S e c o n d E d i t i o t

## AUDITING



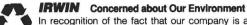
## **AUDITING**

Second Edition

Kurt Pany Arizona State University

O. Ray Whittington San Diego State University

#### IRWIN



In recognition of the fact that our company is a large end-user of fragile yet replenishable resources, we at IRWIN can assure you that every effort is made to meet or exceed Environmental Protection Agency (EPA) recommendations and requirements for a "greener" workplace.

To preserve these natural assets, a number of environmental policies, both companywide and department-specific, have been implemented. From the use of 50% recycled paper in our textbooks to the printing of promotional materials with recycled stock and soy inks to our office paper recycling program, we are committed to reducing waste and replacing environmentally unsafe products with safer alternatives.

© The McGraw-Hill Companies, Inc., 1994 and 1997

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher.

#### Irwin Book Team

Publisher: Michael W. Junior
Associate editor: George Werthman
Editorial assistant: Marc Chernoff
Marketing manager: James Rogers
Project supervisor: Paula M. Buschman
Production supervisor: Pat Frederickson

Art director: Keith McPherson Cover illustration: David Bishop Prepress buyer: Charlene R. Perez

Compositor: Weimer Graphics, Inc., Division of Shepard Poorman Communications Corp.

Typeface: 10/12 Times Roman

Printer: R. R. Donnelley & Sons Company

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

Pany, Kurt.

Auditing / Kurt Pany, O. Ray Whittington.-2nd ed.

p. cm.

Includes index.

ISBN 0-256-17086-X

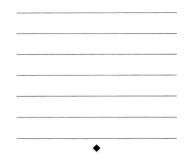
 Auditing. 2. Auditors' reports. I. Whittington, Ray, 1948– II. Title.

HF5667.P344 1977

96-31811

657'.45—dc20

Printed in the United States of America 2 3 4 5 6 7 8 9 0 DO 3 2 1 0 9 8 7



## AUDITING

Second Edition

#### THE IRWIN SERIES IN UNDERGRADUATE ACCOUNTING

Ainsworth, Deines, Plumlee and Larson

Introduction to Accounting: An Integrated Approach

Ansari (Editor-Modular Series)

Management Accounting: A Strategic
Focus

Bernstein

Financial Statement Analysis: Theory, Application and Interpretation

Interpretation
Fifth Edition

Bernstein and Maksy

Cases in Financial Statement

Reporting and Analysis

Second Edition

Boatsman, Griffin, Vickrey and

Williams

Advanced Accounting

Eighth Edition

Boockholdt Accounting Information Systems

Fourth Edition

Booker, Caldwell, Gallbreath, and

Rand

Praxis Ready Slides Praxis Ready Shows Praxis Ready Notes

Power Point Classroom Presentation

Products

Carse and Slater Payroll Accounting 1997 Edition

Danos and Imhoff

Introduction to Financial Accounting

Second Edition

Dyckman, Dukes and Davis Intermediate Accounting

Third Edition

Engler, Bernstein and Lambert

Advanced Accounting
Third Edition

Engstrom and Hay

Essentials of Accounting for Governmental and Not-for-Profit

Organizations Fourth Edition

Epstein and Spalding

The Accountant's Guide to Legal

Liability and Ethics

Ferris

Financial Accounting and Corporate

Reporting: A Casebook

Fourth Edition

Garrison and Noreen

Managerial Accounting

Eighth Edition

Hay and Wilson

Accounting for Governmental and

Nonprofit Entities

Tenth Edition

Hermanson and Edwards

Financial Accounting: A Business

Perspective Sixth Edition

Hermanson, Edwards and Maher Accounting: A Business Perspective

Sixth Edition

Hermanson and Walker

Computerized Accounting with Peachtree

Complete® Accounting, Version 8.0

Hoyle

Advanced Accounting

Fourth Edition

Larson

Financial Accounting

Seventh Edition

Larson and Chiappetta

Fundamental Accounting Principles

Fourteenth Edition

Larson, Spoede and Miller

Fundamentals of Financial and Managerial Accounting

Libby, Libby and Short Financial Accounting

Maher

Cost Accounting

Fifth Edition

Mansuetti and Weidkamp

Introductory/Intermediate Practice

Set Series Fourth Edition

Marshall and McManus

Accounting: What the Numbers

Mean

Third Edition

Miller, Redding and Bahnson

The FASB: The People, the Process

and the Politics Third Edition

Morris

Short Audit Case Seventh Edition

Morse and Zimmerman

Managerial Accounting

Mueller, Gernon and Meek
Accounting: An International
Perspective

Fourth Edition

Pasewark and Louwers

Real World Accounting Series

Athletronics, Inc. Shoe Business, Inc.

