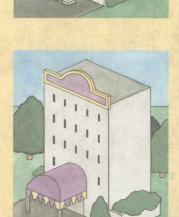
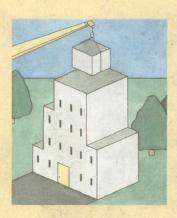
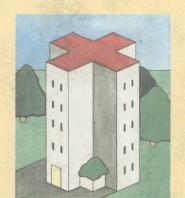


# A Survey of accounting







Richard G. Schroeder Charles P. Zlatkovich

# **Survey of Accounting**

Richard G. Schroeder, DBA, CPA
Charles P. Zlatkovich, Ph.D.
Both of University of Texas at El Paso



Homewood, IL 60430 Boston, MA 02116

#### Cover Illustrations: Jeanne Marie Regan

#### © RICHARD D. IRWIN, INC., 1991

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.

Sponsoring editor: Mike Reynolds

Developmental editor: Lynnelle Morgenthaler

Project editor: Rita McMullen Production manager: Diane Palmer Designer: Robyn B. Loughran

Artist: Alice B. Thiede

Compositor: Weimer Typesetting Co., Inc.

Typeface: 10/12 Palatino

Printer: R. R. Donnelley & Sons Company

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

Schroeder. Richard G.

Survey of Accounting / Richard G. Schroeder, Charles P. Zlatkovich.

p. cm.

Includes index.

ISBN 0-256-07007-5

1. Accounting. I. Zlatkovich, Charles P. II. Title.

HF5635.S375 1991

657-dc20

90-4822

## Preface

All professionals and business managers require a basic knowledge of accounting. During the past several years, many colleges and universities have attempted to provide nonbusiness majors with an introductory, one-semester accounting course, typically titled Survey of Accounting, that satisfies these students' need to understand the accounting process. However, the supply of texts available for these courses is limited, and most of the available texts are simply watered-down versions of previously published accounting principles texts. Because these texts are not specifically suited to the needs of nonbusiness majors, students often rapidly lose interest in the subject matter. This text is specifically designed to meet the needs of nonbusiness majors.

#### **FOCUS**

Because many of the students enrolled in Survey of Accounting courses are or will be self-employed or work in small, unincorporated businesses, this text, in the early chapters, emphasizes accounting for sole proprietorships. Later, it introduces accounting for corporations and partnerships, and finally, it discusses some of the managerial accounting topics most useful to the individuals served by this course.

The text is divided into four sections. Section I introduces the accounting cycle as well as accounting for service and merchandising companies. Section II presents the reporting and measurement issues associated with assets, liabilities, and equity. Section III reviews special reporting issues including financial statement analysis, international accounting, accounting for changing prices, and income taxation. Finally, Section IV presents managerial accounting and introduces such topics as planning and controlling, cost behavior analysis, product costing, budgeting, and standard costing.

#### **FEATURES**

We have supplied this text with a wealth of pedagogical features to facilitate student learning and retention.

- Learning Objectives are outlines at the beginning of the chapter. Later, each learning objective is highlighted in the margin at the point it is discussed in the chapter.
- The **Practical Insight**, a relevant excerpt from the financial press, piques student interest in the topic at hand.
- **Key Terms** are supplied at the end of each chapter for review purposes.
- A **Demonstration Problem** summarizes the major topics covered in each chapter and illustrates key concepts.
- Questions summarize the chapter contents: students who thoroughly understand the issues addressed in the chapter should be able to answer each and every one.
- Exercises review each of the major topics in the chapter. Since each exercise covers *only* one topic, the instructor can use the exercises to illustrate chapter topics without confounding the presentation with multiple issues.
- **Problems** review the more complex issues covered in the chapter, frequently addressing more than one issue in a single problem.
- A Comprehensive Problem functions as a capstone for the problem material in each chapter. This problem deals with several chapter topics simultaneously, showing the interaction of various concepts.
- The **Decision Case** centers on an issue that may be encountered by Survey students in their future careers.

In addition to these features, we offer a **Glossary** at the end of the text. With it, students are enabled to easily access definitions of terms which were defined in earlier chapters. By eliminating this sort of endless page turning, we hope students will spend their extra time studying! Once the course is over, this feature turns the book into a useful reference tool.

Finally, we have incorporated a feature never before offered in a Survey of Accounting text: **Review Cases** specifically geared to some of the fields your Survey students most commonly enter.

