

William F. Messier, Jr.

Steven M. Glover

Douglas F. Prawitt

*4th edition*



# Auditing & Assurance Services

A Systematic Approach



# AUDITING & ASSURANCE SERVICES

A SYSTEMATIC APPROACH

*Fourth  
Edition*

**William F. Messier, Jr.**  
*Deloitte & Touche Professor*  
*School of Accountancy*  
*Georgia State University*

**Steven M. Glover**  
*PricewaterhouseCoopers Research Fellow*  
*Marriott School of Management*  
*Brigham Young University*

**Douglas F. Prawitt**  
*Deloitte Research Fellow*  
*Marriott School of Management*  
*Brigham Young University*



**McGraw-Hill  
Irwin**

Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis  
Bangkok Bogotá Caracas Kuala Lumpur Lisbon London Madrid Mexico City  
Milan Montreal New Delhi Santiago Seoul Singapore Sydney Taipei Toronto



## AUDITING & ASSURANCE SERVICES: A SYSTEMATIC APPROACH

Published by McGraw-Hill/Irwin, a business unit of The McGraw-Hill Companies, Inc., 1221 Avenue of the Americas, New York, NY, 10020. Copyright © 2006, 2003, 2000, 1997 by The McGraw-Hill Companies, Inc. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written consent of The McGraw-Hill Companies, Inc., including, but not limited to, in any network or other electronic storage or transmission, or broadcast for distance learning.

Some ancillaries, including electronic and print components, may not be available to customers outside the United States.

This book is printed on acid-free paper.

3 4 5 6 7 8 9 0 QPD/QPD 0 9 8 7 6

ISBN-13: 978-0-07-294623-9

ISBN-10: 0-07-294623-7

Editorial director: *Brent Gordon*

Publisher: *Stewart Mattson*

Sponsoring editor: *Steve DeLancey*

Developmental editor I: *Kelly Odom*

Marketing manager: *Marc Chernoff*

Media producer: *Victor Chiu*

Project manager: *Jim Labeots*

Senior production supervisor: *Michael R. McCormick*

Coordinator freelance design: *Artemio Ortiz Jr.*

Supplement producer: *Matthew Perry*

Senior digital content specialist: *Brian Nacik*

Cover design: *Artemio Ortiz Jr.*

Interior design: *Artemio Ortiz Jr.*

Typeface: *10/12 New Aster*

Compositor: *Cenveo*

Printer: *Quebecor World Dubuque*

### Library of Congress Cataloging-in-Publication Data

Messier, William F.

Auditing & assurance services : a systematic approach / William F. Messier, Steven Glover, Douglas Prawitt.—4th ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-07-294623-7 (alk. paper)

1. Auditing. I. Glover, Steven M., 1963– II. Prawitt, Douglas F. III. Title.

HF5667.M46 2006

657'.45—dc22

2004056944



# IMPORTANT

HERE IS YOUR REGISTRATION CODE TO ACCESS MCGRAW-HILL PREMIUM CONTENT AND MCGRAW-HILL ONLINE RESOURCES

For key premium online resources you need THIS CODE to gain access. Once the code is entered, you will be able to use the web resources for the length of your course.

Access is provided only if you have purchased a new book.

If the registration code is missing from this book, the registration screen on our website, and within your WebCT or Blackboard course will tell you how to obtain your new code. Your registration code can be used only once to establish access. It is not transferable

To gain access to these online resources

1. USE your web browser to go to: **www.mhhe.com/messier4e**
2. CLICK on "First Time User"
3. ENTER the Registration Code printed on the tear-off bookmark on the right
4. After you have entered your registration code, click on "Register"
5. FOLLOW the instructions to setup your personal UserID and Password
6. WRITE your UserID and Password down for future reference. Keep it in a safe place.

If your course is using WebCT or Blackboard, you'll be able to use this code to access the McGraw-Hill content within your instructor's online course.

To gain access to the McGraw-Hill content in your instructor's WebCT or Blackboard course simply log into the course with the user ID and Password provided by your instructor. Enter the registration code exactly as it appears to the right when prompted by the system. You will only need to use this code the first time you click on McGraw-Hill content.

These instructions are specifically for student access. Instructors are not required to register via the above instructions.