Understanding Corporate Annual Reports

Pany and Whittington

Auditing

Second Edition

Peters and Peters

College Accounting
Second Edition

Peters, Peters and Yacht

Computerized College Accounting

Pratt and Kulsrud

Corporate, Partnership, Estate and Gift Taxation, 1997 Edition

Pratt and Kulsrud

Federal Taxation, 1997 Edition

Pratt and Kulsrud

Individual Taxation, 1997 Edition

Rayburn

Cost Accounting: Using a Cost

Management Approach

Sixth Edition

Robertson Auditing

Eighth Edition

Schrader

College Accounting: A Small

Business Approach Second Edition

Van Breda and Hendriksen

Accounting Theory Sixth Edition

Whittington and Pany *Principles of Auditing* Eleventh Edition

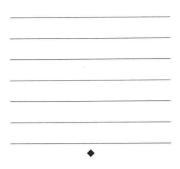
Yacht

Computer Accounting with Peachtree® for Microsoft® Windows® Release 3.0/3.5

Yacht and Terry

Computer Accounting for Microsoft®

Windows®



#### **PREFACE**

The second edition of *Auditing* provides a carefully balanced presentation of auditing theory and practice. Written in a clear and understandable manner, it is appropriate for students with no audit experience. The text's approach is to integrate auditing material with that obtained by students in previous courses in accounting systems and in financial and managerial accounting.

Auditing is well suited for the introductory one-semester or one-quarter course. Alternatively, key chapters may be covered in greater detail in a first course, with other chapters being included in a subsequent auditing course. One way to divide the information is to cover in the second course the second sampling chapter (Chapter 11), cycles other than the revenue cycle (Chapters 14 through 17), and other responsibilities (Chapters 19 and 20). In this way the first course would include professional responsibilities, design of an audit, the fundamentals of audit sampling, and extensive coverage of the revenue cycle.

While the text stresses accounting systems with computerized applications throughout, it recognizes the reality that most accounting systems are not computerized or manual, but are composed of a combination of computerized and manual subsystems. Accordingly, the text illustrates these types of systems.

#### ORGANIZATION OF TEXT

The textbook is divided into five major parts:

Part	Title	Chapters
I.	Professional Responsibilities	1-5
II.	The Design of Audits	6–8
III.	Technology and Sampling Approaches	9-11
IV.	Testing Controls and Performing Substantive Tests	12-18
V.	Other Responsibilities	19–20

The chapters are written to stand alone, with the exceptions of Chapters 11 and 13 on sampling and the revenue cycle, respectively, which rely upon the chapter that precedes them. Therefore, various combinations and ordering of chapters may be used.

Part I—Professional Responsibilities. The opening chapters describe the role and professional responsibilities of auditors. Rather than focus only on audits of financial statements, the discussion in the first chapter covers the broad concepts of the attest function, and illustrates how audits of financial statements relate to that function. Chapter 2 covers the professional standards that provide the overall measures of performance for audits and various other types of attest engagements. Chapter 3, on audit reports, presents the various reporting responsibilities when audits of financial statements are performed. Chapter 4 discusses ethical standards and emphasizes emerging and controversial issues that illustrate the need for judgment in evaluating situations that might impair the auditors' independence. An up-to-date description of the legal liability of auditors in the 1990s, including the Private Securities Litigation Reform Act of 1995, is presented in Chapter 5.

Part II—The Design of Audits. Chapter 6 presents the audit risk model with its components of inherent risk, control risk, and detection risk. It also describes the nature of audit evidence and includes an integrated discussion of the relationships among audit risk, the components of audit risk, financial statement assertions, and the nature, timing, and extent of evidence. These relationships are emphasized throughout the remainder of the text. Chapter 7 discusses the major factors to be considered in planning an audit, with an emphasis on the critical aspect of assessing risk and has been updated to include discussion of *Statement on Auditing Standards (SAS) 82* on the auditor's consideration of fraud in a financial statement audit. Chapter 8 presents information on the auditors' consideration of internal control and has been reorganized to reflect changes made by *SAS 78* which modifies *SAS 55* to align the professional literature with the control criteria developed by the Committee of Sponsoring Organizations (COSO).

