% | 49% |
| Operational auditing | 50% | 46% | 43% | 47% |

Analysis by Scope of Operations

Especially in local organizations, a more than average proportion of respondents expects the review of financial processes (43 percent compared to an average of 39 percent), regulatory compliance (55 percent compared to an average of 50 percent), and operational auditing (50 percent compared to an average of 47 percent) to increase. This result is consistent with previous findings, which note that local organizations are often smaller and privately held (see **Table 2–5**).

Table 2–5
Expected Increase in the Five Roles of the Internal Audit Activity per
Scope of Operations (Percentage of Respondents)

| | Local | State/ Provincial/ Regional | National | International/ Multinational | Overall Average |
|-------------------------------|-------|-----------------------------------|----------|---------------------------------|-----------------|
| Review of financial processes | 43% | 38% | 43% | 37% | 39% |
| Risk management | 79% | 77% | 80% | 79% | 79% |
| Governance | 66% | 61% | 66% | 65% | 65% |
| Regulatory compliance | 55% | 50% | 49% | 50% | 50% |
| Operational auditing | 50% | 48% | 49% | 45% | 47% |

Analysis by the Internal Audit Activity Age

Within the most recently created internal audit activities (established fewer than four years ago), a more than average proportion of respondents expects to increase the internal audit activity role for the forthcoming five years in the review of financial processes (45 percent compared to an average of 40 percent), risk management (81 percent compared to an average of 79 percent), and operational auditing (55 percent compared to an average of 47 percent). Their expectation to focus on risk management in the next five years could be explained by the fact that these internal audit activities have been created or have developed in a period during which risk management has become a key business issue for many organizations as a result of the recent financial and economic crisis (see **Table 2–6**).

Table 2–6
Expected Increase in the Five Roles of the Internal Audit Activity
per Age of the Internal Audit Activity (Percentage of Respondents)

| | Up to 4 Years | 5-10 Years | 11-50 Years | More than 50 Years | Overall Average |
|-------------------------------|---------------|------------|-------------|--------------------|-----------------|
| Review of financial processes | 45% | 40% | 37% | 40% | 40% |
| Risk management | 81% | 79% | 78% | 76% | 79% |
| Governance | 64% | 64% | 65% | 65% | 65% |
| Regulatory compliance | 50% | 47% | 50% | 57% | 50% |
| Operational auditing | 55% | 51% | 43% | 46% | 47% |

Analysis by Expected Evolution of the Internal Audit Activity Size

A greater than average proportion of respondents who expect their internal audit activity staff size to increase in the next five years expect an increase in their role in risk management (86 percent compared to an average of 82 percent) and governance (75 percent compared to an average of 69 percent). This is an important finding that contains an important message: according to the respondents, a more intense role in risk management and governance will require an increase in staff size. In other words, for internal audit activities to play an increased role in the two areas that are strongly believed will become key cornerstones for the profession, it will be necessary to expand staff numbers (see **Table 2–7**).

Table 2–7
Expected Increase in the Five Roles of the Internal Audit Activity by expected Evolution of the Internal Audit Activity Size (Percentage of Respondents)

| | Increase | Remain the Same | Decrease | Overall Average |
|-------------------------------|----------|-----------------|----------|-----------------|
| Review of financial processes | 41% | 30% | 32% | 36% |
| Risk management | 86% | 78% | 79% | 82% |
| Governance | 75% | 62% | 66% | 69% |
| Regulatory compliance | 48% | 40% | 41% | 44% |
| Operational auditing | 49% | 40% | 42% | 45% |

Analysis by Internal Audit Activity Staff Level

Analysis reveals a number of differences between the expectations of CAEs and internal audit managers compared to internal audit seniors and other staff members about the future roles of the internal audit activity. A more than average proportion of CAEs indicate an expected increase in the internal audit activity role in risk management (82 percent for CAEs compared to an average 79 percent). However, both CAEs and internal audit managers indicate an expected more than average increase in governance (69 percent for CAEs and 67 percent for managers compared to an average of 65 percent). Conversely, a more than average proportion of internal audit seniors and other audit staff report that they are likely to become more involved in the review of financial processes (41 percent for seniors and 46 percent for other staff compared to an average of 40 percent) and regulatory compliance (53 percent for both senior and other staff compared to an average of 50 percent).

This might be explained by closer contact that CAEs and internal audit managers have with their audit committee and senior management. It would follow that they are therefore more likely to take a strategic view of their role and perceive the need to increase their role in risk management and governance. The two remaining groups of internal audit activity staff are more involved in the operational side of internal auditing and therefore may not share the same vision. This is an important message for CAEs and internal audit managers: they should be aware that staff may not have the same expectations as they do about the future roles of the internal audit activity and it would be advisable to ensure that expectations within the internal audit activity become aligned. The current lack of alignment suggests that The IIA has an important role to play in closing this expectations gap. This might be achieved by running professional development programs, using benchmarking, and encouraging networking and other activities that include all staff levels (see **Table 2–8**).

Table 2–8
Expected Increase in the Five Roles of the Internal Audit Activity per Internal Audit Activity Staff Level

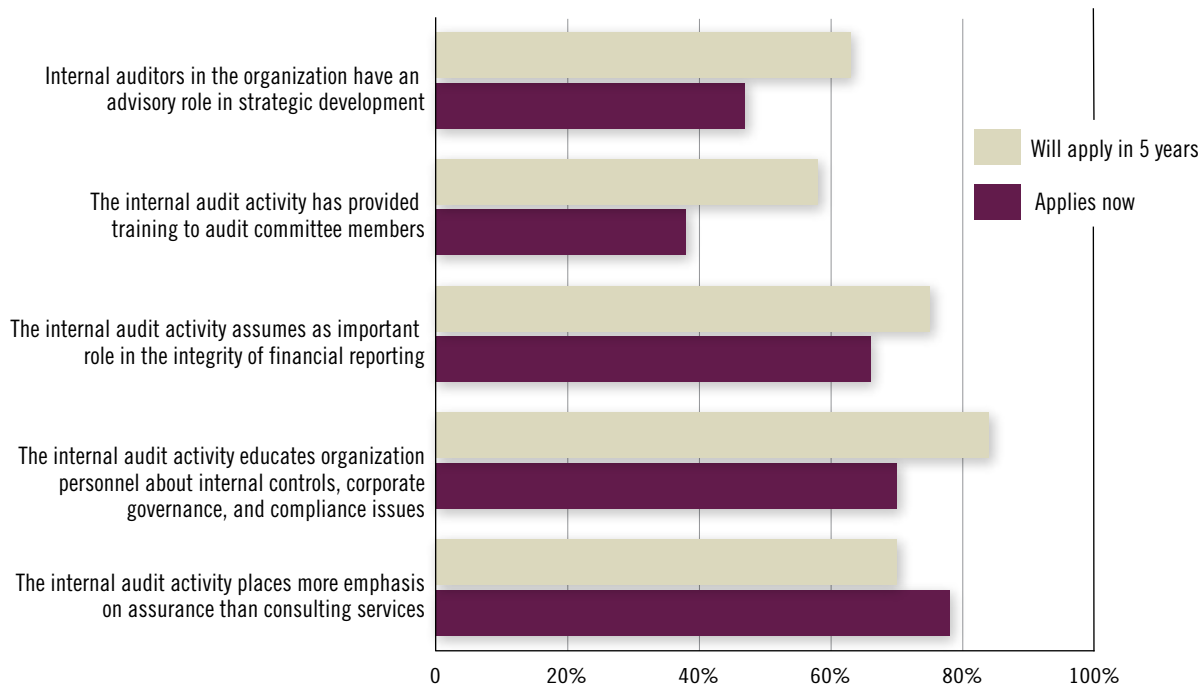
| | Chief Audit Executive (CAE) or Service Provider Partner (SPP) | Internal Audit or SP Manager | Internal Audit or SP Senior/Supervisor | Internal Audit or SP Staff | Overall Average |
|-------------------------------|---|------------------------------|--|----------------------------|-----------------|
| Review of financial processes | 36% | 35% | 41% | 46% | 40% |
| Risk management | 82% | 79% | 77% | 77% | 79% |
| Governance | 69% | 67% | 64% | 58% | 65% |
| Regulatory compliance | 45% | 50% | 53% | 53% | 50% |
| Operational auditing | 45% | 45% | 47% | 53% | 47% |

Additional Internal Audit Activity Roles

A large percentage of respondents (see **Figure 2-2**) expect an increase between the current situation and for the next five years in:

- The role of training audit committee members (20 percent of respondents).
- The internal audit activity's advisory role in strategy development (16 percent of respondents).
- An education role for the organization's personnel (14 percent of respondents).

Figure 2–2: Additional Internal Audit Roles (Overall Results)



Strategy Development

The results show that the internal audit activities in this study have a clear expectation of becoming more involved with top-level issues such as strategy development (proportion of respondents increases from 47 percent to 63 percent). This can be related to the reported overall expectation that there will be less emphasis on assurance in the next five years (8 percent of the respondents expect there to be a decrease). This expectation also existed in 2006, with 63 percent of the respondents at that time expecting an enhanced advisory role by 2009.

Risk Management and Governance Awareness

Another important message that can be inferred from these results (cf. previous page) is that the internal audit activity also expects to have an important role to play in the creation of risk management and governance awareness at all levels of the organization. It is further evidenced that practitioners believe that these two areas are going to become (or have already become) important cornerstones of their profession. It is also clear that respondents appreciate that, to establish this role, they must first create awareness of the importance of risk management and governance through training and education. Again, a comparison with the earlier survey reveals that this intention already existed in 2006.

Integrity of Financial Reporting

The internal audit activity's role in the integrity of financial reporting is expected to increase slightly (9 percent of the respondents expect an increase) in the next five years but is clearly perceived to be of less importance than the three other internal audit activity roles. Expectations with respect to the evolution of this role were clearly higher in 2006 than the situation in 2010. This might be explained by the fact

that the integrity of financial reporting became a very important issue in the aftermath of the corporate scandals that led to Sarbanes-Oxley and other similar guidance.²²

Analysis by Region

Analyzing the five additional internal audit activity roles outlined above in terms of the respondents' region shows that especially respondents from the Middle East (27 percent of them expect an increase) and Latin America/Caribbean (23 percent of them expect an increase) expect to become more involved in strategy development in the next five years. As previously highlighted, the profession is younger in these areas. Conversely, this expectation is much lower in regions where the profession is well established: the United States/Canada (13 percent of the respondents expect an increase) and Western Europe (15 percent of the respondents expect an increase). This suggests that in countries where the profession is well established, practitioners have lower expectations of an increased role in strategy development. Further research is needed to understand why this might be the case. Possible reasons for this situation might be a perception on behalf of internal audit activities that their competitive advantage and contribution to their organizations currently lie where their skills and competences are most directly employable. The situation in the Middle East, where most internal audit activities are currently outsourced to the Big Four consulting firms, might explain why they have a higher than average expectation of becoming involved in strategy development, as this is likely to be a much more familiar and higher value area for these respondents.

The largest proportion of respondents that expect the internal audit activity to provide more training for audit committee members in the next five years can be found in the Middle East (44 percent of the respondents expect an increase) and Africa (31 percent of the respondents expect an increase). The high expectations in these regions might be linked to the important improvements (current and expected) in the governance and internal control contexts of organizations in this region. This might also explain why internal audit practitioners in these regions expect that audit committee members, who are mandated to play a key role in improving the governance and internal control contexts, need more training.

The smallest proportion of respondents that expect an increase in the internal audit activity's role in the integrity of financial reporting was found in the United States and Canada (only 5 percent of the respondents expect an increase). This might be explained by the impact of Sarbanes-Oxley, which has been a part of the regulatory systems since 2002, and a large group of the internal audit activities in this region (44 percent) are publicly traded organizations that are already strongly focusing on the integrity of financial reporting and therefore expect a lower increase in this area.

With respect to the balance of assurance and consulting, in the next five years, results show that the largest proportion of respondents expecting a decrease can be found in Asia Pacific (13 percent of the respondents expect a decrease) and the United States and Canada (10 percent of the respondents expect a decrease) (see **Table 2–9**).

²² www.sec.gov/about/laws/soa2002.pdf

Table 2–9
Additional Internal Audit Roles per Region (Percentage of Respondents)

| Item | Now | Africa | Asia Pacific | Eastern Europe-Central Asia | Latin America and Caribbean | Middle East | United States and Canada | Western Europe | Overall Average |
|--|-----------------------|--------|--------------|-----------------------------|-----------------------------|-------------|--------------------------|----------------|-----------------|
| | 5 Years from Now | | | | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 62% | 54% | 48% | 57% | 53% | 44% | 36% | 47% |
| | Will apply in 5 years | 80% | 70% | 70% | 80% | 80% | 57% | 51% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 46% | 37% | 22% | 43% | 34% | 48% | 29% | 38% |
| | Will apply in 5 years | 77% | 54% | 49% | 71% | 78% | 64% | 47% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 77% | 70% | 50% | 68% | 59% | 74% | 58% | 67% |
| | Will apply in 5 years | 87% | 76% | 67% | 80% | 80% | 79% | 67% | 75% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 82% | 71% | 51% | 74% | 79% | 82% | 60% | 71% |
| | Will apply in 5 years | 94% | 83% | 78% | 89% | 88% | 91% | 76% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 84% | 78% | 75% | 74% | 78% | 82% | 77% | 78% |
| | Will apply in 5 years | 75% | 65% | 70% | 68% | 69% | 72% | 70% | 70% |

Analysis by Industry

The proportion of respondents who expect to become more involved in strategy development is highest in the raw material and agriculture industry (20 percent of the respondents expect an increase) and lowest in the public sector (10 percent of the respondents expect an increase). This might be explained by the fact that strategy development will receive more attention within the private sector where strategy is developed and implemented by senior management. In the public sector, governments have a political mandate through their electorate and strategy is a less discrete activity.