The McGraw-Hill Companies



**McGraw-Hill  
Irwin**

Thank you, and welcome to your  
McGraw-Hill/Irwin Online Resources.

**Messier, Glover, Prawitt**  
**Auditing and Assurance Services, 4/e**  
**ISBN-13: 978-0-07-310319-8**  
**ISBN-10: 0-07-310319-5**

6DFH-HFUW-K67D-BNCR-GMGJ

REGISTRATION CODE  
REGISTRATION CODE

The McGraw-Hill Companies  
**McGraw-Hill  
Irwin**

# AUDITING & ASSURANCE SERVICES

A SYSTEMATIC APPROACH

This book is dedicated to Teddie, Stacy,  
Mark, Bob, Brandon, and Zachary.

—William F. Messier, Jr.

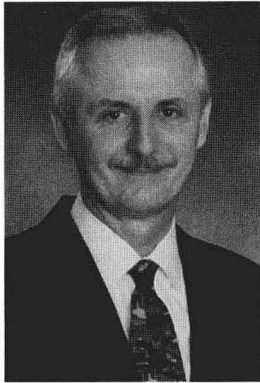
This book is dedicated to Tina, Jessica,  
Andrew, Jennifer, Anna, Wayne, and Penny.

—Steven M. Glover

This book is dedicated to Meryll, Nathan,  
Matthew, Natalie, Emily, AnnaLisa, Lileah,  
George, and Diana.

—Douglas F. Prawitt

# About the Authors



**Professor William F. Messier, Jr.** is the Deloitte & Touche Professor at the School of Accountancy, Georgia State University. He holds a Professor II at the Institute for Accounting & Auditing, Norwegian School of Economics and Business Administration and he is a visiting faculty member at SDA Bocconi in Milan, Italy. Professor Messier holds a BBA from Siena College, an MS from Clarkson University, and an MBA and DBA from Indiana University. He is a CPA in Florida and has taught at the Universities of Florida and Michigan. Professor Messier is Editor of *Auditing: A Journal of Practice & Theory* and is associate Editor of the *Journal of Accounting Literature*. Professor Messier serves on the AICPA's Auditing Standards Board as Chair of the AICPA's International Auditing Standards Subcommittee. He was formerly Chairperson of the Auditing Section of the American Accounting Association. He has authored or coauthored over 50 articles in accounting, decision science, and computer science journals.



**Professor Steven M. Glover** is an Associate Professor of Accounting and PricewaterhouseCoopers Research Fellow at the Marriott School of Management, Brigham Young University. Professor Glover is a CPA in Utah and holds a PhD and BS from the University of Washington and an AA in Business from BYU – Idaho. He is a CPA and previously worked as a senior auditor for KPMG LLP and a director in the national office of PricewaterhouseCoopers LLP. Professor Glover sits on the board of advisors for two technology companies and actively consults with public companies and public accounting firms. Professor Glover is on the editorial boards of *Auditing: A Journal of Practice & Theory* and *Accounting Horizons*. He has authored or coauthored over 25 articles and books primarily focused in the areas of auditor decision making, audit education, and audit practice.



**Professor Douglas F. Prawitt** is a Professor of Accounting and Deloitte Research Fellow at the Marriott School of Management, Brigham Young University. Professor Prawitt is a CPA in Utah and holds a PhD from the University of Arizona, and BS and MAcc degrees from Brigham Young University. He has consulted extensively with several prestigious companies and international and local public accounting firms. Over the past three years he has worked with the Committee of Sponsoring Organizations (COSO) and PricewaterhouseCoopers on the COSO *Enterprise Risk Management Framework* project, which builds on the COSO *Internal Control Integrated Framework*. Professor Prawitt has served in several positions with the American Accounting Association, and is on the editorial boards of *Auditing: A Journal of Practice & Theory* and *Accounting Horizons*. He has authored or coauthored over 25 articles and books, primarily in the areas of auditor judgment and decision making, audit education, and audit practice.



# Messier/Glover/Prawitt:

In the wake of corporate scandals, significant changes have occurred and will continue to evolve within the auditing profession.

The 4th edition of *Auditing & Assurance Services: A Systematic Approach* has been revised to respond to this changing environment. Chapter concepts and topics acknowledge past fraudulent events and fully integrate material on Sarbanes/Oxley, the PCAOB, and the Audit of Internal Control over Financial Reporting.