Part III—Technology and Sampling Approaches. Chapter 9, on internal control in a computer system, has been structured around the most recent professional pronouncements (including SAS 78 and various recently issued Auditing Procedures Studies). While all of the procedural chapters of the text incorporate discussions of accounting systems with computerized operations, Chapter 9 emphasizes the auditors' consideration of computerized internal control systems ranging in sophistication from those using a single microcomputer to those using complex, networked mainframe computers. Like Chapter 8, it has been revised to reflect the COSO's Integrated Framework.

Chapters 10 and 11 provide an easy-to-understand discussion of audit sampling, both statistical and nonstatistical. Chapter 10, which many instructors may consider sufficient topical coverage of the area, includes discussions of overall concepts, attributes sampling, and the essentials of variables sampling. Chapter 11 has been restructured in the second edition of the textbook to include three stand-alone modules on variables sampling—classical methods, probability-proportional-to-size sampling, and nonstatistical sampling. Any combination of these modules may be selected for inclusion in the course.

Preface vii

Part IV—Testing Controls and Performing Substantive Tests. Information on testing controls and performing substantive tests may be structured in several ways, including by account or by transaction cycle. This text provides a cycles-based approach that attempts to capture the essence of SAS 55 and 78 on internal control and the earlier SAS 31 on evidential matter. Since SAS 55 and 78 require auditors to assess control risk by assertion, the text deals directly with assertions and avoids the intermediate stage of "internal control" objectives.

Chapter 12 on the auditors' consideration of internal control for the revenue cycle illustrates a computerized system similar to those one might expect to encounter in practice. The illustration is described in simple terms so students with a limited background in systems and computers can understand it. The inclusion of detailed systems flowcharts in Chapter 12 facilitates very specific coverage of the cycle. Alternatively, the flowcharts may be quickly covered in class, with increased emphasis on the broader concepts. The material on substantive tests of the revenue cycle accounts, including sales, receivables, and cash is presented in Chapter 13. Chapters 14 through 17 provide similar coverage for the other accounting cycles. All of these chapters have been revised to reflect the CSO framework. Finally, Chapter 18 includes information about auditing the operations of the company and completing the audit.

Part V—Other Responsibilities. Chapter 19 presents a discussion of other attest and nonattest services provided by Certified Public Accountants. Chapter 20, on internal, operational, and compliance auditing, describes the professional standards of internal auditors, the purpose and nature of operational audits, and various types of compliance audit engagements. Compliance auditing continues to gain importance as auditors receive increasing requests from Congress and regulatory agencies to audit for compliance with laws and regulations, especially those relating to the use of taxpayers' funds.

#### FEATURES OF THIS TEXT

This text includes a variety of features to enhance the learning experience:

Chapter Objectives provide a concise presentation of each chapter's most important concepts.

**Keystone Computers & Networks, Inc.** is the text's **Illustrative Audit Case.** It is based on an actual company and begins in the planning chapter (Chapter 7). It continues in Chapters 12, 13, 14, and 18 (case only). Keystone both illustrates audit methods and provides realistic, thought-provoking case exercises. Although each portion of the case is designed to stand alone, if used in combination, it will help the student develop problemsolving activities in planning (Chapter 7), assessing internal control over the revenue and acquisition cycles (Chapters 12 and 14), testing account balances (Chapter 13), and completing the audit (Chapter 18). In addition to incorporating the use of computerized accounting applications, the case integrates the fundamentals of audit sampling.

**Illustrative Cases** use actual business and accounting examples to illustrate key chapter concepts. The cases are boxed and appear throughout the text.

Preface

**Industry Focus Cases,** new to this edition, use examples from specific industries to provide students with detailed "real world" illustration of points being emphasized in the text. These cases show the importance of having a thorough knowledge of the audit client's business. Like the illustrative cases, these cases are boxed and appear throughout the text.

**International Auditing Standards** are discussed as appropriate. These standards are becoming increasingly significant as countries attempt to create international markets for securities.