Similar results can be found with respect to the expectations to provide training to audit committee members, where the highest proportion expecting an increase is found in the raw material and agriculture industry (25 percent of the respondents) and the lowest proportion in the public sector (18 percent of the respondents). This last finding can be explained by the fact that, within those countries that are highly represented in this study, audit committees have a relatively long history within the

public sector, which may reduce the opportunity for the internal audit activity to further increase its training role.

The proportion of respondents expecting to provide more education to organizational personnel is lowest within the financial services industry (12 percent of the respondents expect an increase). Given that recent malpractices within this industry in the United States and Western Europe (regions that represent a significant group of respondents) have highlighted a lack of awareness of the importance of governance and risk management at all levels, this is a surprising result. It is possible that because issues of control and governance have traditionally been discussed more thoroughly in the banking industry than in other areas (albeit possibly not enough or unsuccessfully), there is little perception of a need to increase this educational role.

The group of respondents who expect to place less emphasis on assurance in the next five years is largest within the raw material and agriculture industry (12 percent of the respondents), which is consistent with previous findings. This group is smallest in the public sector/government (6 percent of the respondents expect a decrease). **Table 2–10** shows the full analysis of the expected evolution in these five roles by industry.

Table 2–10
Additional Internal Audit Roles per Industry (Percentage of Respondents)

| Item | Now | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|---|-----------------------|--|------------------------------|---------------------------|------------------------------|---------|---|----------------------------|-----------------|
| | 5 Years from Now | | | | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 47% | 42% | 54% | 48% | 50% | 46% | 43% | 47% |
| | Will apply in 5 years | 64% | 59% | 64% | 68% | 67% | 61% | 59% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 42% | 29% | 40% | 40% | 41% | 33% | 30% | 38% |
| | Will apply in 5 years | 61% | 50% | 58% | 65% | 64% | 53% | 50% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 67% | 68% | 62% | 69% | 66% | 67% | 67% | 67% |
| | Will apply in 5 years | 76% | 76% | 69% | 75% | 75% | 73% | 75% | 75% |

Table 2–10
Additional Internal Audit Roles per Industry (Percentage of Respondents) (continued)

| Item | Now | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|--|-----------------------|--|------------------------------|---------------------------|------------------------------|---------|---|----------------------------|-----------------|
| | 5 Years from Now | | | | | | | | |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 68% | 68% | 72% | 73% | 74% | 70% | 71% | 71% |
| | Will apply in 5 years | 80% | 85% | 86% | 86% | 87% | 83% | 86% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 82% | 75% | 79% | 78% | 74% | 77% | 72% | 78% |
| | Will apply in 5 years | 73% | 65% | 73% | 66% | 67% | 70% | 64% | 70% |

Analysis by Ownership Structure

Within privately held organizations, a larger proportion of respondents expects an increasing role in all activities (the proportion of respondents ranges from 12 percent to 23 percent) and a relatively large proportion of respondents within this group expects a lower focus on assurance (16 percent of the respondents). On the other hand, most respondents within listed organizations expect minimal change in their advisory and education role (the proportion of respondents who expect an increase ranges from 6 percent to 17 percent). This might mean that in the more highly established (mature) internal audit activity (more commonly found within listed organizations), the proportion of internal audit activities that expects an increase in their advisory and education role is smallest (see **Table 2–11**).

Table 2–11
Additional Internal Audit Roles per Ownership Structure (Percentage of Respondents)

| Item | Now | Privately Held (Nonlisted) Company | Publicly Traded (Listed) Company | Public Sector/ Government | Not-for-profit Organization/ Nongovernment Organization | Overall Average |
|--|-----------------------|--|--|------------------------------|--|--------------------|
| | 5 Years from Now | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 45% | 44% | 54% | 48% | 47% |
| | Will apply in 5 years | 64% | 60% | 68% | 63% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 33% | 39% | 40% | 46% | 38% |
| | Will apply in 5 years | 56% | 56% | 60% | 67% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 60% | 73% | 64% | 62% | 67% |
| | Will apply in 5 years | 73% | 79% | 72% | 71% | 75% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 67% | 72% | 72% | 77% | 71% |
| | Will apply in 5 years | 82% | 84% | 85% | 89% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 82% | 75% | 79% | 78% | 77% |
| | Will apply in 5 years | 68% | 68% | 74% | 70% | 70% |

Analysis by Organizational Size

An analysis taking into account respondents' organizational size (see **Table 2–12**) shows results consistent with those based on ownership structure. Given that a large majority (61 percent) of the privately held organizations in this study also fall into the group of smallest organizations (total revenues/budget less than US \$1 billion), it is reasonable to see that within the group of smallest organizations, a proportion of respondents expects to have an increase in all roles studied in this section (the proportion of respondents ranges from 9 percent to 21 percent) compared to the two other groups. This can also be linked to a previous finding that privately held as well as smaller organizations expect their internal audit activity roles to catch up with their listed and larger counterparts.

Table 2–12
Additional Internal Audit Roles per Organizational Size (Percentage of Respondents)

| Item | Now | Less than \$1B | \$1B-\$15B | More than \$15B | Overall Average |
|--|-----------------------|----------------|------------|-----------------|-----------------|
| | 5 Years from Now | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 49% | 41% | 48% | 46% |
| | Will apply in 5 years | 66% | 57% | 60% | 62% |
| The internal audit activity has provided training to audit committee members | Applies now | 36% | 35% | 45% | 38% |
| | Will apply in 5 years | 58% | 56% | 59% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 64% | 68% | 73% | 67% |
| | Will apply in 5 years | 74% | 76% | 78% | 75% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 70% | 71% | 73% | 71% |
| | Will apply in 5 years | 85% | 83% | 83% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 76% | 78% | 82% | 77% |
| | Will apply in 5 years | 70% | 68% | 72% | 70% |

Analysis by Range of Operations

A relatively larger proportion of respondents within international/multinational organizations expects a lower emphasis on assurance in the next five years (11 percent of the respondents expect a decrease) and a relatively smaller proportion of these respondents expects an increase in the internal audit activity's role in the integrity of financial reporting (only 6 percent of the respondents expect an increase). This may be due to the relatively long history of compliance with supervisory and regulatory codes such as Sarbanes-Oxley within this group of organizations (see **Table 2–13**).

Table 2–13
Additional Internal Audit Roles per Scope of Operations (Percentage of Respondents)

| Item | Now | Local | State/ Provincial/ Regional | National | International/ Multinational | Overall Average |
|--|-----------------------|-------|-----------------------------------|----------|---------------------------------|--------------------|
| | 5 Years from Now | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 51% | 51% | 49% | 44% | 47% |
| | Will apply in 5 years | 67% | 66% | 66% | 59% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 41% | 42% | 37% | 36% | 38% |
| | Will apply in 5 years | 63% | 61% | 57% | 56% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 62% | 66% | 65% | 69% | 67% |
| | Will apply in 5 years | 73% | 74% | 75% | 75% | 75% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 73% | 71% | 70% | 70% | 71% |
| | Will apply in 5 years | 84% | 86% | 83% | 84% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 78% | 76% | 78% | 78% | 78% |
| | Will apply in 5 years | 72% | 71% | 71% | 67% | 70% |

Analysis by Internal Audit Activity Age

Taking into account the age of the internal audit activity (see **Table 2–14**), it becomes clear that the highest percentage of respondents who expects an increase in all five roles over the next five years was found within the group of youngest internal audit activities (the percentage of respondents ranges from 17 percent to 29 percent). The more well established the internal audit activity, the smaller the percentage of respondents who expect increases; this may be because they already play these roles. A striking difference can be found for the internal audit activity's role in the integrity of financial reporting. In internal audit activities with the longest history, there are respondents who expect a decrease in the role of the internal audit activity in the integrity of financial reporting (0.3 percent of the respondents expect a decrease). This could mean that for more traditional roles, internal audit activities with a longer history have already maximized their role in this area. Further research is needed to investigate why well established internal audit activities hold lower expectations of expanding their advisory and education role.

Table 2–14
Additional Internal Audit Roles per Internal Audit Activity Age (Percentage of Respondents)

| Item | Now | Up to 4 Years | 5-10 Years | 11-50 Years | More than 50 Years | Overall Average |
|--|-----------------------|---------------|------------|-------------|--------------------|-----------------|
| | 5 Years from Now | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 44% | 47% | 48% | 52% | 47% |
| | Will apply in 5 years | 66% | 64% | 62% | 59% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 29% | 33% | 41% | 50% | 37% |
| | Will apply in 5 years | 57% | 54% | 59% | 61% | 57% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 59% | 63% | 69% | 81% | 67% |
| | Will apply in 5 years | 76% | 71% | 75% | 81% | 74% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 66% | 69% | 73% | 72% | 71% |
| | Will apply in 5 years | 85% | 84% | 84% | 79% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 78% | 76% | 78% | 78% | 78% |
| | Will apply in 5 years | 69% | 69% | 71% | 71% | 70% |

Analysis by Internal Audit Activity Size

When the expected changes to staff size in the next five years are taken into consideration, some striking and contradictory findings are revealed. On the one hand, within the group of respondents who expect an increase in staff size, a larger proportion of respondents expects to become more involved in strategy development (22 percent of the respondents expect an increase) as well as to provide more training and education for both audit committee members (26 percent of the respondents expect an increase) and organizational personnel (17 percent of the respondents expect an increase), yet the balance between assurance and consulting is not expected to change in this group (only 0.1 percent of the respondents in this group expect a decrease). It is possible that this might be explained by the fact that these internal audit activities also expect an increase in assurance work in addition to their expected increased advisory and education role. This is viable given that they expect an increase in staff size so that the overall balance remains the same. But for the group of respondents who expect a decrease in internal audit activity staff size, the results are quite contradictory: a relatively larger proportion of these respondents expect more focus on the integrity of financial reporting (17 percent expect an increase) combined with 16 percent of them who expect a decrease in assurance activities (see **Table 2–15**).

Table 2–15
Additional Internal Audit Roles per Expected Change in the Internal Audit Activity Size (Percentage of Respondents)

| Item | Now | Increase | Remain the Same | Decrease | Overall Average |
|--|-----------------------|----------|-----------------|----------|-----------------|
| | 5 Years from Now | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 41% | 40% | 39% | 40% |
| | Will apply in 5 years | 63% | 55% | 58% | 59% |
| The internal audit activity has provided training to audit committee members | Applies now | 31% | 27% | 26% | 29% |
| | Will apply in 5 years | 57% | 47% | 51% | 52% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 62% | 60% | 61% | 61% |
| | Will apply in 5 years | 76% | 70% | 78% | 73% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 72% | 68% | 70% | 70% |
| | Will apply in 5 years | 89% | 81% | 84% | 85% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 70% | 78% | 80% | 83% |
| | Will apply in 5 years | 70% | 67% | 64% | 68% |

Analysis by Internal Audit Activity Staff Level

Finally, an investigation of expectations related to the respondents' position in the internal audit activity indicates expectations similar to those found earlier. Expectations of the internal audit activity's ambition to play an advisory role in strategy development and provide training to audit committee members differ sharply depending on the level of the respondent. The proportion of CAEs and managers that expect increases in involvement in strategy development (19 percent of the CAEs and 17 percent of the managers) and training to audit committee members (24 percent of the CAEs and 20 percent of the managers) is higher than in the other groups of respondents. This might be explained by the fact that the two highest levels of the internal audit activity have more contact with senior management and may see the need to become involved in strategy development. Furthermore, these two groups within the internal audit activity are also those who interact most with audit committee members and understand their need for training, which could have had an impact on their expectations. Of course, this does not necessarily mean that the audit committee itself will ask the internal audit activity to deliver this training.

The expected increase in educating organization personnel is less asymmetric: CAEs and junior staff have the highest expectations (16 percent of the respondents in both groups expect an increase in this

role). This might be explained by the fact that junior staff have most contact with operational personnel during audit work and may identify a need for education on internal control, corporate governance, and compliance. Only the junior staff level seems less convinced of the expected lower focus on assurance (only 6 percent of them expect a decrease). This leads to two potential issues for the future: either CAEs must ensure that their junior staff become convinced of the change toward a reduced focus on assurance work or they have to discover why their junior staff (who often have the most frequent contact with the operational side of the organization) are less convinced of the change to less assurance work (see **Table 2–16**).