Legal Review Case 1, summarizing Chapters 1–4, illustrates the accounting cycle for an attorney. The students are asked to assist in developing a suitable accounting systems for the practice.

Hotel Review Case 2, summarizing Chapters 5–8, in-Management volves some reporting and measurement issues for a hotel and casino under restoration. Preface vii

Engineering Review Case 3, summarizing Chapters 9-12, in-

troduces students to an engineering partnership about to decide whether they should accept the

terms of a new project.

Health Review Case 4, summarizing Chapters 13–18, Administration calls for managerial accounting knowledge to as-

calls for managerial accounting knowledge to assist a nonprofit health safety organization in

their search for appropriate equipment.

We have developed all of these pedagogical features with the needs of Survey of Accounting students in mind. Further, we have strived to create an easy-to-teach format to assist both instructors as well as students in the educational process.

#### **ACKNOWLEDGMENTS**

This project would not have been possible without the help and cooperation of many individuals. We are especially indebted to the following reviewers who provided many helpful comments and suggestions:

David Dunsdon Oregon State University
Joseph P. Fox Marquette University

Betty S. Harper Middle Tennessee State University

Origen J. James Georgia Southern University
Clair W. Janes San Jose State University
Loretta Kilgore Spokane Community College
Richard A. Lamb University of New Hampshire
Patsy H. Lund Lakewood Community College

James Sisson Oregon State University

Sheldon Smith

David Wiest University of North Carolina-Chapel Hill

A special thanks is also due to the individuals at the University of Texas at El Paso who assisted in the development of this text—especially Sylvia De La Cruz, Guadalupe Talavera, Viola Pike, and Cheryl Baldridge.

The staff at Richard D. Irwin were particularly helpful. We thank John Black (our original editor), Lew Gossage, Mike Reynolds, and Lynelle Morgenthaler.

Finally, we wish to thank our wives, Laura Schroeder and Sandra Zlatkovich, for their patience and understanding over the course of this project.

Richard G. Schroeder Charles P. Zlatkovich

## **Contents**

	PART I THE ACCOUNTING CYCLE 1		Financial Accounting Standards Board (FASB) 18 Securities and Exchange Commission (SEC)
1	Fundamental Accounting Concepts 2		18
	The Function of Accounting 3		Internal Revenue Service (IRS) 19
	Accounting Measurement and Concepts		The Accounting Profession 19
	4		Public Accounting 19
	Business Entity 4		Private Accounting 20
	Unit of Measure 5		Practical Insight 21
	Historical Cost 5		Government Accounting 20
	The Three Forms of Business Organization 5	2	Processing Accounting Information 35
	Sole Proprietorships 5		
	Partnerships 6		The Need for Accurate Accounting Records 36
	Corporations 6		
	The Accounting Equation 7 Assets 7		Practical Insight 37 The Association Decision Making Information
	Liabilities 7		The Accounting Decision-Making Information System 37
	Owner's Equity 7		Accounts 38
	Business Transactions 9		Debits and Credits 38
	Owner's Original Contribution 9		Journals 41
	Prepayment of Rent 10		The Charts of Accounts 43
	Acquisition of Supplies on Account 10		Posting to the Accounts 44
	Acquisition of Office Equipment by Paying Cash and Issuing a Note 11		Journalizing and Posting—An Illustration 45 The Trial Balance 49
	Payment of an Account Payable 11 Receipt of Fees 11 Payment of Expenses 12	3	Completion of the Accounting Cycle
	Receipt of Cash for Future Services 13		The Cash and Accrual Basis of Accounting
	Billing Clients for Services Performed 13		70
	Collection of Accounts Receivable 14		Practical Insight 71
	Payments of Expenses 14		Accounting Cycle Summarized 70
	Withdrawals by the Owners 14		The Worksheet 72
	Financial Statements 16		Adjusting Entries 74
	Authoritative Bodies Influencing Accounting Practice 17		Adjusted Trial Balance Columns 79 The Income Statement and Balance Sheet
	The American Institute of Certified Public		Columns 80
	Accountants (AICPA) 18		Preparation of Financial Statements 82