**Key Terms Introduced or Emphasized** is a glossary of each chapter's most important terms. The terms are boldface within the chapter and are defined at the end of the chapter. Placing the definitions at the end of each chapter allows the student to quickly find the meaning of unfamiliar terms while reading the material. The glossary also serves as an excellent review tool and helps the student see how well he or she understands the major ideas presented.

**Illustrations, tables,** and **flowcharts** are used throughout to enhance and clarify the presentation. **Chapter Summaries** recap the most important information presented in the chapter.

#### END-OF-CHAPTER PROBLEM MATERIAL

A combination of questions carefully selected to address each chapter's objectives have been written by the authors and adapted from various professional examinations. The questions at the end of each chapter are segregated as follows: Review Questions, Questions Requiring Analysis, Problems, Research and Discussion Cases, and Audit Case Exercises.

The **Review Questions** are closely related to the material in the chapter and provide a convenient means of determining whether students have grasped the major concepts and details contained in that chapter.

The **Questions Requiring Analysis** call for thoughtful consideration of realistic auditing situations and the application of generally accepted auditing standards. A number of these questions are taken from CPA and other professional examinations, and others describe real-world audit situations. These questions, generally shorter than Problems, tend to stress value judgments and conflicting opinions. New to this edition is a group of questions in Chapters 7 and 13 that require students to use the *Internet* to perform audit research. The Internet problems are identified with a WWW logo in the margin.

Many of the **Problems** have been drawn from CPA and CIA examinations. In selecting these problems, consideration was given to ones appearing in recent professional exams. However, older questions are included when they are superior to others available.

Research and Discussion Cases involve controversial situations that do not lend themselves to clear-cut answers. Students are required to research appropriate auditing and accounting literature and to then apply critical thinking skills to logically formulate and justify their personal positions on the issues involved in each case. The cases acquaint students with the professional literature, develop research and communication skills, and



Preface ix

demonstrate that several diverse, yet defensible, positions may be argued persuasively in a given situation.

The Audit Case Exercises all pertain to the text's continuing integrated case, Keystone Computers & Networks, Inc. While each exercise may stand alone, when used in combination these case exercises lead the students from the original planning of an audit through the process of performing tests of controls and substantive tests to evaluating the audit results. Audit Case Exercises are included in Chapters 7, 12, 13, 14, and 18. A Computer Disk of Spreadsheet Templates is available to be used in conjunction with selected audit case exercises. The exercises with templates available may be identified by a floppy disk logo in the margin.



#### REFERENCES TO AUTHORITATIVE SOURCES

Numerous references are made to the pronouncements of the American Institute of Certified Public Accountants (AICPA), the Institute of Internal Auditors (IIA), the Financial Accounting Standards Board, the Governmental Accounting Standards Board, and the Securities and Exchange Commission. The cooperation of the AICPA and the IIA in permitting the use of their published materials and of questions from the CPA and CIA examinations brings to an auditing text an element of authority not otherwise available.

#### **SUPPLEMENTS**

A **Study Guide**, written by the text's authors, enables students to review text material and to test their understanding. The guide includes a summary of each chapter's highlights and an abundance of objective questions and exercises. Since the guide includes answers to the questions and exercises, it provides immediate feedback to students.

Our **Instructor's Lecture Guide** includes topical outlines of each chapter, the authors' personal comments on each chapter, and numerous instructional aids, including transparency masters. A **Solutions Manual** includes thorough and up-to-date solutions to the text's questions, problems, and exercises.

The **Test Bank** includes both original questions and problems, and questions adapted from various professional examinations. It has been significantly expanded in this edition by the inclusion of more than 100 additional multiple choice questions, with approximately 1/2 author-prepared and 1/2 from recent professional exams; in addition, the number of essay type questions has been significantly increased.

Computest3 is the computerized version of the test bank. This advanced-feature test generator allows the instructor to add and edit questions; save and reload tests; create up to 99 versions of each test; attach graphics to questions and answers; import and export ASCII files; and select questions based on type, level of difficulty, or keyword. Computest3 provides password protection of saved tests and question databases and can run on a network. It is available on 5.25 and 3.5 disks.

Powerpoint Presentations are available to assist in classroom presentations.