Table 2–16
Additional Internal Audit Roles by Respondent's Position (Percentage of Respondents)

| Item | Now | Chief Audit Executive (CAE) or Service Provider Partner (SPP) | Internal Audit or SP Manager | Internal Audit or SP Senior/Supervisor | Internal Audit or SP Staff | Overall Average |
|--|-----------------------|---|------------------------------|--|----------------------------|-----------------|
| | 5 Years from Now | | | | | |
| Internal auditors in the organization have an advisory role in strategy development | Applies now | 41% | 45% | 50% | 55% | 47% |
| | Will apply in 5 years | 60% | 62% | 64% | 68% | 63% |
| The internal audit activity has provided training to audit committee members | Applies now | 30% | 40% | 40% | 41% | 38% |
| | Will apply in 5 years | 54% | 60% | 59% | 59% | 58% |
| The internal audit activity assumes an important role in the integrity of financial reporting | Applies now | 61% | 71% | 68% | 67% | 67% |
| | Will apply in 5 years | 74% | 78% | 74% | 73% | 75% |
| The internal audit activity educates organization personnel about internal controls, corporate governance, and compliance issues | Applies now | 70% | 73% | 73% | 67% | 71% |
| | Will apply in 5 years | 86% | 86% | 83% | 81% | 84% |
| The internal audit activity places more emphasis on assurance than consulting services | Applies now | 77% | 80% | 79% | 77% | 78% |
| | Will apply in 5 years | 68% | 71% | 70% | 71% | 70% |

Chapter 3

Performance of Internal Audit Activities

In previous chapters, it was noted that respondents predict important changes in the governance and internal control context of the organization for which they work and in the roles that the internal audit activity is likely to play in the next five years. This chapter provides a more detailed discussion of the expected evolution of specific internal audit activities and presents the analysis of respondents' replies to the following:

- Please indicate whether your internal audit activity performs (or is anticipated to perform) the following activities.

The list provided to the respondents included the 25 activities shown in **Figure 3–1**. Respondents were asked to mark all that applied to them. They were not asked to indicate the evolution (increase, stable, or decrease) of these activities given in this question. Exclusive answering categories were used so that those who indicated that they currently perform an activity could not indicate that they expect to perform this activity in the forthcoming five years and vice versa.²³

The aims of this chapter are to:

- Analyze the activities that practitioners expect to perform in the forthcoming five years.
- Assess the potential influence of the expected changes in the governance and internal control contexts and in the future roles of the internal audit activity (as analyzed in Chapters 1 and 2).

Other factors that might influence internal audit activities are also identified. An overview of these factors can be found at the end of this chapter.

The Top Five Activities

The top five activities that respondents' internal audit activities performed in 2010 were:

- Operational auditing (89 percent of respondents).
- Audits of compliance with regulatory code (including privacy) requirements (75 percent of respondents).
- Auditing of financial risks (72 percent of respondents).
- Investigations of fraud and irregularities (71 percent of respondents).
- Evaluating the effectiveness of control frameworks (i.e., using COSO and COBIT) (69 percent of respondents).

²³ It is not possible to know whether those who indicate that they expect to perform an activity in the future already perform this activity at present.

As there were differences in the questionnaires used in 2006 and 2010, a direct comparison of results is not possible. Despite this, it is clear that both operational auditing and compliance audits continue to be in the top five performed internal audit activities by a large proportion of respondents. It should be noted that these results do not give any indication of the proportion of working time spent on these activities. The most likely explanation for the continuing high ranking of operational auditing is that it is likely to be a response to the recent global financial crisis and subsequent economic recession. These events are likely to have led to an increased demand for the internal audit activity to focus on business processes so that areas of inefficiencies can be identified and to support their organization's initiatives of cost reduction and control activities.

Many organizations currently comply with a corporate governance code and have implemented an internal control framework. The results analyzed in this chapter suggest that this governance and internal control context has an influence on the activities performed by the internal audit activity, since audits of compliance with a regulatory code still can be found in the five most important activities performed in 2010. Again, the economic crisis might also be seen as one of the main reasons for carrying out audits of financial risks (i.e., credit, market, and liquidity risks). These results are consistent with those of other studies on the impact of the financial crisis on internal audit activities carried out in 2009 by The IIA and The IIA RF. These studies indicate a major focus of internal audit activities on cost/expenses reduction, operational auditing, and financial risks.²⁴ Again, due to the differences of participants of the CBOK studies with those of the survey launched by The IIA and The IIA RF, it is not possible to make direct comparisons. Nevertheless, it might be argued that the recent economic recession has created a need to expand internal audit activity coverage in other areas such as financial risks and the investigation of fraud and irregularities.

The Five Least Performed Activities

The five least performed activities in 2010 were:

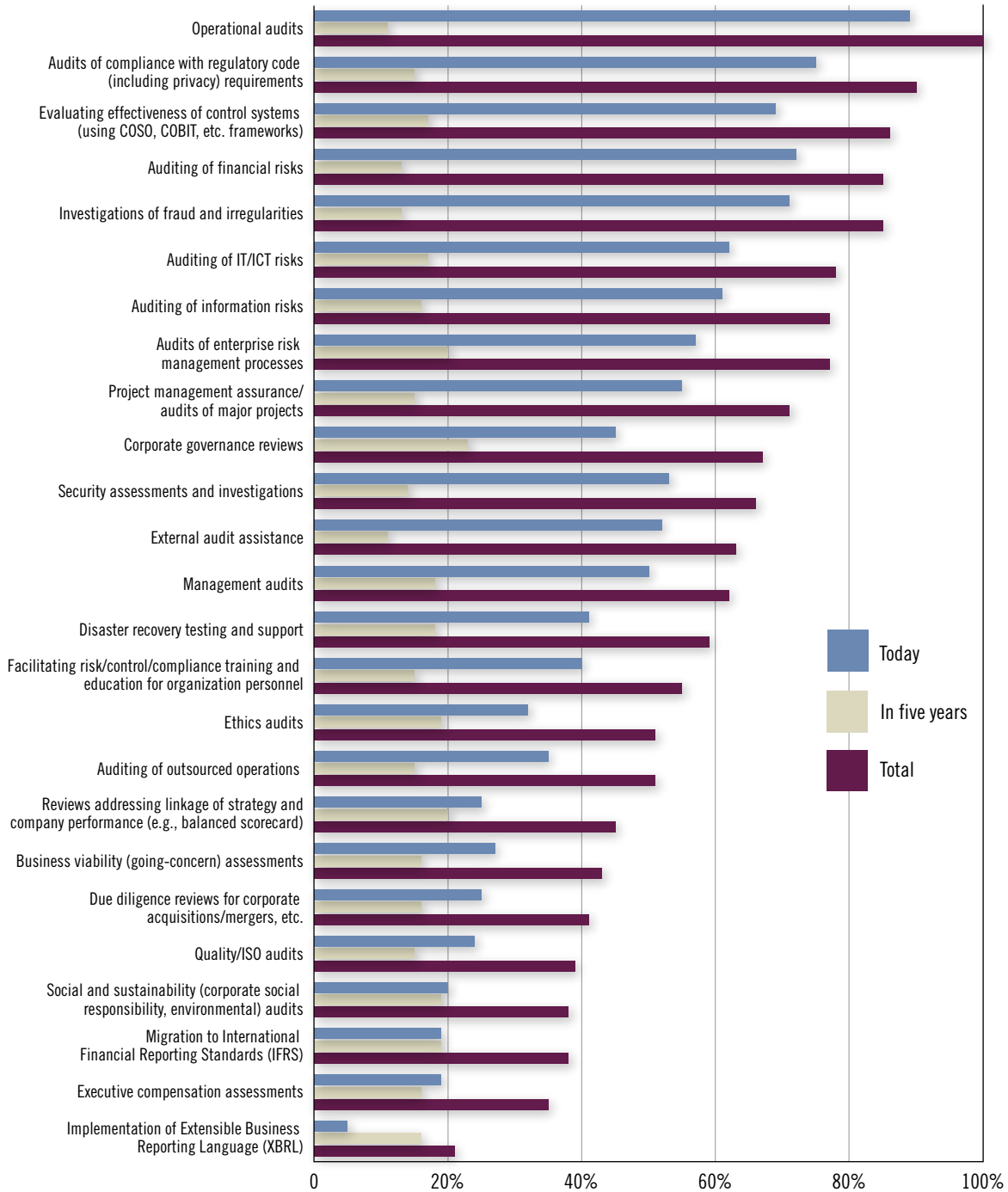
- Implementation of Extensible Business Reporting Language (XBRL) (5 percent of respondents).
- Executive compensation assessments (19 percent of respondents).
- Migration to International Financial Reporting Standards (IFRS) (19 percent of respondents).
- Social and sustainability (corporate social responsibility, environmental) audits (19 percent of respondents).
- Quality/ISO audits (24 percent of respondents).

Social and sustainability audits and quality/ISO audits were also in the list of least performed activities in 2006.²⁵

²⁴ See Global Audit Information Network (GAIN), Knowledge Alert (2009), *The Financial Crisis and Its Impact on the Internal Audit Profession*, The Institute of Internal Auditors Research Foundation. The research was carried out with GAIN members, and 524 practitioners participated to the survey.

²⁵ See Burnaby et al., *A Global Summary of the Common Body of Knowledge* (Altamonte Springs, FL: The Institute of Internal Auditors Research Foundation, 2007), 209–210

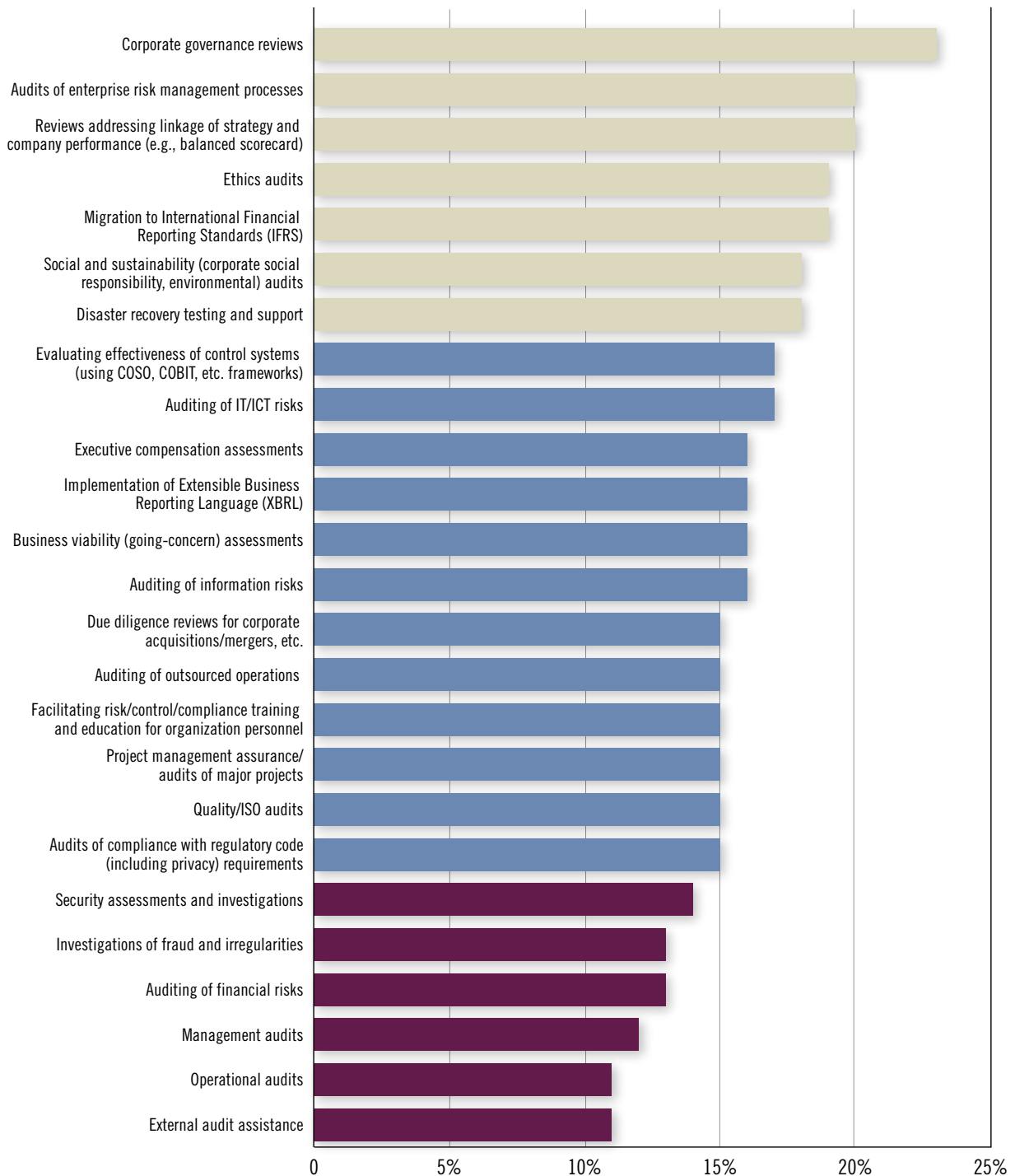
Figure 3–1: Type of Activities Performed (Today, in Five Years, and Total)



Expectations of Activities to Be Performed in the Next Five Years

These activities can be divided into three main groups containing seven activities (see **Figure 3-2**). In many organizations, the governance and internal control context was expected to improve further

Figure 3–2: Type of Activities to Be Performed in Five Years (including activities not currently performed)



In **tan/beige**, activities for which more than 18 percent of the respondents expect an increase, in **blue**, activities for which between 18 percent and 15 percent of the respondents expect an increase, and in **purple**, those activities for which less than 15 percent expect an increase.

in the next five years and this would be reflected in increased compliance with corporate governance codes and implementation of internal control frameworks. The increased importance of a changing organizational culture can be linked to the nature of the activities that respondents expect to perform in the next five years where currently they are not performed. These are:

- Corporate governance reviews (23 percent of respondents).
- Audits of the enterprise risk management process (20 percent of respondents).
- Reviews addressing linkage of strategy and company performance (e.g., balanced scorecard — 20 percent of respondents).
- Ethics audits (19 percent of respondents).
- Social and sustainability audits (19 percent of respondents).