Contents

x

Income Statement 82 Statement of Owner's Capital 83	Reporting and Measurement Issue for Cash 174
Balance Sheet 83	Temporary Investments 176
Closing Entries 85 The Classified Balance Sheet 87	Reporting and Measurement Issues for Temporary Investments 177
Current Assets 88 Property, Plant, and Equipment 88 Long-Term Investments 88 Intangibles 88 Current Liabilities 88 Long-Term Debt 88 Owner's Equity 89  Accounting for Merchandising Operations 117	Accounting for Initial Cost and Periodic Revenues 177 Accounting for Sales of Temporary Investments 177 Accounting for Changes in Value 178 Receivables 179 Accounts Receivable 179 Reporting and Measurement Issues for Accounts Receivable 179
-	Practical Insight 180
The Nature of Merchandising Operations 118	Matching Bad Debt Expenses with Revenues 181
Merchandising Account Relationships 118	Recording Bad Debts 181
Periodic and Perpetual Inventory Systems 123	Methods of Estimating the Amount of Bad Debt Expense 182 Writing Off an Uncollectible Account 185
Transaction Recording in a Periodic Inventory System 124  Transaction Recording in a Perpetual Inventory System 127  Additional Merchandising Accounts 130  Inventory Cost Flow Assumptions 133  FIFO Cost Flow 136  LIFO Cost Flow 137  Average Cost Flow 138  Lower of Cost or Market 140  Inventory Estimation 141  Practical Insight 142  Gross Profit Method 143  Retail Method 145	Credit Cards 186 Reporting and Measurement Issues for Credit Card Sales 186 Bank Credit Cards 186 Nonbank Credit Cards 187 Notes Receivable 187 Computing Interest 187 Reporting and Measurement Issues for Notes Receivable 188 Accounting for Notes Receivable 188 Discounting a Note Receivable 189 Reporting and Measurement Issues for Notes Receivable Discounted 189
12000	Accounting for Notes Receivable Discounted 189
1	

# PART II REPORTING AND MEASUREMENT ISSUES 167

#### 5 Liquid Current Assets 168

The Nature of and Control of Cash 169
Control of Receipts 169
Control of Payments 170
Petty Cash 170
Bank Reconciliation 172

### 6 Long-Term Assets Used in the Business 211

The Nature of Property, Plant, and Equipment 212
Reporting and Measurement Issues for Property, Plant, and Equipment 212
Cost Determination 212
Depreciation 215
Practical Insight 216
Subsequent Expenditures 226

Contents xi

Disposal of Property, Plant, and Equipment 227 Trade-In of Assets 229	Income Tax Reporting 278 Earnings per Share 279 Prior Period Adjustments 280
Accounting for Natural Resources 235 Reporting and Measurement Issues for Natural Resources 235 Cost Determination 235 Recording Depletion 236	8 Liabilities 296 Current Liabilities 297 The Nature of Bonds 298 Bond Features 298
Recording Sales and Cost of Goods Sold 237 Long-Term Investments 239 Reporting and Measurement Issues for Long-Term Investments 239 Intangibles 239 Reporting and Measurement Issues for Intangibles 240	Practical Insight 300 The Concept of Present Value 301 The Present Value of a Single Amount 302 Present Value of an Annuity 303 Issuing Bonds 304 Reporting and Measurement Issues Associated with Selling Bonds 305
7 Accounting for Corporations 257	Bonds Sold at Face Value 305 Bonds Sold between Interest Payment Dates
Characteristics of the Corporate Form of Business Organization 258 Forming a Corporation 258 Advantages and Disadvantages of Corporations 259 The Corporate Capital Structure 260 Capital Stock 260 Reporting and Measurement Issues for Capital Stock 261 Accounting for Capital Stock 262 Issuance of Stated Value and No-Par Value Stock 264 Stock Subscriptions 264 Reporting and Measurement Issues for Stock Subscriptions 264 Practical Insight 265	Determining Bond Issue Prices 307 Recording Bonds Sold at Discounts and Premiums 309 Reporting and Measurement Issues Associated with Amortizing Bond Discounts and Premiums 310 Amortizing Bond Discounts 311 Amortizing Bond Premiums 313 Retirement of Bonds 315 Reporting and Measurement Issues Associated with the Early Retirement of Bonds 316 Convertible Bonds 317 Reporting and Measurement Issues Associated with Convertible Bonds 318 Mortgages Payable 318
Accounting for Stock Subscriptions 266 Retained Earnings 267 Dividends 269 Reporting and Measurement Issues for Dividends 270	Reporting and Measurement Issues Associated with Mortgages Payable 318  Leases 319
Accounting for Cash Dividends 270 Accounting for Stock Dividends 272 Stock Splits 275 Treasury Stock 275 Reporting and Measurement Issues for	PART III SPECIAL REPORTING ISSUES 339