#### CONTRIBUTIONS BY OTHERS

Many people have made valuable contributions to this textbook. Special thanks are offered to John Broughton, CIA, CISA, CMA, for his assistance in the revision of Chapter 9 on internal control in a computerized system. The work of Donald A. Schwartz, J.D., CPA, of National University in developing the software supplement for the audit case exercises is especially appreciated. In addition, our sincere thanks is extended to the many professors, practitioners, and governmental regulators who have offered helpful suggestions for this text. Especially helpful were the advice and suggestions of the following reviewers:

Professor Sherri Anderson
Sonoma State University
Professor Rich Brody
Central Connecticut University
Professor Randy Elder
Syracuse University
Professor Steve Kaplan
Arizona State University
Professor Keith Moreland
University of Michigan—Flint
Professor Jane F. Mutchler
Penn State University
Professor Thomas R. Weirich
Central Michigan University

Kurt Pany
O. Ray Whittington

## CONTENTS IN BRIEF

#### PART 1 Professional Responsibilities

1 THE ROLE OF THE AUDITOR IN THE AMERICAN ECONOMY 2

98

- 2 PROFESSIONAL STANDARDS 33
- 3 AUDITORS' REPORTS 62
- 4 PROFESSIONAL ETHICS
- 5 LEGAL LIABILITY OF AUDITORS 134

#### PART 2 The Design of Audits 165

- 6 AUDIT EVIDENCE 166
- 7 PLANNING THE AUDIT; DESIGNING AUDIT PROGRAMS 214
- 8 INTERNAL CONTROL 268

### PART 3 Technology and Sampling Approaches 311

- 9 CONSIDERATION OF INTERNAL CONTROL IN A COMPUTER ENVIRONMENT 312
- 10 AUDIT SAMPLING: CONCEPTS AND TECHNIQUES 351
- 11 AUDIT SAMPLING: APPLICATIONS FOR SUBSTANTIVE TESTING 391

## PART 4 Testing Cycle Controls and Performing Substantive Tests 425

- 12 REVENUE CYCLE—OBTAINING AN UNDERSTANDING AND TESTING CONTROLS 426
- 13 REVENUE CYCLE—SUBSTANTIVE TESTS 476
- 14 AUDITING THE ACQUISITION CYCLE 5
- 15 AUDITING THE CONVERSION AND PAYROLL CYCLES 570
- 16 AUDITING THE FINANCING CYCLE 621
- 17 AUDITING THE INVESTMENT CYCLE 652
- 18 AUDITING OPERATIONS AND COMPLETING THE AUDIT 685

#### PART 5 Other Responsibilities 723

- 19 OTHER ATTESTATION AND ACCOUNTING SERVICES 724
- 20 INTERNAL, OPERATIONAL, AND COMPLIANCE AUDITING 763 INDEX 800

# •

## **CONTENTS**

PART 1 Professional Responsibilities 1  1 THE ROLE OF THE AUDITOR IN THE AMERICAN ECONOMY 2 What Is the Attest Function? 2 Financial Statement Audits 3 What Creates the Demand for Audits? 7 Major Audit Developments of the 20th Century 9 Types of Audits 12 Types of Auditors 13 The Public Accounting Profession 14 American Institute of Certified Public Accountants 14 The CPA Examination 17 State Boards of Accounting Standards Board 17 Governmental Accounting Standards Board 18 Securities and Exchange Commission 18 Other Types of Professional Services 19 Organization of the Public Accounting Profession 20 Industry Specialization—The Wave of the Future 21 Responsibilities of the Professional Staff 22 Professional Development for CPA Firm Personnel 23	Seasonal Fluctuations in Public Accounting Work 24 Relationships with Clients 24  2 PROFESSIONAL STANDARDS 33  Generally Accepted Auditing Standards (GAAS) 34 Application of Auditing Standards 35 Training and Proficiency 35 Independence 35 Due Professional Care 36 Standards of Field Work—Accumulating and Evaluating Evidence 36 Adequate Planning and Supervision 36 Sufficient Understanding of Internal Control 37 Sufficient Competent Evidential Matter 37 Standards of Reporting 37 Statements on Auditing Standards (SASs) 37 The Auditors' Responsibility for Detecting Misstatements 39 The Auditors' Report 41 The Scope Paragraph of the Auditors' Report 43 The Opinion Paragraph of the Auditors' Report 43 Generally Accepted Accounting Principles (GAAP) 45 Other Types of Auditors' Reports 45 The Attestation Standards 47 Expansions of the Attest Function 47 Quality Control in CPA Firms 48 Division for CPA Firms 49
	Division for Oth Linns 1)