Among all of this change, the 4th edition of *Auditing & Assurance Services* holds true to its fundamental values:

**Student Engagement.** The authors believe students are best served by understanding the basic concepts that underlie the audit process and how to apply those concepts to various audit and assurance services. The primary purpose for an auditing text is to facilitate student learning, and this text is written accordingly. The text is intended to be accessible to students through straightforward writing and through the use of engaging, relevant real-world examples, illustrations, and analogies. Additionally, the case for EarthWear Clothiers, a mail-order retailer, has been updated and integrated throughout the book and Online Learning Center.

**A Systematic Approach.** The text continues to take a systematic approach to the audit process by first introducing the three underlying concepts: audit risk, materiality, and evidence. These concepts are then applied to each major business process and related account balances using a risk-based approach. The text has been revised to include the risk assessment process proposed by the Auditing Standards Board and adopted by the International Auditing and Assurance Standards Board. The assessment of control risk is then described, followed by discussion of the nature, timing, and extent of evidence necessary to reach the appropriate level of detection risk.

**Decision Making.** In covering these important concepts and their applications, the book focuses on critical judgments and decision-making processes followed by auditors. Much of auditing practice involves the application of auditor judgment. If a student understands these basic concepts and how to apply them to an audit engagement, he or she will be more effective in today's dynamic audit environment.



# What's NEW about 4e?

## Chapter 1:

- Provides an overview of the recent events that are powerfully reshaping the profession.
- A new introduction to auditing and auditors allows students to develop an intuitive understanding of the demand for assurance and the characteristics of audits and auditors.
- The overview of the audit process and of fundamental auditing concepts (audit risk, materiality, and evidence) has been moved from Chapter 2 to Chapter 1 to give immediacy to the central focus of the text and to pique student interest.
- The chapter uses plain language, clear illustrations, and intuitive analogies to make a compelling case for auditing as a dynamic, challenging, and valuable service to society.

## Chapter 2:

- Restructured to help students understand the context in which financial statement auditing takes place.
- Provides a high-level model of business (including governance, objectives, strategy, business processes, transactions, risk management, and control) as the primary context for the financial statement audit.
- Explains the responsibilities, standards, and key organizations affecting the auditor's work environment.
- Offers an overview of the various types of assurance services and assurance providers in the broader world of auditors and auditing.
- Gives an overview of the new CPA Exam.

## Chapter 3:

- The chapter has been revised to present the risk assessment process before introducing the discussion of materiality.

- The discussion of the auditor's risk assessment process has been substantially revised based on standards proposed by the ASB and adopted by the IAASB.
- Expanded coverage of fraud.
- The description for establishing and evaluating materiality has been revised to better reflect current audit practice and to be clearer to students.
- New real world cases (Tyco and Nortel) included to illustrate concepts.

## Chapter 4:

- Chapter 4 has been revised in accordance with the new standard on audit evidence proposed by the ASB and adopted by the IAASB.
- The chapter presents the new categories for management assertions and types of audit evidence.
- Expanded coverage of audit documentation requirements by the PCAOB.
- For simplicity and to better reflect current practice, rather than elaborate on both "assertions" and "audit objectives," the text now focuses only on assertions.

## Chapter 5:

- The discussion of the audit planning process has been revised and updated.
- The discussion of analytical procedures has been substantially revised to better reflect current audit practice.
- To help students better understand the various testing methods, we introduce two conceptual aids: the "Audit Testing Hierarchy" and "Assurance Buckets."

# Current in Times of Change

## EarthWear Case.

---

The EarthWear Clothiers integrated case is based on a real-world company and is used to demonstrate important auditing concepts throughout the book. The company's 2005 Annual Report is bound into the book following Chapter 1, where the case is introduced. A home page for the company contains extensive information on EarthWear, and a home page for the company's auditors, Willis & Adams, CPAs, contains extensive audit-related information ([mhhe.com/messier4e](http://mhhe.com/messier4e)). The website will contain an assignment that allows students to perform risk analysis for EarthWear, including assessment of the five internal control components. Additionally, numerous problems and Internet assignments related to EarthWear are found throughout the text.