This finding is also consistent with the expected increase in the role of the internal audit activity in governance and risk management (two cornerstones of the profession). The two remaining activities of the top seven are:

- Migration to International Financial Reporting Standards (IFRS) (19 percent of respondents).
- Disaster recovery testing and support (18 percent of respondents).

Analysis by Region of the Top Seven Activities to Be Performed in the Next Five Years

Analysis of the seven expected changes in the five internal audit activity roles per region (**Table 3–1**) shows that:

- The highest percentage of respondents expecting corporate governance reviews and ethics audits to be performed in the next five years came from the Middle East (39 percent and 30 percent, respectively), Latin America/Caribbean (30 percent and 23 percent, respectively), and Eastern Europe/Central Asia (29 percent and 25 percent, respectively). The overall average response was 23 percent for corporate governance reviews and 19 percent for ethics audits. Similar results can be found when looking at the expected increase in social and sustainability audits. It should be noted that these are areas where most significant changes in the governance and internal control contexts are expected, so it is understandable that the internal audit activities will also be reoriented to governance and ethics. This can also be linked to the higher percentage of respondents from Eastern Europe/Central Asia (28 percent) and the Middle East (26 percent) expecting the performance of audits of the ERM process.
- Similarly, the expected increase of social and sustainability audits is higher than average from respondents in the Middle East (30 percent compared to an overall average of 19 percent), with a lower than average response from internal audit practitioners located in the United States and Canada (14 percent).
- The lowest percentage of respondents who expect that reviews addressing the linkage between strategy and performance will be performed in the next five years came from the United States and Canada (17 percent) and Western Europe (18 percent), which can be linked to a previous

finding that in countries where the profession is more highly established, practitioners aspire less to play a role in strategy development.

- The expected involvement of the internal audit activity in the migration to IFRS is higher in the Middle East (27 percent), the Asia Pacific region (26 percent), Latin America/Caribbean (24 percent), and the United States and Canada (22 percent) but lower than the average in Western Europe (9 percent), the overall average being 19 percent. This might be explained by the fact that in Western Europe, the implementation of IFRS is already relatively advanced (effective since January 2005).
- Finally, the expected increase of involvement in disaster recovery testing and support is higher than the average figure of 18 percent in Eastern Europe/Central Asia (24 percent), the Middle East (21 percent), and Latin America/Caribbean (21 percent). The degree of economic development in these regions is catching up to other parts of the world since their relatively recent move to a market-based economy, which means that business continuity will move more to the forefront in the upcoming years.

Overall, **Table 3–1** clearly shows that in the Middle East, the expected evolution in all seven internal audit activities is higher than average; again, this can be linked to findings in the previous chapters and confirms that there are significant challenges facing the internal audit profession in that region.

Table 3–1
Top Seven Activities to Be Performed per Region in the Next Five Years (Percentage of Respondents)

| | Africa | Asia Pacific | Eastern Europe-Central Asia | Latin America and Caribbean | Middle East | United States and Canada | Western Europe | Overall Average |
|---|--------|--------------|-----------------------------|-----------------------------|-------------|--------------------------|----------------|-----------------|
| Corporate governance reviews | 25% | 21% | 29% | 30% | 39% | 21% | 20% | 23% |
| Audits of enterprise risk management processes | 18% | 19% | 28% | 20% | 26% | 22% | 18% | 20% |
| Reviews addressing linkage of strategy and company performance | 22% | 21% | 24% | 24% | 32% | 17% | 18% | 20% |
| Ethics audits | 21% | 18% | 25% | 23% | 30% | 17% | 18% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 20% | 26% | 16% | 24% | 27% | 22% | 9% | 19% |
| Social and sustainability audits | 26% | 21% | 19% | 25% | 30% | 14% | 17% | 19% |
| Disaster recovery testing and support | 20% | 18% | 24% | 21% | 21% | 18% | 15% | 18% |

Analysis by Industry of the Top Seven Activities to Be Performed in the Next Five Years

Results in **Table 3–2** show that:

- Expectations of the performance of corporate governance reviews in the next five years were held by the highest percentage of respondents from the wholesale/retail industry (26 percent), the raw material and agriculture industry (26 percent), and the transportation and communication industry (24 percent). The overall average was 23 percent. For the raw material and agriculture industry, this is consistent with previous findings that a higher than average response indicated an expected increase of the internal audit activity's role in risk management and governance.
- A lower percentage of respondents from the public sector (19 percent) expected corporate governance reviews to be performed in the next five years, which is also in line with a previous finding that there is a less developed governance and internal control context for this type of organization and the impact this has on the role of internal audit activities.
- The highest percentage of respondents expecting audits of the ERM process to be performed in the next five years were located in the manufacturing and construction industry (23 percent) and the raw material and agriculture industry (22 percent). The average response was 20 percent. Both industries have a more highly developed governance and internal control context.
- On the other hand, a lower percentage of respondents within the financial services industry expect this activity to be performed in the next five years. This might be explained by the fact that this kind of activity is already more highly established within this industry due to the regulatory impact on risk management practices.
- A smaller percentage of respondents in the public sector (18 percent) and the manufacturing and construction industry (18 percent) expect ethics audits to be performed (the overall average was 19 percent). This might be linked to the fact that in both industries, ethics are inherently held in very high regard (as illustrated by the importance of stewardship of public finance and anti-bribery regulations and laws in the construction industry). This implies that internal audit activities already take this sensitive element into account.
- The highest percentage of respondents expecting social and sustainability audits to be performed in the next five years were located in the wholesale and retail industry (21 percent), the services industry (20 percent), and the manufacturing and construction industry (20 percent). The overall average was 19 percent. In the wholesale and retail and manufacturing and construction industries, this issue has clearly moved more to the forefront in recent years and is expected to become even more important in the near future (possible drivers include criticism of outsourcing and off-shoring of production to low-cost countries, excessive transportation and packaging costs, and ethical sourcing of products).
- The highest percentage of respondents expecting disaster recovery testing and support to be performed in the next five years were from the wholesale and retail industry (23 percent) and raw material and agriculture industry (22 percent). The overall average was 18 percent. This might be explained by the sophisticated risk profile of organizations in these industries (i.e., the growing appreciation of risks related to e-commerce and electronic distribution channels

or the high dependency on physical plants). The lowest percentage of respondents expecting this activity to be performed in the next five years came from the financial services industry (14 percent). Again, this might be explained by the likely higher maturity and resilience of their IT infrastructure as a whole.

- The highest percentage of respondents expecting the review of the linkage between strategy and company performance to be performed over the next five years came from the raw material and agriculture industry (24 percent) and the wholesale/retail industry (22 percent). The overall average was 20 percent. These results are consistent with Chapter 2, where it was found that the aspiration to become more involved in strategy development is highest in the raw material and agriculture industry.

Table 3–2
Top Seven Activities to Be Performed per Industry in the Next Five Years (Percentage of Respondents)

| | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|---|--|------------------------------|---------------------------|------------------------------|---------|---|----------------------------|-----------------|
| Corporate governance reviews | 22% | 23% | 19% | 26% | 22% | 25% | 26% | 23% |
| Audits of enterprise risk management processes | 19% | 23% | 21% | 22% | 20% | 20% | 20% | 20% |
| Reviews addressing linkage of strategy and company performance | 20% | 21% | 15% | 24% | 19% | 21% | 22% | 20% |
| Ethics audits | 19% | 18% | 18% | 19% | 19% | 21% | 20% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 18% | 25% | 11% | 21% | 18% | 19% | 24% | 19% |
| Social and sustainability audits | 18% | 20% | 15% | 17% | 20% | 19% | 21% | 19% |
| Disaster recovery testing and support | 14% | 20% | 17% | 22% | 20% | 19% | 23% | 18% |

Analysis by Ownership Structure of the Top Seven Activities to Be Performed in the Next Five Years

Analysis of the seven internal audit activities that are expected to be performed in the next five years, according to respondents' organizations' ownership structure, shows that:

- Respondents from both privately held organizations and not-for-profit organizations have a higher than the overall average expectation that corporate governance reviews will be performed in the next five years (26 percent and 27 percent, respectively, while the average response was 23 percent); similarly, with audits of the ERM processes (21 percent and 27 percent, respectively, with the overall average of 20 percent) and ethics audits (21 percent and 21 percent, respectively, with the overall average of 19 percent). For privately held organizations, these findings are consistent with previous findings that their governance and internal control contexts are expected to try and catch up with their listed counterparts. In other words, privately held organizations expect the improvement in their governance and internal control contexts to impact the expected evolution of their internal audit activities.
- Respondents from privately held organizations also have higher than average expectations that social and sustainability audits will be performed in the next five years (21 percent compared with the average of 19 percent). Responses from those in not-for-profit organizations suggest that the trend for seeking to catch up also applies to this group of organizations, particularly for several discrete activities. A higher percentage of respondents from not-for-profit organizations expect disaster recovery testing and support will be performed in the next five years (22 percent compared with an overall average of 18 percent) This might be explained by the fact that these organizations may be lagging behind in the development and implementation of their IT infrastructure.
- A smaller percentage of respondents from listed organizations expect disaster recovery testing and support to be performed in the next five years (17 percent compared with the overall of 18 percent), which might be expected given that these organizations are more likely to have a more mature IT infrastructure.
- With respect to the expected internal audit activity's involvement in the migration to IFRS, a higher than average (the average response was 19 percent) frequency within listed organizations (23 percent) and a less than the average response within the public sector/government (13 percent) has been found. This is clearly linked to the regulatory requirements to implement IFRS, which impacts listed organizations much more than those in public sector/government (see **Table 3–3**).

Table 3–3
Top Seven Activities to Be Performed per Ownership Structure in
the Next Five Years (Percentage of Respondents)

| | Privately Held (Nonlisted) Company | Publicly Traded (Listed) Company | Public Sector/ Government | Not-for-profit Organization/ Nongovernment Organization | Overall Average |
|---|--|-------------------------------------|------------------------------|--|--------------------|
| Corporate governance reviews | 26% | 21% | 22% | 27% | 23% |
| Audits of enterprise risk management processes | 21% | 19% | 21% | 27% | 20% |
| Reviews addressing linkage of strategy and company performance | 21% | 20% | 17% | 22% | 20% |
| Ethics audits | 21% | 18% | 19% | 21% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 19% | 23% | 13% | 15% | 19% |
| Social and sustainability audits | 21% | 19% | 17% | 18% | 19% |
| Disaster recovery testing and support | 20% | 17% | 18% | 22% | 18% |

Analysis by Scope of Operations of the Top Seven Activities to Be Performed in the Next Five Years

When considering the scope of operations, the results are mixed and hard to explain:

- The higher percentage of respondents reporting an expectation of performance in the next five years of four of the seven internal audit activities (20 percent to 24 percent compared with overall averages of 18 percent to 23 percent) are from organizations operating at the local level. A similar picture is given by those from organizations operating at a national level (20 percent to 25 percent compared with overall averages of 19 percent to 23 percent).
- On the other hand, a lower percentage of respondents from organizations operating at state/regional level (16 percent to 19 percent compared with overall averages of 19 percent to 20 percent) and organizations operating at international/multinational level (from 16 percent to 22 percent compared with overall averages of 18 percent to 23 percent) expect between four or five of the seven internal audit activities to be performed in the next five years (see **Table 3–4**).

Table 3–4
Top Seven Activities to Be Performed per Scope of Operation in
the Next Five Years (Percentage of Respondents)

| | Local | State/ Provincial/ Regional | National | International/ Multinational | Overall Average |
|---|-------|-----------------------------------|----------|---------------------------------|--------------------|
| Corporate governance reviews | 24% | 23% | 25% | 22% | 23% |
| Audits of enterprise risk management processes | 21% | 19% | 21% | 27% | 20% |
| Reviews addressing linkage of strategy and company performance | 20% | 19% | 20% | 20% | 20% |
| Ethics audits | 22% | 18% | 21% | 18% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 18% | 16% | 20% | 19% | 19% |
| Social and sustainability audits | 20% | 17% | 20% | 18% | 19% |
| Disaster recovery testing and support | 21% | 19% | 20% | 16% | 18% |

Analysis by Size of the Organization of the Top Seven Activities to Be Performed in the Next Five Years

Fewer respondents from the group of the largest organizations reported expectations of performance of the seven internal audit activities in the next five years (13 percent to 18 percent compared with overall averages of 19 percent to 24 percent), which suggests that the internal audit activity's agenda is more stable within larger organizations. This group of organizations is characterized by a more highly developed (and stable) governance and internal control context. The introduction or increase in internal audit activities to be performed in the next five years expected within the group of smallest organizations (20 percent to 25 percent compared with overall averages of 19 percent to 24 percent) confirms the attempted catching-up trend identified and discussed in previous chapters (see **Table 3–5**).