The Public Oversight Board 51	Analysis of Acts Discreditable 119
Peer Reviews 51	Rule 502—Advertising and Other Forms of
International Accounting and Auditing	Solicitation 120
Standards 51	Analysis of Advertising and Other Forms of Solicitation 120
3 AUDITORS' REPORTS 62	Rule 503—Commissions and Referral Fees 120
Financial Statements 63	Analysis of Commissions and Referral Fees 121
Financial Statement Disclosures 64	Rule 505—Form of Organization and Name 121
Comparative Financial Statements 64	Analysis of Form of Organization and Name 121
The Auditors' Standard Report 65	The CPA as Tax Adviser—Ethical Problems 122
Expression of an Opinion 66	Enforcement of Professional Ethics 123
The Unqualified Opinion 67	Ethics for Internal Auditors 123
Qualified Opinions 72	Edites for internal Additors 125
Adverse Opinions 76	5 LEGAL LIABILITY OF AUDITORS 134
Disclaimer of Opinion 77	Unique Vulnerability of Accountants to
Summary of Auditors' Reports 79	Lawsuits 135
Two or More Report Modifications 79	Definition of Terms 136
Different Opinions on Different Statements 81	Litigation Placed in Perspective 137
Reporting on Comparative Financial	Auditors' Liability to Their Clients under
Statements 81	Common Law 138
Reports to the SEC 82	Lawsuits by Clients 138
	Auditors' Common-Law Liability to Third Parties 139
4 PROFESSIONAL ETHICS 98	Ultramares Approach 139
The Nature of Ethics 99	Restatement of Torts Approach 140
What Are Ethical Dilemmas? 99	Rosenblum Approach 141
A Framework for Ethical Decisions 99	Joint and Several Liability 141
Making Ethical Decisions—A Professional	Liability to Third Parties under Statutory Law 142
Example 100	Securities Act of 1933 142
The Need for Professional Ethics 103	Securities Exchange Act of 1934 144
Professional Ethics in Public Accounting 104	Comparison of the 1933 and 1934 Acts 147
The AICPA Code of Professional Conduct 105	The Racketeer Influenced and Corrupt Organizations
Rule 101—Independence 108	Act 147
Analysis of Independence 109	Auditors' Civil Liability: A Summary 147
Rule 102—Integrity and Objectivity 114	Auditors' Criminal Liability under the Securities
Analysis of Integrity and Objectivity 114	Acts 149
Rule 201—General Standards 115	The SEC's Regulation of Accountants 150
Analysis of General Standards 115	Accountants' Liability for Accounting and Review
Rule 202—Compliance with Standards 115	Services 150
Analysis of Compliance with Standards 115	The CPA's Posture in the Age of Litigation 152
Rule 203—Accounting Principles 116	
Analysis of Accounting Principles 117	PART 2
Rule 301—Confidential Client Information 117	The Design of Audits 165
Analysis of Confidential Client Information 117	
Rule 302—Contingent Fees 118	6 AUDIT EVIDENCE 166
Analysis of Contingent Fees 119	The Relationship of Audit Risk to Evidence 167
Rule 501—Acts Discreditable 119	Financial Statement Assertions 167