## Expanded Student Supplement Package.

---

*NEW!* *ACL*<sup>TM</sup> audit software is packaged with every new copy of the 4th edition. Basic *ACL* assignments are found on the text Online Learning Center ([mhhe.com/messier4e](http://mhhe.com/messier4e)) for each chapter of the text. These assignments will allow students to test controls, perform audit sampling, and conduct other analysis. Some chapters will lend themselves better to *ACL*, depending on content, but every chapter will offer at least 1–2 assignments.

*NEW!* The Study Guide/Casebook, developed by Helen Roybark of Radford University, consists of two parts: Section I includes a detailed case study entitled "Townsend Office Supplies and Equipment, Inc.," and Section II includes a unit for each chapter in the textbook. Each chapter unit in Section II includes a chapter summary, true/false questions, multiple-choice questions, short essay questions, a crossword puzzle to test terminology, and a case activity for Townsend, Inc. Solutions are included.

## Problem Material.

---

The end-of-chapter materials contain review questions, multiple-choice questions from CPA examinations, problems, Internet assignments, and discussion cases.

- Review questions allow students to quickly test their knowledge of the learning objectives for each chapter and provide a basis for meaningful in-class discussion.
- Multiple-choice questions provide a sound basis for testing understanding of the chapter material.
- Problems are drawn from the CPA and CIA examinations and require relatively in-depth application of chapter material.
- Internet assignments involve solving problems related to the EarthWear case and accessing various types of accounting and industry information online.
- Discussion cases are based on real-world examples and require the student to research solutions using various information sources.
- *ACL* assignments are located on the text Online Learning Center ([mhhe.com/messier4e](http://mhhe.com/messier4e)).



## Chapter 6:

- Updated for recent changes in internal controls.
- Presents a base for assessing internal control for financial statement audits and audits of internal control over financial reporting.

## Chapter 7:

- This is a new chapter containing a detailed presentation of audits of internal control over financial reporting based on the PCAOB's Auditing Standard No. 2.

## Chapter 8:

- Before getting into the statistical terms and technical concepts, we now illustrate the fundamental concepts of sampling in a nontechnical, intuitive, and interactive manner using straightforward illustrations and analogies.
- The discussion of attributes sampling has been simplified and updated to better reflect current practice.

## Chapter 9:

- The discussion of monetary unit sampling has been simplified and updated to better reflect practice.
- Classical variables sampling now begins with a review of the theory of sampling distributions.

## Chapters 10–16:

- The business process chapters (cycles) have been updated to reflect the changes made in Chapters 3–5 for the auditor's risk assessment process, management assertions, and types of evidence.

- Several new real world cases have been inserted to illustrate concepts.

## Chapter 17:

- Added completion procedures and communications associated with an audit of internal controls over financial reporting.
- New working paper with archiving and retention requirements outlined.

## Chapter 18:

- Updated to include reports for an integrated audit and the audit of internal controls over financial reporting.

## Chapter 19:

- Clarified discussion of fundamental ethical and moral theories.
- Updated to reflect new independence rules imposed by the SEC and PCAOB after the Sarbanes-Oxley Act of 2002.
- Reorganized presentation for enhanced clarity.

## Chapter 20:

- New Advanced Module provides an in-depth look at an actual trial where auditors are convicted on fraud charges.
- Some of the historical cases are now covered on the book's website ([mhhe.com/messier4e](http://mhhe.com/messier4e)).
- General updating to reflect new auditor liability cases (e.g., Andersen and Enron) as well as the new requirements and liability under Sarbanes Oxley.

## Chapter 21:

- New section on internal auditing and the Institute of Internal Auditors.



# Supplements

## For Instructors...

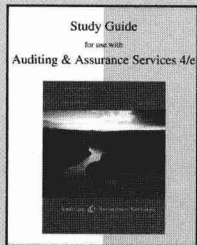
**Instructor's Resource CD-ROM (ISBN 0072946245):** Contains all essential course supplements including:

- Solutions Manual, revised by William F. Messier, Jr., Steven M. Glover, and Douglas F. Prawitt
- Instructor's Manual, revised by Jane Kapral of Boston University
- Test Bank Word files, revised by Mark Taylor of Creighton University
- Computerized Test Bank by Brownstone
- PowerPoint Presentations, prepared by Jon A. Booker, Charles W. Caldwell, and Susan C. Galbreath



**Online Learning Center (OLC):** [mhhe.com/messier4e](http://mhhe.com/messier4e)

The Instructor Edition of the Auditing & Assurance Services, 4e OLC is password-protected and another convenient place for instructors to access essential course supplements. Additional resources include: Links to Professional Resources, Sample Syllabi, Text Updates, and Solutions to *ACL* assignments.