Table 3–5
Top Seven Activities to Be Performed per Organization Size in
the Next Five Years (Percentage of Respondents)

| | Less than \$1B | \$1B-\$15B | More than \$15B | Overall Average |
|---|----------------|------------|-----------------|-----------------|
| Corporate governance reviews | 25% | 25% | 18% | 24% |
| Audits of enterprise risk management processes | 22% | 22% | 16% | 21% |
| Reviews addressing linkage of strategy and company performance | 21% | 21% | 17% | 20% |
| Ethics audits | 22% | 19% | 17% | 20% |
| Migration to International Financial Reporting Standards (IFRS) | 19% | 21% | 17% | 19% |
| Social and sustainability audits | 20% | 19% | 17% | 19% |
| Disaster recovery testing and support | 20% | 19% | 13% | 19% |

Analysis by Age of the Internal Audit Activity of the Top Seven Activities to Be Performed in the Next Five Years

When analyzing the expected evolution of the seven internal audit activities, taking into account the age of the internal audit activity (see **Table 3–6**), it is possible to identify a clear pattern. Specifically, all seven internal audit activities are expected to be performed (if not currently performed) by more of those within the group of the youngest internal audit activities (20 percent to 30 percent of respondents compared with overall averages of 18 percent to 23 percent). In more established and mature internal audit activities, these expectations are lower (10 percent to 17 percent compared with overall average responses of 18 percent to 23 percent). This finding is consistent with previous findings that a younger internal audit activity is ambitious in its aspirations and expects to play an increasingly advisory role. It is also reasonable to assume that the younger the internal audit activity, the more room for change given that the older activities already have a more established agenda. As discussed in Chapter 2, the greater reported expectation of the younger internal audit activities to focus on governance and risk management in the next five years might also be explained by the fact that they have been created in a period during which risk management and governance have become important topics in corporate life, prompted by the impact of the recent financial and economic crisis.

Table 3–6
Top Seven Activities to Be Performed per Internal Audit Activity Age
in the Next Five Years (Percentage of Respondents)

| | Up to 4 years | 5-10 years | 11-50 years | More than 50 years | Overall Average |
|---|---------------|------------|-------------|--------------------|-----------------|
| Corporate governance reviews | 30% | 24% | 21% | 17% | 23% |
| Audits of enterprise risk management processes | 26% | 21% | 19% | 16% | 20% |
| Reviews addressing linkage of strategy and company performance | 24% | 22% | 18% | 15% | 20% |
| Ethics audits | 24% | 20% | 18% | 16% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 20% | 20% | 18% | 17% | 19% |
| Social and sustainability audits | 22% | 19% | 17% | 14% | 18% |
| Disaster recovery testing and support | 26% | 20% | 15% | 10% | 18% |

Analysis by Internal Audit Activity Size of the Top Seven Activities to Be Performed in the Next Five Years

All seven internal audit activities are expected to be performed in the next five years by a higher percentage of respondents that expect an increase in internal audit activity staff size (27 percent to 39 percent compared to the overall average responses of 24 percent to 34 percent) (see **Table 3–7**). This result supports the conclusion that adopting a more intensive role in risk management and governance is only possible if the staff size increases. With respect to the expected reviews addressing the linkage of strategy and company performance, findings in Chapter 2 have already shown that internal audit practitioners who expect an increase in their internal audit activity staff size also expect to become significantly more involved in strategy development. The tension between the internal audit activity that expects to play a more intense role and the resources needed to accomplish this should be seen as one of the most important challenges for practitioners.

Table 3–7
Top Seven Activities to Be Performed per Internal Audit Activity Size
in the Next Five Years (Percentage of Respondents)

| | Increase | Remain the Same | Decrease | Overall Average |
|---|----------|-----------------|----------|-----------------|
| Corporate governance reviews | 39% | 30% | 34% | 34% |
| Audits of enterprise risk management processes | 34% | 30% | 28% | 32% |
| Reviews addressing linkage of strategy and company performance | 34% | 25% | 26% | 30% |
| Ethics audits | 32% | 23% | 24% | 27% |
| Migration to International Financial Reporting Standards (IFRS) | 27% | 20% | 25% | 24% |
| Social and sustainability audits | 31% | 22% | 22% | 27% |
| Disaster recovery testing and support | 28% | 23% | 24% | 26% |

Analysis by Staff Position of the Top Seven Activities to Be Performed in the Next Five Years

A higher percentage of CAEs, when compared with internal audit staff (not managers or supervisory level staff), clearly have expectations that all seven activities will be performed in the next five years (CAEs — 24 percent to 34 percent; internal audit staff — 14 percent to 18 percent compared with overall averages of 18 percent to 23 percent). In particular, for corporate governance reviews (34 percent) and audits of the ERM processes (31 percent), the difference with the overall average (23 percent and 20 percent, respectively) is greater than 10 percentage points (see **Table 3–8**). This finding confirms that an expectations gap exists between the highest hierarchical level and the other staff within the internal audit activity. The higher ambitions of CAEs can, to some extent, be explained by the fact that they are more likely to be thinking at a macro/strategic level and interacting with other corporate governance agents. Unfortunately, this result suggests that there is a lack of shared vision or consensus about where the profession is going. Given the fact that this is a fundamental issue for the profession, more in-depth research on the reasons for this expectations gap is needed.

Table 3–8
Activities to Be Performed per Staff Position in the Next Five Years (Percentage of Respondents)

| | Chief Audit Executive (CAE) or Service Provider Partner (SPP) | Internal Audit or SP Manager | Internal Audit or SP Senior/Supervisor | Internal Audit or SP Staff | Overall Average |
|---|---|------------------------------|--|----------------------------|-----------------|
| Corporate governance reviews | 34% | 20% | 20% | 18% | 23% |
| Audits of enterprise risk management processes | 31% | 19% | 15% | 16% | 20% |
| Reviews addressing linkage of strategy and company performance | 29% | 20% | 17% | 14% | 20% |
| Ethics audits | 28% | 19% | 16% | 15% | 19% |
| Migration to International Financial Reporting Standards (IFRS) | 24% | 21% | 16% | 16% | 19% |
| Social and sustainability audits | 27% | 17% | 16% | 14% | 19% |
| Disaster recovery testing and support | 26% | 17% | 15% | 15% | 18% |

Chapter 4

Audit Tools and Techniques

Previous chapters analyzed the changes to internal audit activity roles and activities that respondents expect to happen during the forthcoming five years and identified several factors that might influence these roles and activities. This chapter is based on the argument that the development of new roles and activities needs to be supported by adequate audit tools and techniques to enable internal audit activities to perform their activities efficiently and effectively.

This chapter is based on respondents' replies to the following statement:

- Indicate the extent to which internal audit activity plans to use the following audit tools or techniques on a typical audit engagement in the next five years.

Closed-ended responses include:

- The audit tools or techniques that are not planned to be used in the next five years.
- The audit tools or techniques that are planned to be used in the next five years, but to a lesser extent than now.
- The audit tools or techniques that are planned to be used about the same as now.
- The audit tools or techniques that are planned to be used more than now.

The list of tools and techniques provided to the respondents includes the 16 shown in **Figure 4–1** and correspond to that used in 2006. Respondents could not amend the list provided.

This chapter does not include the responses for the current use of audit tools and techniques that are reported in Report II of The IIA's Global Internal Audit Survey. The main objective of this chapter is to study the future use of audit tools and techniques, and the relationship that may exist between the expected changes in the use of audit tools and techniques and the expected changes in internal audit activity roles and activities discussed in previous chapters.

The Top Five Audit Tools and Techniques

The top five audit tools and techniques that are predicted to be used more in the next five years are as follows, with a complete list shown in **Figure 4–1**:

- Computer-assisted audit techniques (CAATs) (63 percent of respondents).
- Electronic workpapers (55 percent of respondents).
- Continuous/real-time auditing (54 percent of respondents).
- Data mining (52 percent of respondents).
- Risk-based audit planning (52 percent of respondents).

The top five responses clearly indicate an expected trend to improve the efficiency of internal audit work. In addition, the expected increase in the use of continuous/real-time auditing can be considered to be a reaction to the fact that the business environment in many organizations changes constantly, necessitating a concomitant continuous follow-up of risks and controls. The expected increase in the use of risk-based audit planning by internal audit professionals is consistent with the expected growing importance of risk management as one of the two cornerstones of the profession. Risk-based planning is an important way of incorporating the principles of risk management into internal audit work.

Comparison with 2006

A comparison with the expectations of practitioners four years ago²⁶ reveals that in 2006, the use of risk-based audit planning and electronic workpapers was expected to increase most. The fact that risk-based audit planning has a lower place in the ranking might mean that a significant group of internal audit activities has already implemented this technique in the past four years.²⁷ In 2006, the use of CAATs was ranked third, whereas it has now moved up to first place. This clearly indicates an aspiration to improve the efficiency of internal audit work even more. Continuous/real-time auditing has also become more popular as is shown by its rise from sixth place in 2006 to third place in 2010. This increase is interpreted as showing this relatively new technique may be perceived by respondents as an effective way of improving internal auditing. In addition, the increasing popularity of this technique might also be explained by the recent economic recession that has shown how dynamic risks can be. It should be noted that CAATs are often needed to facilitate continuous/real-time auditing, which further explains why they are both in the top five.

Tools and Techniques That Are Predicted to Be Used Less or Not at All

Figure 4–1 also shows the five tools and techniques that are predicted to be used less or not at all in the next five years:

- Process modeling software (55 percent of respondents).
- Total quality management techniques (48 percent of respondents).
- Balanced scorecard or similar framework (48 percent of respondents).
- Process mapping application (41 percent of respondents).
- Flowchart software (34 percent of respondents).

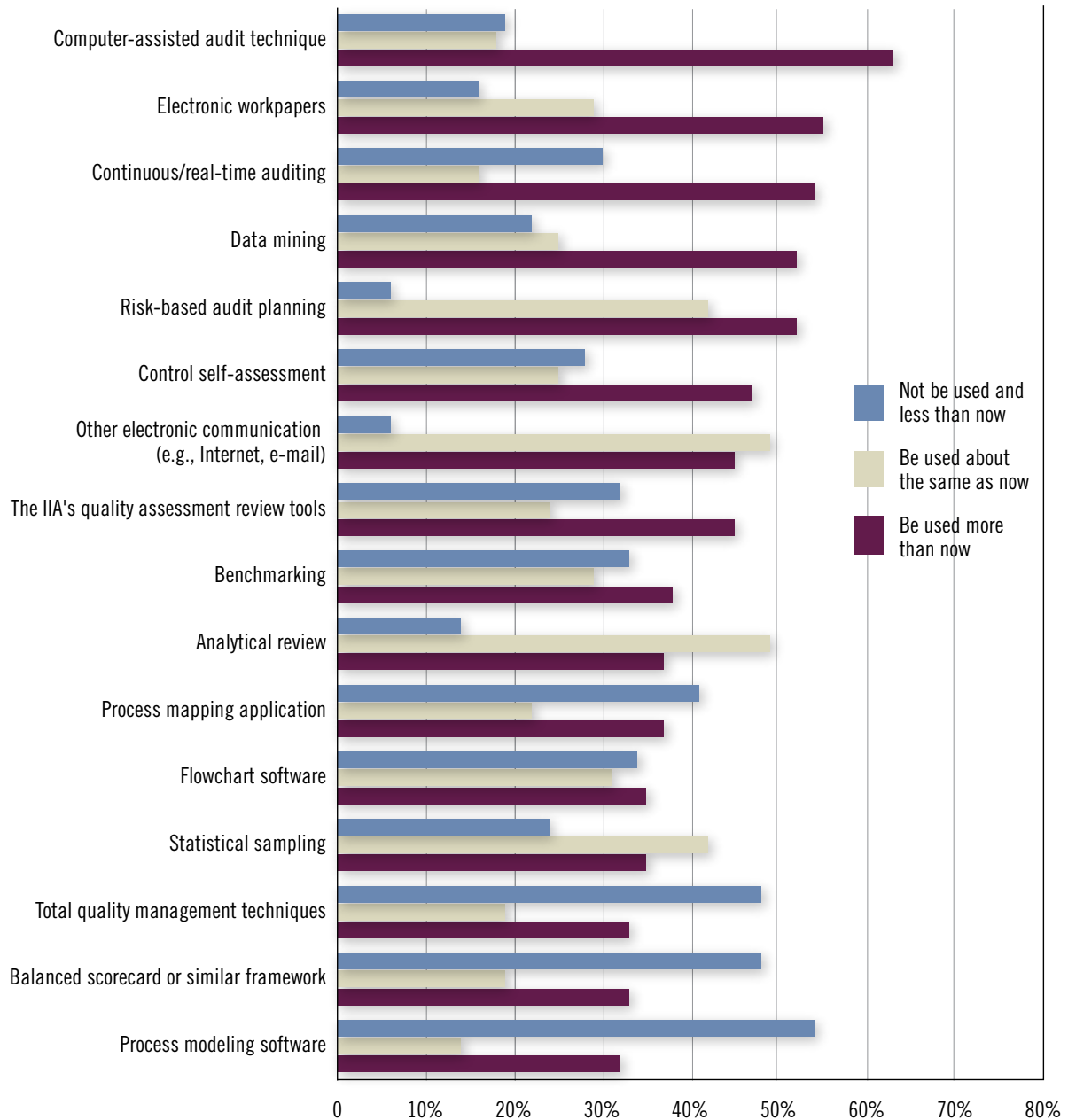
This list indicates that internal auditors expect to work less on documenting processes and controls. This might be explained by the likelihood that many organizations have worked on the implementation of a control framework in the past years, and this has probably led to the formalization of documentation (due to significant changes in corporate governance regulations and recommendations). However, this does not detract from the importance of internal audit practitioners ensuring the continuous updating of the documentations of processes and controls to reflect accurately the dynamic environment in which organizations operate.