Contents xv

Audit Risk at the Assertion Level 168	The Audit Trail 232
Audit Risk Illustrated 169	Organization of the Audit Program 234
Measuring Audit Risk 169	Objectives of Audit Programs 237
Audit Evidence 171	General Objectives of Audit Programs for Asset
Types of Evidence 172	Accounts 237
Audit Procedures 179	Substantiation of Account Balances 238
The Nature of Audit Procedures 179	Existence of Assets 238
Timing of Audit Procedures 179	Rights to the Assets 238
Extent of Audit Procedures 179	Establishing Completeness 239
The Cost of Audit Procedures 181	Valuation of Assets 240
Analytical Procedures 181	Clerical Accuracy of Records 240
Developing an Expectation 182	Financial Statement Presentation and
Timing of Analytical Procedures 185	Disclosure 240
Extent of Analytical Procedures 186	
Evidence on Accounting Estimates 187	An Illustration of Audit Program Design 240
Evidence on Related-Party Transactions 188	Audit Process 242
Documentation 189	Timing of Audit Work 244
Functions of Working Papers 189	Illustrative Audit Case 245
Confidential Nature of Working Papers 191	8 INTERNAL CONTROL 268
Ownership of Audit Working Papers 191	The Meaning of Internal Control 269
Working Papers and Auditors' Liability 191	The Foreign Corrupt Practices Act of 1977 271
Types of Working Papers 192	Means of Achieving Internal Control 271
Organization of Working Papers 195	The Control Environment 271
Guidelines for Preparation of Working Papers 196	
Computer-Generated Working Papers 198	Integrity and Ethical Values 272
The Review of Audit Working Papers 198	Commitment to Competence 272
The Review of Audii working Eupers 190	Board of Directors or Audit Committee 272
7 PLANNING THE AUDIT: DESIGNING AUDIT	Management Philosophy and Operating Style 272
PROGRAMS 214	Organizational Structure 273
Client Acceptance 215	Assignment of Authority and Responsibility 275
Communication with Predecessor Auditors 216	Human Resource Policies and Procedures 275
Other Communications 217	Risk Assessment 276
Other Considerations in Accepting an Audit	The Accounting Information and Communication
Client 217	System 277
Obtaining the Engagement 217	Control Activities 277
Audit Committees 218	Performance Reviews 278
Fee Arrangements 218	Information Processing 278
Engagement Letters 219	Physical Controls 279
Audit Planning 219	Segregation of Duties 280
Obtaining an Understanding of the Client's	Monitoring 281
Business 219	The Internal Audit Function 281
Developing an Overall Audit Strategy 222	Limitations of Internal Control 281
Audit Plans 230	The Auditors' Consideration of Internal Control 282
Time Budgets for Audit Engagements 231	Obtaining an Understanding of Internal Control to
Planning a Recurring Engagement 231	Plan the Audit 282
Designing Audit Programs 232	Assess Control Risk 288

Decision Aids for Audit Program Modification 294	Types of Statistical Sampling Plans 358
Consideration of the Work of Internal Auditors 294	Allowance for Sampling Risk (Precision) 359
Communication of Control Related Matters 296	Sample Size 359
Internal Control in the Small Company 298	Audit Sampling for Tests of Controls 360
	Sampling Risk for Tests of Controls 360
DADE 2	Attributes Sampling 361
PART 3	Determine the Objective of the Test 362
Technology and Sampling Approaches 311	Define the Attributes and "Deviation"
9 CONSIDERATION OF INTERNAL CONTROL IN A	Conditions 362
COMPUTER ENVIRONMENT 312	Define the Population 362
Nature of Computer Systems 313	Specify the Risk of Assessing Control Risk Too Low and
Characteristics of Various Types of Computer	the Tolerable Deviation Rate 363
Systems 314	Estimate the Expected Population Deviation
Impact of Computers on the Audit Trail 317	Rate 364
Internal Control in a Computer Environment 318	Determine the Sample Size 364
Organizational Structure of the Information	Select the Sample 367
System Function 318	Test the Sample Items 367
Computer-Centered Fraud 321	Evaluate the Sample Results 367
Internal Auditing in a Computer	Document the Sampling Procedure 370
Environment 323	Detailed Illustration of Attributes Sampling 370
Control Activities in a Computer System 323	Other Statistical Attributes Sampling
General Control Activities 323	Approaches 372
Application Control Activities 327	Nonstatistical Attributes Sampling 374
Manual Follow-Up Activities 328	Audit Sampling for Substantive Tests 375
User Control Activities 328	Sampling Risk for Substantive Tests 375
Control in Microcomputer Systems 328	Statistical Sampling for Substantive Tests 376
The Auditors' Consideration of Internal Control in a	Determine the Objective of the Test 376
Computer Environment 329	Define the Population and Sampling Unit 376
Obtaining an Understanding of Computerized	Choose an Audit Sampling Technique 377
Internal Control 329	Determine the Sample Size 377
Documenting Computerized Internal Control 329	Select the Sample 380
Assessing Control Risk—Testing Computer	Test the Sample Items 380
Controls 332	Evaluate the Sample Results 381
Substantive Testing with Computers 337	Document the Sampling Procedure 381
Using Audit Software: An Illustration 338	11 AUDIT SAMPLING: APPLICATIONS FOR SUBSTANTIVE
Computer Service Centers and Outsourced Computer	TESTING 391
Processing 339	
10 AUDIT SAMPLING: CONCEPTS AND	Module A—Classical Variables Sampling 392
TECHNIQUES 351	Mean-per-Unit Estimation 392
Comparison of Statistical and Nonstatistical	Controlling Sampling Risk 394 Determination of Sample Size 395
Sampling 352	
Selecting a Random Sample 353	***
Other Methods of Sample Selection 356	Illustration of Mean-per-Unit Estimation 396 Ratio and Difference Estimation 400
Stratification 357	Illustration of Ratio and Difference Estimation 400