## For Students...

**Study Guide/Casebook for use with Auditing & Assurance Services: A Systematic Approach, 4e (ISBN 0073024899):** developed by Helen Roybark of Radford University. New to the 4th edition, this companion resource offers students the opportunity to practice chapter material, reinforce key terms, and complete activities relating to the case study, "Townsend Office Supplies and Equipment, Inc."



**Online Learning Center (OLC):** [mhhe.com/messier4e](http://mhhe.com/messier4e)

The Student Edition of the Auditing & Assurance Services, 4e OLC contains tools designed to enhance students' learning experience: Chapter Learning Objectives, Relevant Accounting and Auditing Pronouncements by Chapter, Multiple-Choice Quizzes, Key Term Flash Cards, PowerPoint Presentations, Auditing Web Links, and text updates. Should the instructor choose to integrate *ACL* into his or her course, assignment material, which requires students to use the software issued for free with their text, is located on the OLC. The home pages for EarthWear Clothiers and Willis & Adams, CPAs are also located here.

# Acknowledgments

First and foremost, we thank our families for their continuous support. We would like to acknowledge the American Institute of Certified Public Accountants for permission to quote from auditing standards, the Code of Professional Conduct, the Uniform CPA Examination, and the *Journal of Accountancy*. We would also like to thank ACL Services, Ltd. for granting permission to distribute the educational version of *ACL* software with our textbook.

We have received extensive feedback from users and nonusers of the 3rd edition. Our market research includes surveys and in-depth reviews; the valuable feedback provided by these processes helped us develop and enhance the 4th edition text. Thank you to the following colleagues for their invaluable advice:

Jeff Austin,  
*Southern Methodist University*

Duane M. Brandon,  
*Auburn University*

James Crockett,  
*University of Southern Mississippi*

Mary Curtis,  
*University of North Texas*

Frank Daroca,  
*Loyola Marymount University*

Todd DeZoort,  
*University of Alabama – Tuscaloosa*

William Dilla,  
*Iowa State University*

Robert Ekew,  
*Purdue University*

Charles Holley,  
*Virginia Commonwealth University*

Pam Legner,  
*College of DuPage (IL)*

Ralph Licastro,  
*Pennsylvania State University –  
University Park*

Robert McCabe,  
*California State University – Fullerton*

Robert Minnear,  
*Emory University*

Vincent Owghoso,  
*Bentley College*

John Rigsby,  
*Mississippi State University*

Sandra Roberson,  
*Furman University*

Helen Roybark,  
*Radford University*

Brian Shapiro,  
*University of Minnesota –  
Minneapolis*

Scott Vandervelde,  
*University of South Carolina*

Glen Van Whye,  
*Pacific Lutheran University*

George Young,  
*Florida Atlantic University*

Dave S. Baglia,  
*Grove City College*

# Brief Table of Contents

PART I	INTRODUCTION TO FINANCIAL STATEMENT AUDITING	1
1	An Introduction to Assurance and Financial Statement Auditing	2
2	The Financial Statement Auditing Environment	34
PART II	BASIC AUDITING CONCEPTS: RISK ASSESSMENT, MATERIALITY, AND EVIDENCE	77
3	Risk Assessment and Materiality	78
4	Audit Evidence and Audit Documentation	130
PART III	PLANNING THE AUDIT, AND UNDERSTANDING AND AUDITING INTERNAL CONTROL	165
5	Audit Planning and Types of Audit Tests	166
6	Internal Control in a Financial Statement Audit	218
7	Auditing Internal Control over Financial Reporting in Conjunction with an Audit of Financial Statements	264
PART IV	STATISTICAL AND NONSTATISTICAL SAMPLING TOOLS FOR AUDITING	317
8	Audit Sampling: An Overview and Application to Tests of Controls	318
9	Audit Sampling: An Application to Substantive Tests of Account Balances	362
PART V	AUDITING BUSINESS PROCESSES	407
10	Auditing the Revenue Process	408
11	Auditing the Purchasing Process	466
12	Auditing the Human Resource Management Process	506
13	Auditing the Inventory Management Process	536
14	Auditing Financing Process: Prepaid Expenses and Property, Plant, and Equipment	568
15	Auditing Financing Process: Long-Term Liabilities, Stockholders' Equity, and Income Statement Accounts	592
16	Auditing Financing Process: Cash and Investments	614