²⁶ Note that the answering categories in the questionnaire were not the same as those used in 2006.

²⁷ The results in Report II show that, currently, 74.6 percent of the respondents use risk-based audit planning, whereas in 2006, only 57.0 percent of the respondents indicated that they used this technique (see Burnaby et al., 2007).

Additionally, it can be seen that the decline in use by internal auditing of management tools and techniques, such as total quality management and the balanced scorecard that are commonly used in other management disciplines, is likely to indicate their overall decreasing popularity and that internal auditing would prefer to create its own specialized audit tools and techniques,²⁸ such as CAATs and continuous/real-time auditing.

Figure 4–1: Overall Results for Tools and Techniques in the Next Five Years



²⁸ For an interesting article on the subject, see Burns, D. C., J. W. Greenspan, and C. Hartwell, "The State of Professionalism in Internal Auditing." *The Accounting Historians Journal*, Vol. 21, No. 2 (1994): 86–116.

Top Five Audit Tools and Techniques That Are Expected to Be Used More in the Next Five Years

In the rest of this chapter, the analysis is concentrated on the top five audit tools and techniques that are expected to be used more in the next five years than at present. **Table 4–1** shows that the expected use of audit tools and techniques differs significantly among regions. Most of these differences can be linked to the findings in previous chapters.

- The expectation of an increase in the use of CAATs was reported by the highest percentage of respondents in the Middle East (73 percent), Latin America/Caribbean (71 percent), and United States/Canada (65 percent). The lowest expectation of an increase was from respondents in the Asia Pacific region (58 percent). The overall average was 63 percent.
- 2. The expectation of an increased use of electronic workpapers was reported by the highest percentage of respondents in the Middle East (60 percent). The lowest expectation of an increase was from respondents in the United States/Canada (26 percent), Western Europe (32 percent), the Asia Pacific region (32 percent), Africa (38 percent), and Eastern Europe/Central Asia (45 percent). The overall average was 55 percent.
- The expectation of an increased use of continuous/real-time auditing was reported by the highest percentage of respondents from Latin America/Caribbean (67 percent) and United States/Canada (62 percent). The lowest expectation of an increase was from respondents in Eastern Europe/Central Asia (42 percent), Asia Pacific region (49 percent), and Western Europe (46 percent). The overall average was 54 percent.
- The expectation of an increased use in data mining was reported by the highest percentage of respondents in the Middle East (66 percent) and United States/Canada (64 percent). The lowest expectation of an increase was from respondents in Eastern Europe/Central Asia (33 percent), Latin America/Caribbean (48 percent), and the Asia Pacific region (45 percent). The overall average was 52 percent.
- The expectation of an increased use of risk-based audit planning was reported by the highest percentage of respondents in the Middle East (75 percent), Latin America/Caribbean (72 percent), Africa (62 percent), and the Asia Pacific region (55 percent). The lowest expectation of an increase was from respondents in Western Europe (45 percent) and United States/Canada (44 percent). The overall average was 52 percent.

Thus, the expected trend to improve the efficiency of internal audit work is most present in the Middle East (where they have the highest expectations for four of the top five audit tools and techniques) and least present in Western Europe. It can be seen that internal audit activities in the Middle East (which are relatively young) are working on catching up rapidly with global best practices. Electronic workpapers are already more commonly used nowadays in regions where the profession has a longer history (i.e., United States/Canada and Western Europe). Risk-based audit planning is expected by internal audit practitioners to become more popular in those regions where they expect the greatest improvements in the governance and internal control contexts and where the profession is younger. It may be argued that in regions where the governance and internal control context is already more

highly developed and the profession is well established, this technique is already in common use today. However, the use of risk-based audit planning still needs to be broadened considerably, even in the more mature markets of the United States/Canada and Western Europe.

Table 4–1
Top Five Audit Tools and Techniques to Be Used More Than Now or Less Than
Now per Region in the Next Five Years (Percentage of Respondents)

| | Africa | Asia Pacific | Europe-Central Asia | Latin America and Caribbean | Middle East | United States and Canada | Western Europe | Overall Average |
|-----------------------------------|--------|--------------|---------------------|-----------------------------|-------------|--------------------------|----------------|-----------------|
| Computer-assisted audit technique | 63% | 58% | 61% | 71% | 73% | 65% | 61% | 63% |
| Electronic workpapers | 38% | 32% | 45% | 52% | 60% | 26% | 32% | 55% |
| Continuous/real-time auditing | 56% | 49% | 42% | 67% | 57% | 62% | 46% | 54% |
| Data mining | 50% | 45% | 33% | 48% | 66% | 64% | 52% | 52% |
| Risk-based audit planning | 62% | 55% | 48% | 72% | 75% | 44% | 45% | 52% |

Expected Use of the Five Audit Tools and Techniques According to Industry

An analysis of the expected use of the five audit tools and techniques according to industry (see **Table 4–2**) shows some interesting differences:

- Expectations of an increase in the use of CAATs in the next five years was reported by the highest percentage of respondents from the raw material and agriculture industry (66 percent), the transportation and communication industry (65 percent), and the financial services industry (64 percent). The lowest expectations were held by respondents in public sector/government (59 percent). The overall average was 63 percent.
- Expectations of an increase in the use of electronic workpapers were reported by the highest percentage of respondents from the raw material and agriculture industry (60 percent), public sector/government (58 percent), and the financial services industry (57 percent). The lowest expectations were held by respondents in the manufacturing and construction industry (52 percent) and the wholesale/retail industry (46 percent). The overall average was 55 percent.
- Expectations of an increase in the use of continuous/real-time auditing were reported by the highest percentage of respondents from the transportation and communications industry (59 percent), the raw material and agriculture industry (55 percent), and the manufacturing and construction industry (55 percent). The lowest expectations were held by respondents in public sector/government (47 percent). The overall average was 54 percent.

- Expectations of an increase in the use of data mining were reported by the highest percentage of respondents in the financial services industry (55 percent). The lowest expectations were held by respondents in public sector/government (51 percent), the wholesale and retail industry (50 percent), and the manufacturing and construction industry (50 percent). The overall average was 52 percent.
- Expectations of an increase in the use of risk-based audit planning was reported by the highest percentage of respondents from the wholesale and retail industry (54 percent), the raw material and agriculture industry (54 percent), and the manufacturing and construction industry (53 percent). The lowest expectations were held by respondents in public sector/government (47 percent). The overall average was 52 percent.

It is concluded that increases in the use of automated tools and techniques are expected by proportionally more respondents in the raw material and agriculture industry and the financial services industry. This finding confirms that, as an example, within the financial services industry, the profession will need to cope with a lot of challenges, not only in terms of the roles they want to play but also in the way they perform their internal audit activities. In addition, it can be seen that improvement of internal audit activity efficiency is less of an issue within the public sector (except for the use of electronic workpapers); this could be explained by the young age of the profession in this sector. It is clear that continuous/real-time auditing and risk-based audit planning are expected by internal audit practitioners to be increasingly used in industries with a more dynamic risk profile.

Table 4–2
Top Five Audit Tools and Techniques to Be Used More Than Now or Less Than Now per Industry in the Next Five Years (Percentage of Respondents)

| | Financial, including Banking, Insurance, and Real Estate | Manufacturing & Construction | Public Sector/ Government | Raw Material and Agriculture | Service | Transportation, Communication, Electric, Gas, Sanitary Services | Wholesale and Retail Trade | Overall Average |
|-----------------------------------|--|------------------------------|---------------------------|------------------------------|---------|---|----------------------------|-----------------|
| Computer-assisted audit technique | 64% | 61% | 58% | 66% | 64% | 65% | 63% | 63% |
| Electronic workpapers | 57% | 52% | 58% | 60% | 56% | 54% | 46% | 55% |
| Continuous/real-time auditing | 54% | 55% | 47% | 55% | 55% | 59% | 52% | 54% |
| Data mining | 55% | 50% | 51% | 53% | 52% | 53% | 50% | 52% |
| Risk-based audit planning | 52% | 53% | 47% | 54% | 52% | 51% | 54% | 52% |

Expected Use of Audit Tools and Techniques in the Context of the Ownership Structure

Table 4–3 shows an analysis of the expected use of audit tools and techniques in the context of the ownership structure of the organization. There is no important variation when it comes to the expected use of CAATs, but the use of electronic workpapers is expected to increase by more internal audit practitioners within the public sector (61 percent) and within privately held organizations (57 percent) than the overall average of 55 percent. These findings are consistent with those outlined above. Internal audit practitioners from publicly listed organizations appear to have lower expectations for change, which may indicate that they are already more familiar with using this tool given their longer history of internal audit activity. Continuous/real-time auditing is expected to increase by more respondents within publicly listed organizations (57 percent) compared with the average of 54 percent. It is reasonable to assume that listed organizations feel a greater need to monitor risks and controls on a continuous basis to avoid potential negative market reactions. The results for data mining do not show any major differences between the groups. The expected use of risk-based audit planning shows clearly that fewer internal audit practitioners from publicly listed organizations (48 percent) expect an increase in use, whereas more respondents from privately held organizations expect an increase (56 percent) when compared with an overall average of 52 percent.

Table 4–3
Top Five Tools and Techniques to Be Used More Than Now or Less Than Now per
Ownership Structure in the Next Five Years (Percentage of Respondents)

| | Privately Held (Nonlisted) Company | Publicly Traded (Listed) Company | Public Sector/ Government | Not-for-profit Organization/ Nongovernment Organization | Overall Average |
|-----------------------------------|--|-------------------------------------|------------------------------|--|--------------------|
| Computer-assisted audit technique | 62% | 64% | 63% | 62% | 63% |
| Electronic workpapers | 57% | 50% | 61% | 55% | 55% |
| Continuous/real-time auditing | 54% | 57% | 50% | 54% | 54% |
| Data mining | 52% | 53% | 52% | 54% | 52% |
| Risk-based audit planning | 56% | 48% | 52% | 51% | 52% |

Expected Use of Audit Tools and Techniques in Relation to the Range of Operations

When analyzing the expected use of audit tools and techniques in relation to the range of operations (see **Table 4–4**), CAATs and data mining are reported to be more likely to be used in organizations with a broader range of operations. This becomes clearer when comparing the two extreme groups: 59 percent of respondents from organizations that have local operations expect an increase in the use of CAATs compared with 65 percent of respondents from organizations that have international/multinational operations; 51 percent of respondents from organizations that have local operations expect increased use of data mining compared with 54 percent of respondents from organizations with international/multinational operations. As in the previous paragraph, more respondents (55 percent) from organizations with a broader range of operations (and a concomitant higher risk profile) expect an increased use of continuous/real-time auditing in the next five years compared with the average of 54 percent. Moreover, risk-based audit planning is already commonly used in organizations with a broader range of operations and is expected to increase within organizations based at a local level (54 percent). The overall average was 52 percent.

Table 4–4
Top Five Tools and Techniques to Be Used More Than Now or Less Than Now per
Range of Operation in the Next Five Years (Percentage of Respondents)

| | Local | State/ Provincial/ Regional | National | International/ Multinational | Overall Average |
|-----------------------------------|-------|-----------------------------------|----------|---------------------------------|--------------------|
| Computer-assisted audit technique | 59% | 60% | 64% | 65% | 63% |
| Electronic workpapers | 58% | 55% | 58% | 53% | 55% |
| Continuous/real-time auditing | 51% | 53% | 54% | 55% | 54% |
| Data mining | 51% | 52% | 51% | 54% | 52% |
| Risk-based audit planning | 54% | 51% | 53% | 50% | 52% |

Expected Use of Audit Tools and Techniques in Relation to the Size of the Organization

Table 4–5 presents an analysis of the expected use of audit tools and techniques in relation to the size of the organization. When looking at the expected use of CAATs and data mining, it is clear that these techniques are expected to increase by more respondents in larger organizations (65 percent for both tools for group 2 and by 58 percent and 57 percent, respectively, for group 3, compared with the averages of 63 percent and 53 percent, respectively). Proportionally fewer respondents from smaller organizations expect an increased use of these tools (62 percent and 49 percent, respectively). This might be explained by the fact that potential economies of scale are lower within smaller organizations. A similar trend can be found when looking at the expected use of continuous/real-time auditing: proportionally fewer respondents from the smallest organizations expect an increased use in this technique (51 percent compared to an average of 54 percent). This might be explained by the relationship between the size of the organization, listed status, and risk profile. Larger organizations are more likely to be listed and have a more complex and/or dynamic risk profile, which might explain why continuous/real-time auditing is more appropriate to that type of organization.

The expected use of risk-based audit planning shows an opposite trend. This technique is expected to increase by proportionally more respondents from the smaller organizations (52 percent compared with the average of 51 percent). This might be linked to previous findings that show that smaller organizations are catching up to their larger counterparts in terms of governance and control context as well as internal audit roles and activities).