Contents xvii

Module B—Probability-Proportional-to-Size (PPS)	Inspect Notes Receivable 479
Sampling 405	Confirm Receivables 481
Controlling Sampling Risk 406	Review Sales Cutoff 486
Determination of Sample Size 406	Perform Analytical Procedures 487
Method of Sample Selection 407	Verify Interest on Notes Receivable 489
Evaluation of Sample Results 408	Evaluate the Accounting for Revenue
Illustration of PPS Sampling 408	Recognition 490
Considerations in Using PPS Sampling 412	Evaluate Allowance for Uncollectible Accounts 491
Module C—Nonstatistical Sampling for Substantive	Investigate Pledged Receivables 492
Tests 416	Investigate Receivables from Related Parties 492
Determination of Sample Size 416	Evaluate Disclosures 493
Evaluating of Sample Results 416	Interim Audit Work on Receivables and Sales 493
Illustration of Nonstatistical Sampling 418	Audit Working Papers for Receivables and
interview of the content configuration of the content content configuration of the content con	Sales 494
	Designing Substantive Tests of Cash 494
PART 4	Objectives for Substantive Tests of Cash 495
Testing Cycle Controls and Performing	How Much Audit Time for Cash? 496
Substantive Tests 425	Substantive Tests for Cash 497
12 REVENUE CYCLE—OBTAINING AN UNDERSTANDING	Obtain Analyses of Cash Accounts 497
	Confirm Cash Accounts 498
AND TESTING CONTROLS 426	Analyze Reconciliations 498
The Nature of the Revenue Cycle 427	
Internal Control over Sales 427	
Internal Control over Cash Receipts 433	AND THE PROPERTY OF THE PROPER
An Overview of the Revenue Cycle 437	Verify Cash Cutoff 503
The Auditors' Consideration of Internal Control 440	Analyze Bank Transfers 503
Obtain an Understanding of Internal Control over the	Investigate Related Party Transactions 505 Evaluate Disclosures 505
Revenue Cycle 440	
Document the Understanding of the Revenue	
Cycle 441	Audit Working Papers for Cash 505  Illustrative Audit Case 506
The System Walk-Through 441	Illustrative Audit Case 506
Consider Potential Misstatements of Revenue Cycle	14 AUDITING THE ACQUISITION CYCLE 524
Accounts 442	The Nature of the Acquisition Cycle 525
Test Controls and Assess Control Risk for Revenue Cycle	Internal Control over Purchases 525
Accounts 442	Internal Control over Cash Disbursements 531
Reassess Control Risk for Revenue Cycle	The Auditors' Consideration of Internal Control 532
Accounts 450	Obtain an Understanding of Internal Control over the
Illustrative Audit Case 452	Acquisition Cycle 532
13 REVENUE CYCLE—SUBSTANTIVE TESTS 476	Document the Understanding of the Acquisition
Designing Substantive Tests of Receivables and Sales 477	Cycle 533
Objectives for Substantive Tests of Receivables and	Consider Potential Misstatements of Acquisition Cycle
Sales 477	Accounts 536
Substantive Tests of Receivables and Sales 478	Test Controls and Assess Control Risk 536
Obtain Aged Schedule of Accounts Receivable 479	Reassess Control Risk for Acquisition Cycle
Obtain Analysis of Notes Receivable 479	Accounts 539