PART VI	COMPLETING THE AUDIT AND REPORTING RESPONSIBILITIES	645
17	Completing the Engagement	646
18	Reports on Audited Financial Statements and on Internal Control over Financial Reporting	680
PART VII	PROFESSIONAL RESPONSIBILITIES	725
19	Professional Conduct, Independence, and Quality Control	726
20	Legal Liability	778
PART VIII	ASSURANCE, ATTESTATION, AND INTERNAL AUDITING SERVICES	825
21	Assurance, Attestation, and Internal Auditing Services	826
	<i>Index</i>	871

# Table of Contents

PART I	INTRODUCTION TO FINANCIAL STATEMENT AUDITING	1
1	An Introduction to Assurance and Financial Statement Auditing	2
	The Study of Auditing	5
	The Demand for Auditing and Assurance	6
	<i>Principals and Agents</i>	6
	<i>The Role of Auditing</i>	7
	An Assurance Analogy: The Case of the House Inspector	9
	<i>Seller Assertions, Information Asymmetry, and Inspector Characteristics</i>	9
	<i>Desired Characteristics of the House Inspection Service</i>	9
	<i>Relating the House Inspection Analogy to Financial Statement Auditing</i>	10
	<i>Management Assertions and Financial Statements</i>	11
	Auditing, Attest, and Assurance Services Defined	12
	<i>Auditing</i>	13
	<i>Attestation</i>	14
	<i>Assurance</i>	14
	Fundamental Concepts in Conducting a Financial Statement Audit	15
	<i>Audit Risk</i>	16
	<i>Materiality</i>	17
	<i>Evidence Regarding Management Assertions</i>	18
	Sampling: Inferences Based on Limited Observations	18
	The Audit Process	19
	<i>Overview of the Financial Statement Auditing Process</i>	19
	<i>Major Phases of the Audit</i>	21
	Conclusion	25
	Key Terms	26
	Review Questions	27
	Multiple-Choice Questions	28
	Problems	29

Discussion Case	30
Internet Assignments	31
<b>2 The Financial Statement Auditing Environment</b>	<b>34</b>
A Time of Challenge and Change for Auditors	36
<i>Problems and Warning Signs</i>	36
<i>An Explosion of Scandals</i>	36
<i>Government Regulation</i>	37
<i>Back to Basics</i>	38
The Context of Financial Statement Auditing	38
<i>Business as the Primary Context of Auditing</i>	38
A Model of Business	39
<i>Corporate Governance</i>	39
<i>Objectives, Strategies, Processes, Controls, Transactions, and Reports</i>	39
A Model of Business Processes: Five Components	40
<i>The Financing Process</i>	40
<i>The Purchasing Process</i>	40
<i>The Human Resource Management Process</i>	40
<i>The Inventory Management Process</i>	40
<i>The Revenue Process</i>	40
<i>Relating the Process Components to the Business Model</i>	42
Management Assertions	42
Auditing Standards	43
<i>The Roles of the ASB and the PCAOB</i>	43
<i>The 10 Generally Accepted Auditing Standards</i>	44
<i>Three General Standards</i>	44
<i>Three Standards of Field Work</i>	45
<i>Four Standards of Reporting</i>	46
Statements on Auditing Standards—Interpretations of GAAS	46
Ethics, Independence, and the Code of Professional Conduct	47
The Auditor's Responsibility for Errors, Fraud, and Illegal Acts	48
Audit Reporting	49
<i>Generally Accepted Accounting Principles as Audit Criteria</i>	50
<i>The Auditor's Standard Unqualified Audit Report</i>	50
<i>Reasons for Departures from an Unqualified Audit Report</i>	52
<i>Other Types of Audit Reports</i>	52
Public Accounting Firms	53
<i>Organization and Composition</i>	53
Types of Audit, Attest, and Assurance Services	54
<i>Audit Services</i>	55
<i>Attest Services</i>	56
<i>Assurance Services</i>	57
<i>Other Nonaudit Services</i>	58