Table 4–5
Top Five Tools and Techniques to Be Used More Than Now or Less Than Now per
Organization Size in the Next Five Years (Percentage of Respondents)

| | Less than \$1B | \$1B-\$15B | More than \$15B | Overall Average |
|-----------------------------------|----------------|------------|-----------------|-----------------|
| Computer-assisted audit technique | 62% | 65% | 65% | 63% |
| Electronic workpapers | 56% | 54% | 55% | 55% |
| Continuous/real-time auditing | 51% | 58% | 56% | 54% |
| Data mining | 49% | 58% | 57% | 53% |
| Risk-based audit planning | 52% | 51% | 49% | 51% |

Top Five Audit Tools and Techniques, Taking into Account the Age of the Internal Audit Activity

Table 4–6 shows the top five audit tools and techniques, taking into account the age of the internal audit activity. Respondents from the youngest internal audit activities expect the highest increase in the use of risk-based audit planning (56 percent of respondents) and electronic workpapers (56 percent of respondents), whereas those from the older, more established internal audit activities expect the highest increase in data mining (56 percent of respondents). Analysis of the expected use of CAATs and continuous/real-time auditing does not reveal such a clear pattern. When interpreting these results, it should be taken into account that 68 percent of the youngest internal audit activities can be found in the group of smallest organizations, making these results consistent with other results reported above.

Table 4–6
Top Five Tools and Techniques to Be Used More Than Now or Less Than Now per Internal Audit Activity Age in the Next Five Years (Percentage of Respondents)

| | Up to 4 Years | 5-10 Years | 11-50 Years | More than 50 Years | Overall Average |
|-----------------------------------|---------------|------------|-------------|--------------------|-----------------|
| Computer-assisted audit technique | 64% | 59% | 65% | 62% | 63% |
| Electronic workpapers | 56% | 55% | 55% | 54% | 55% |
| Continuous/real-time auditing | 53% | 53% | 55% | 52% | 54% |
| Data mining | 51% | 48% | 54% | 56% | 52% |
| Risk-based audit planning | 56% | 52% | 51% | 44% | 52% |

Top Five Audit Tools and Techniques, Taking into Account the Expected Evolution of the Internal Audit Activity's Staff Size

Table 4–7 analyzes the expected use of the top five audit tools and techniques, taking into account the expected evolution of the internal audit activity's staff size. It is clear that those internal audit activities that expect an increase in their staff size in the next five years also expect the highest increase in the use of all five tools and techniques (ranging from 58 percent to 73 percent). Intuitively, it might be assumed that especially those internal audit activities that expect a decrease in staff size would be more intensive users of audit tools and techniques as a way of compensating for the reduced staff number. Rather, these results suggest that audit tools and techniques cannot replace people; instead, they appear to be complementary.

Table 4–7
Top Five Tools and Techniques to Be Used More Than Now or Less Than Now per Internal Audit Activity Size in the Next Five Years (Percentage of Respondents)

| | Increase | Remain the Same | Decrease | Overall Average |
|-----------------------------------|----------|-----------------|----------|-----------------|
| Computer-assisted audit technique | 73% | 60% | 64% | 67% |
| Electronic workpapers | 60% | 49% | 47% | 55% |
| Continuous/real-time auditing | 64% | 50% | 59% | 58% |
| Data mining | 62% | 54% | 57% | 58% |
| Risk-based audit planning | 58% | 44% | 40% | 51% |

For three out of the five tools and techniques that are expected to be used more in the next five years (CAATs, continuous/real-time auditing, and data mining), both the CAEs (67 percent, 58 percent, and 58 percent, respectively) and internal audit managers (65 percent, 57 percent, and 57 percent, respectively) have higher than the average expectations of 63 percent, 54 percent, and 53 percent, respectively. This finding might be explained by the fact that improving the efficiency of the internal audit activity (via CAATs) is traditionally a mission for those within internal audit activities who are responsible for managing the internal audit activity (thus, those in the most senior positions). The need to evolve toward continuous/real-time auditing is felt more by those who interact with senior management and the board/audit committee, given that they are responsible for managing and monitoring the dynamic risk profile of the organization. The fact that junior internal audit staff has the highest expectations when it comes to the future use of electronic workpapers (57 percent) is due to the more intensive use of this tool by those who are mostly involved in the fieldwork (see **Table 4–8**).

Table 4–8
Tools and Techniques to Be Performed More Than Now per Internal Audit Activity Size in the Next Five Years (Percentage of Respondents)

| | Chief Audit Executive (CAE) or Service Provider Partner (SPP) | Internal Audit or SP Manager | Internal Audit or SP Senior/Supervisor | Internal Audit or SP staff | Overall Average |
|-----------------------------------|---|------------------------------|--|----------------------------|-----------------|
| Computer-assisted audit technique | 67% | 65% | 60% | 58% | 63% |
| Electronic workpapers | 55% | 54% | 55% | 57% | 55% |
| Continuous/real-time auditing | 58% | 57% | 52% | 47% | 54% |
| Data mining | 58% | 57% | 49% | 43% | 52% |
| Risk-based audit planning | 51% | 48% | 54% | 54% | 52% |

Chapter 5

Conclusion

This report addressed:

- Legal/regulatory and governance/internal control context.
- Changing roles of the internal audit activity.
- Performance of internal audit activities.
- Expected use of audit tools and techniques.

In relation to the legal/regulatory and governance/internal control context, the results show that:

- A majority of the respondents currently work for organizations in which the internal audit activity is required by law and/or by regulation. This group is expected to increase slightly in the next five years.
- The Middle East is the region where the most significant change in the legal/regulatory context for the professional practice of internal auditing is expected in the next five years, with a greater degree of legal and regulatory mandates for an internal audit activity.
- A large majority of the respondents work for organizations that currently comply with a corporate governance code and have implemented an internal control framework. This group is expected to grow in size in the next five years, which could be considered a natural response to the recent financial and economic crisis. However, future research is needed to confirm this view.
- The region with the largest percentage of respondents in organizations that have already implemented internal control frameworks is the Asia Pacific region.
- Proportionally more respondents from public sector organizations expect investment in the next five years in the implementation of internal control frameworks.
- There is a clear expected convergence trend when it comes to the governance and internal control contexts. More specifically:
 - The governance and internal control contexts are expected to improve most significantly in regions with a higher representation of emerging countries that are represented in this study. Organizations in these countries are projected to be attempting to catch up with those in more developed countries.
 - Respondents from privately held firms are anticipating that their firm will be attempting to catch up with their listed counterparts.
 - Respondents from smaller organizations are likewise projecting that their organization will be seeking to catch up with their larger counterparts.

Regarding the likely changes in the roles of the internal audit activity over the next five years, the findings reveal that:

- The role of the internal audit activity in risk management and governance will continue to increase to become accepted from the perspective of internal audit practitioners as the two most important cornerstones of the profession.
- Within emerging countries, where the internal audit profession is younger, the internal audit activity is expected to evolve in the next five years toward roles that are already established in regions where the internal audit profession has been established for a longer period.
- Recent serious control breakdowns in the financial services industry and the resulting cascade of governance failures have influenced expectations that the internal audit activity's future role in risk management and governance will increase.
- Respondents from industries with a more highly developed governance and internal control context expect the internal audit activity to play an increased role in risk management and governance in the next five years compared with respondents from activities within less developed contexts.
- The internal audit activity appears to be most challenged within the financial services industry, whereas in the public sector/government sector it is expected to be subject to fewer challenges.
- Privately held firms as well as other smaller organizations are expected to catch up with their listed and larger counterparts in terms of internal audit activity roles. More specifically, a higher percentage of respondents in privately held and smaller organizations have expectations of increasing their internal audit activity roles. Expectations to play a stronger training and education role with the audit committee and organizations' employees reflect an intention to become champions for creating a more highly developed governance and internal control context.
- Within the most recently created internal audit activities, a higher than average percentage of respondents expects to increase the internal audit activity's role in risk management. This might be explained by the fact that these internal audit activities have been created or developed in a period during which risk management has become a key business issue as a result of the recent financial and economic crisis. This would seem to confirm that the internal audit profession is strongly influenced by time-related macroeconomic factors.
- One of the most important messages that can be derived from the results is that for internal audit activities to play an increased role in risk management and governance, it will be necessary to expand staff numbers.
- CAEs should be aware that other internal audit activity staff may not have the same expectations as they do about the future roles of the internal audit activity. The current lack of alignment suggests that the internal audit activity has an important role to play in closing this expectation gap.

- A number of practitioners who participated in this study have a clear expectation of becoming more involved with top-level issues such as strategy development. They are also convinced that they have an important role to play in the promotion of risk management and governance awareness (via training and education) at all levels of the organization. However, it was also found that the better established (mature) the internal audit activity, the smaller the percentage of respondents who expect to increase this advisory and education role.

Results concerning the performance of internal audit activities highlight the influence of the following five factors:

- The economic climate: the recent global economic recession is likely to have created an increasing demand for the internal audit activity to focus on business processes to identify areas of inefficiency and support their organization's initiatives of cost reduction and/or control activities. The recent economic recession has also created the need to expand internal audit activity coverage in other areas such as financial risks (i.e., credit, market, and liquidity risks) and the investigation of fraud and irregularities. These results are also consistent with those of other studies on the impact of the financial crisis on internal audit activities carried out in 2009 by The IIA and The IIAF.
- The degree of economic development at the regional-level: regions, including a number of emerging countries that are aiming to catch up in terms of economic development with other parts of the world (more highly developed countries), will generally be confronted with many new risks and opportunities that may be expected to have an impact on internal audit activities.
- The maturity of the profession: evidence was found that where the profession is more strongly established, internal audit activities are less ambitious when it comes to extending their activities. However, respondents from more recently established internal audit activities turn out to be more ambitious, including holding higher expectations of their activities playing an increasing advisory role when compared to those that are well established.
- The governance and internal control context of the organization: consistent with other results, it was found that the better developed the governance and internal control context of the organization, the more the internal audit activity focuses on risk management and governance (including ethics). In other words, for those respondents that expect significant improvements of their organization's governance and internal control context, they might also see significant expected changes in the internal audit activities (reorientation toward risk management, governance, and ethics). Results allow us to assume that the relationship between the degree of development of the governance and internal control context and the focus of internal audit activity on risk management, governance, and ethics is non-linear.
- The risk profile of the organization: indications were found that practitioners intend to or are already applying a risk-based auditing philosophy. Results show that risks that are more important for certain types of organizations (often industry related) are also reflected in the (expected) internal audit activities.

In relation to the use of audit tools and techniques, results show:

- An expected trend to improve the efficiency of internal audit work via the use of CAATs and electronic workpapers. Results also suggest that audit tools and techniques cannot replace people; instead, they appear to be complementary.
- The profession intends to create its own set of specialized audit tools and techniques, including CAATs and continuous/real time auditing, and respondents are tending to shy away from generic tools and techniques also used in other management disciplines.
- The expected increase in the use of risk-based audit planning is consistent with the expected growing importance of risk management as one of the two cornerstones of the profession. Risk-based planning is an important way of incorporating the principles of risk management into internal audit work.
- It was found that the expected use of audit tools and techniques is influenced by more or less the same set of factors considered for internal audit activities:
 - The economic climate: the expected increase in the use of continuous/real-time auditing can be considered as a reaction to the fact that the business environment in many organizations changes constantly, necessitating a concomitant continuous follow-up of risks and controls. The recent economic recession has shown how dynamic risks can be, which might explain the growing popularity of this audit technique.
 - The maturity of the profession at the regional-level: electronic workpapers are already more commonly used nowadays in regions where the profession has a longer history. Risk-based audit planning is expected to become more popular in regions where the profession is younger.
 - The maturity of the internal audit activity at organizational level: publicly listed organizations, where internal audit activities traditionally have a longer history, have lower expectations when it comes to the expected use of the top five audit tools and techniques; not surprising given that they are already ahead of the trend. Respondents from the youngest internal audit activities expect the highest increase in the use of risk-based audit planning and electronic workpapers.
 - The governance and internal control context of the organization: risk-based audit planning is more popular in those organizations where there is an expectation of the greatest improvements in the governance and internal control contexts (i.e., smaller organizations or organizations in emerging countries).
 - The risk profile of the organization: a higher percentage of respondents expect continuous/real-time auditing to be used in organizations with a more complex and/or dynamic risk profile (think of larger organizations or organizations with a broader range of operations) as well as organizations where avoidance of negative market reactions (i.e., publicly listed organizations) is an important issue.

Given that some of the top five audit tools and techniques (i.e., CAATs and data mining) have significant implementation and purchasing costs, the potential to create economies of scale has an important impact. By definition, larger organizations have more potential to create these economies of scale, which helps explain, in this respect, their higher expectations.

The IIA's Global Internal Audit Survey — Questions

The entire IIA Global Internal Audit Survey, including question and answer options and glossary, may be downloaded from The IIARF's website (www.theiia.org/research). The following table provides an overview of the questions and groups that answered the specific questions. In addition, the table indicates in which report the survey data were (mostly) used.

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|--|---|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| Personal/Background Information | | | | | | | |
| 1a | How long have you been a member of The IIA? | X | X | X | X | X | I & V |
| 1b | Please select your local IIA. | X | X | X | X | X | I & V |
| 1c | Please select the location in which you primarily practice professionally. | X | X | X | X | X | I & V |
| 2a | Your age. | X | X | X | X | X | I & V |
| 2b | Your gender. | X | X | X | X | X | I & V |
| 3 | Your highest level of formal education (not certification) completed. | X | X | X | X | X | I & V |
| 4 | Your academic major(s). | X | X | X | X | X | I & V |
| 5a | Do you work for a professional firm that provides internal audit services? | X | X | X | X | X | I & V |
| 5b | Your position in the organization. | X | X | X | X | X | I & V |
| 6 | Your professional certification(s) (please mark all that apply). | X | X | X | X | X | I & V |
| 7 | Specify your professional experience (please mark all that apply). | X | X | X | X | X | I & V |
| 8 | How many total years have you been the CAE or equivalent at your current organization and previous organizations you have worked for? | X | | | | | I |
| 9 | Where do you administratively report (direct line) in your organization? | X | | | | | I & V |
| 10 | Do you receive at least 40 hours of formal training per year? | X | X | X | X | | I & V |

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|--------------------------------|--|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| Your Organization | | | | | | | |
| 11 | The type of organization for which you currently work. | X | X | X | X | | I |
| 12 | The broad industry classification of the organization for which you work or provide internal audit services. | X | X | X | X | | I |
| 13a | Size of the entire organization for which you work as of December 31, 2009, or the end of the last fiscal year (total employees). | X | X | X | X | | I & V |
| 13b | Total assets in U.S. dollars. | X | X | X | X | | I & V |
| 13c | Total revenue or budget if government or not-for-profit in U.S. dollars. | X | X | X | X | | I & V |
| 14 | Is your organization (local, regional, international)? | X | X | X | X | | I & V |
| Internal Audit Activity | | | | | | | |
| 15 | How long has your organization's internal audit activity been in place? | X | | | X | | I, III, & V |
| 16 | Which of the following exist in your organization (e.g., corporate governance code; internal audit charter)? | X | | | X | | I, III, & V |
| 17a | Who is involved in appointing the chief audit executive (CAE) or equivalent? | X | | | | | I & III |
| 17b | Who is involved in appointing the internal audit service provider? | X | X | | | | I & III |
| 18 | Who contributes to the evaluation of your performance? | X | | | | | I & III |
| 19 | Is there an audit committee or equivalent in your organization? | X | | | | | I, III, & V |
| 20a | Number of formal audit committee meetings held in the last fiscal year. | X | | | | | I & III |
| 20b | Number of audit committee meetings you were invited to attend (entirely or in part) during the last fiscal year. | X | | | | | I & III |
| 20c | Do you meet or talk with the audit committee/chairman in addition to regularly scheduled meetings? | X | | | | | I & III |
| 20d | Do you meet with the audit committee/oversight committee/chairman in private executive sessions during regularly scheduled meetings? | X | | | | | I & III |

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|-----------------|--|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| 21a | Do you believe that you have appropriate access to the audit committee? | X | X | | | | I & III |
| 21b | Do you prepare a written report on overall internal control for use by the audit committee or senior management? Do you prepare a written report on overall internal control for use by the audit committee or senior management? How often do you provide a report? | X | X | | | | I & III |
| 21c | Does your organization provide a report on internal control in its annual report? | X | X | | | | I & III |
| 21d | Which of the following are included in the annual report item on internal control? | X | X | | | | I & III |
| 21e | Who signs the report on internal controls? | X | X | | | | I & III |
| 22 | How does your organization measure the performance of the internal audit activity? | X | | | | | I, III, & V |
| 23a | How frequently do you update the audit plan? | X | | | | | I & III |
| 23b | How do you establish your audit plan? | X | | | | | I, III, & V |
| 24a | What is your IT/ICT audit strategy? | X | | | | | I, III, & V |
| 24b | What is the nature of your internal audit activity's technology strategy? | X | | | | | I, III, & V |
| 25a | What is the number of organizations to which you (as an individual) currently provide internal audit services? | | X | | | | I & III |
| 25b | Please indicate your agreement with the following statements as they relate to your current organization or organizations that you audit. | X | | | | | I, III, & V |
| Staffing | | | | | | | |
| 26a | Is your organization offering any special incentives to hire/retain internal audit professionals? | X | | | | | I & III |
| 26b | What sources does your organization use to recruit audit staff? | X | | | | | I & III |
| 26c | Does your organization use college interns/undergraduate placements? | X | | | | | I, III, & V |
| 26d | What is your primary reason for employing college interns/undergraduate placements? | X | | | | | I, III, & V |

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|---------------------------------|--|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| 27 | What methods do you use to make up for staff vacancies? | X | | | | | I & III |
| 28 | What methods is your organization employing to compensate for missing skill sets? | X | | | | | I & III |
| 29 | What percentage of your internal audit activities is currently co-sourced/outsourced? | X | | | | | I & III |
| 30a | How do you anticipate that your budget for co-sourced/outsourced activities will change in the next five years? | X | | | | | I & III |
| 30b | How do you anticipate that your permanent staff levels will change in the next five years? | X | | | | | I, III, & V |
| 31 | What method of staff evaluation do you use? | X | | | | | I & III |
| Internal Audit Standards | | | | | | | |
| 32 | Does your organization use the <i>Standards</i> ? If you are a service provider, do you use the <i>Standards</i> for internal audits of your clients? | X | X | | | | II, III, & V |
| 33 | If your internal audit activity follows any of the <i>Standards</i> , please indicate if the guidance provided by these standards is adequate for your internal audit activity and if you believe your organization complies with the <i>Standards</i> . | X | X | | | | II, III, & V |
| 33a | Do you believe that the guidance provided by the <i>Standards</i> is adequate for internal auditing? | | | | | X | II, III, & V |
| 34 | Your organization is in compliance. | X | | | | | II, III, & V |
| 35 | What are the reasons for not using the <i>Standards</i> in whole or in part? | X | X | | | | II, III, & V |
| 36 | Does your internal audit activity have a quality assessment and improvement program in place in accordance with Standard 1300? | X | | | | | II, III, & V |
| 37a | When was your internal audit activity last subject to a formal external quality assessment in accordance with Standard 1312? | X | | | | | II, III, & V |
| 37b | Why has such a review not been undertaken? | X | | | | | II, III, & V |

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|--|--|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| 37c | As a provider of internal audit services, are your internal audit processes subjected to external quality assessments as specified in Standard 1312? | | X | | | | II, III, & V |
| 38 | For your internal audit activity, which of the following is part of your internal audit quality assessment and improvement program? | X | | | | | II, III, & V |
| Audit Activities | | | | | | | |
| 39 | Please indicate whether your internal audit activity performs (or is anticipated to perform) the following: | X | X | X | X | | I, III, & V |
| 40a | Do you usually provide a form of opinion of the audit subject area in individual internal audit reports? | X | X | X | X | | I & III |
| 40b | Do you usually provide an overall rating (such as satisfactory/unsatisfactory) of the audit subject area in individual internal audit reports? | X | X | X | X | | I & III |
| 40c | Have you ever been subject to coercion (extreme pressure) to change a rating or assessment or to withdraw a finding in an internal audit report? | X | X | X | X | | I & III |
| 41 | After the release of an audit report in the organization, who has the primary responsibility for reporting findings to senior management? | X | X | X | X | | I & III |
| 42 | After the release of an audit report with findings that need corrective action, who has the primary responsibility to monitor that corrective action has been taken? | X | X | X | X | | I & III |
| Tools, Skills, and Competencies | | | | | | | |
| 43a | Indicate the extent the internal audit activity uses or plans to use the following audit tools or techniques on a typical audit engagement. | X | X | X | X | | II, III, & V |
| 43b | What other tools and techniques are you currently using or planning to use (indicate if proprietary)? | X | X | X | X | | II, III, & V |
| 44 | Please mark the five most important of the following behavioral skills for each professional staff level to perform their work. | X | X | | | X | II, III, & V |
| 44a | Please indicate the importance of the following behavioral skills for you to perform your work at your position in the organization | | | X | X | | II, III, & V |
| 45 | Please mark the five most important of the following technical skills for each level of professional staff to perform their work. | X | X | | | X | II, III, & V |

| Question # | Section and Description of Question | CAE | Service Provider Partner | Service Provider Non-partner | Practitioners (staff levels in-house and at-Service Providers) | Academics and Others | Data Used in Report |
|------------------------|--|-----|--------------------------|------------------------------|--|----------------------|---------------------|
| 45a | Please indicate the importance of the following technical skills for you to perform your work at your position in the organization. | | | X | X | | II, III, & V |
| 46 | Please mark the five most important of the following competencies for each level of professional rank to perform their work. | X | X | | | X | II, III, & V |
| 46a | Please indicate the importance of the following competencies for you to perform your work at your position in the organization. | | | X | X | | II, III, & V |
| 46b | How important are the following areas of knowledge for satisfactory performance of your job in your position in the organization? | | | X | X | | II, III, & V |
| 46c | Are there other areas of knowledge that you consider essential? | | | X | X | | II, III, & V |
| Emerging Issues | | | | | | | |
| 47 | Do you perceive likely changes in the following roles of the internal audit activity over the next five years? | X | X | X | X | X | IV & V |
| 48 | Please indicate if the following statements apply to your organization now, in the next five years, or will not apply in the foreseeable future. | X | X | X | X | | IV & V |

The IIA's Global Internal Audit Survey — Glossary

This glossary was made available to respondents when they participated in the survey.

Add Value

Value is provided by improving opportunities to achieve organizational objectives, identifying operational improvement, and/or reducing risk exposure through both assurance and consulting services.

Assurance Services

An objective examination of evidence for the purpose of providing an independent assessment on governance, risk management, and control processes for the organization. Examples may include financial, performance, compliance, system security, and due diligence engagements.

Audit Risk

The risk of reaching invalid audit conclusions and/or providing faulty advice based on the audit work conducted.

Auditee

The subsidiary, business unit, department, group, or other established subdivision of an organization that is the subject of an assurance engagement.

Board

A board is an organization's governing body, such as a board of directors, supervisory board, head of an agency or legislative body, board of governors or trustees of a nonprofit organization, or any other designated body of the organization, including the audit committee to whom the chief audit executive may functionally report.

Business Process

The set of connected activities linked with each other for the purpose of achieving one or more business objectives.

Chief Audit Executive

Chief audit executive is a senior position within the organization responsible for internal audit activities. Normally, this would be the internal audit director. In the case where internal audit activities are obtained from external service providers, the chief audit executive is the person responsible for overseeing the service contract and the overall quality assurance of these activities, reporting to senior management and the board regarding internal audit activities, and follow-up of engagement results. The term also includes titles such as general auditor, head of internal audit, chief internal auditor, and inspector general.

Code of Ethics

The Code of Ethics of The Institute of Internal Auditors (IIA) are Principles relevant to the profession and practice of internal auditing, and Rules of Conduct that describe behavior expected of internal auditors. The Code of Ethics applies to both parties and entities that provide internal audit services. The purpose of the Code of Ethics is to promote an ethical culture in the global profession of internal auditing.

Compliance

Adherence to policies, plans, procedures, laws, regulations, contracts, or other requirements.

Consulting Services

Advisory and related client service activities, the nature and scope of which are agreed with the client, are intended to add value and improve an organization's governance, risk management, and control processes without the internal auditor assuming management responsibility. Examples include counsel, advice, facilitation, and training.

0Any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved.

Customer

The subsidiary, business unit, department, group, individual, or other established subdivision of an organization that is the subject of a consulting engagement.

Engagement

A specific internal audit assignment, task, or review activity, such as an internal audit, control self-assessment review, fraud examination, or consultancy. An engagement may include multiple tasks or activities designed to accomplish a specific set of related objectives.

Enterprise Risk Management — See Risk Management

External Auditor

A registered public accounting firm, hired by the organization's board or executive management, to perform a financial statement audit providing assurance for which the firm issues a written attestation report that expresses an opinion about whether the financial statements are fairly presented in accordance with applicable Generally Accepted Accounting Principles.

Framework

A body of guiding principles that form a template against which organizations can evaluate a multitude of business practices. These principles are comprised of various concepts, values, assumptions, and practices intended to provide a yardstick against which an organization can assess or evaluate a particular structure, process, or environment or a group of practices or procedures.

Fraud

Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

Governance

The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

Independence

The freedom from conditions that threaten objectivity or the appearance of objectivity. Such threats to objectivity must be managed at the individual auditor, engagement, functional, and organizational levels.

Internal Audit Activity

A department, division, team of consultants, or other practitioner(s) that provides independent, objective assurance and consulting services designed to add value and improve an organization's operations. The internal audit activity helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.

Internal Audit Charter

The internal audit charter is a formal document that defines the internal audit activity's purpose, authority, and responsibility. The internal audit charter establishes the internal audit activity's position within the organization; authorizes access to records, personnel, and physical properties relevant to the performance of engagements; and defines the scope of internal audit activities.

Internal Control

A process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

International Professional Practices Framework

The conceptual framework that organizes the authoritative guidance promulgated by The IIA. Authoritative Guidance is comprised of two categories — (1) mandatory and (2) strongly recommended.

IT/ICT

Information technology/information communication technology.

Monitoring

A process that assesses the presence and functioning of governance, risk management, and control over time.

Objectivity

An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they have an honest belief in their work product and that no significant quality compromises are made. Objectivity requires internal auditors not to subordinate their judgment on audit matters to others.

Risk

The possibility of an event occurring that will have an impact on the achievement of objectives. Risk is measured in terms of impact and likelihood.

Risk Assessment

The identification and analysis (typically in terms of impact and likelihood) of relevant risks to the achievement of an organization's objectives, forming a basis for determining how the risks should be managed.

Risk Management

A process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

Service Provider

A person or firm, outside of the organization, who provides assurance and/or consulting services to an organization.

Standard

A professional pronouncement promulgated by the Internal Audit Standards Board that delineates the requirements for performing a broad range of internal audit activities, and for evaluating internal audit performance.

Strategy

Refers to how management plans to achieve the organization's objectives.

Technology-based Audit Techniques

Any automated audit tool, such as generalized audit software, test data generators, computerized audit programs, specialized audit utilities, and computer-assisted audit techniques (CAATs).

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