**Treasury Stock** 

Accounting for Treasury Stock

**Special Reporting Considerations** 

276

278

9 Accounting for Partnerships

Partnerships Characteristics

342

Practical Insight

340

341

xii Contents

	Establishment and Operation of a Partnership 343  Distribution of Partnership Income and Losses 346  Accounting for Changes in Partnership Membership 351  Purchase of a Partnership Interest from an Existing Partner 352		Vertical Analysis 434 Ratio Analysis 436 Liquidity Ratios 436 Profitability Ratios 440 Solvency Ratios 442 Practical Insight 445 Appendix—Portfolio Theory 446
	Investment in the Partnership by a New Partner 352	12	Special Topics Affecting Financial Reporting 474
	Accounting for the Liquidation of a Partnership 354		Factors Influencing Financial Reporting 475
	Partnership Capital Balances Sufficient to Absorb the Loss on the Sale of the Assets 355 Capital Balance of One or More Partners Not Sufficient to Absorb the Loss on the Sale of the Assets 357		International Accounting 475 Accounting for Changing Prices 480 The Impact of Inflation—An Example 481 Adjusting Financial Statements to Reflect Changes in the Price Level 482
10	Statement of Cash Flows 376		The Importance of Income Taxes 486
	Evolution and Purposes of the Statement of Cash Flows 377		The Federal Income Tax System 486 Fundamentals of Federal Income Taxation of Individuals 487
	Classification of Cash Flows 377		Filing Status of Individual Taxpayers 488
	Operating Activities 377  Methods of Presentation of the Statement		Gross Income 488
	of Cash Flows 379		Adjusted Gross Income 490
	An Illustration of the Statement of Cash		Deductions and Exemptions 490
	Flows 380		Taxable Income 491 Tax Credits 492
	A Continuing Illustration 386		Alternative Minimum Tax 492
	Relationships between the Statement of Cash Flows and the Balance Sheet Accounts 391		Fundamentals of Income Tax for Unincorporated Businesses 492
	Accounts 391 Statement of Cash Flow Preparation Using the Worksheet Approach 393		Quarterly Tax Payments and Withholding 493
	Practical Insight 399		Fundamentals of Income Taxation of Corporations 493
11	The Conceptual Framework of Account-		Voluntary Compliance and Audits 496
	ing and Financial Statement Analysis 423		Practical Insight 497
	The Conceptual Framework of Accounting		PART IV
	423 Objectives 424		MANAGERIAL ACCOUNTING
	The Qualitative Characteristics of Accounting Information 425		517
	Elements of Financial Statements 428	13	An Introduction to Managerial
	Concepts 429		Accounting 518
	Using Financial Statements 429 Horizontal Analysis 430		Managerial versus Financial Accounting 519
	Trend Analysis 433		Planning 520

Contents xiii

	Controlling 521		Fixed Costs 590
	Manufacturing Accounting 522		Variable Costs 592
	Cost Classifications 523		Mixed Costs 592
	Manufacturing Costs 524		Step Costs 597
	Prime Cost and Conversion Cost 528		The Contribution Income Statement 598
	Work-in-Process 528		Cost-Volume-Profit Analysis 600
	Unit Cost 530		Assumptions Underlying the Use of the CVP
	Finished Goods 530		Model 601
	Cost of Goods Sold 531		Approaches to CVP Analysis 601
	Statement of Cost of Goods Manufactured and		Managerial Uses of Cost-Volume-Profit
	Sold 531		Analysis 606
	Nonmanufacturing Costs 532		Target Profit 607
	Income Statement 533		Margin of Safety 607
	Product and Period Costs 533		Change in Sales Price 608
	Variable and Fixed Costs 534		Change in Variable Costs 609
	Other Cost Concepts 535		Change in Fixed Costs 610
	Direct and Indirect Costs 536		Practical Insight 612
	Controllable and Noncontrollable Costs 536	16	The Planning Function—Budgeting
	Differential Costs 536		632
	Opportunity Costs 537	-	Advantages of Budgeting 633
	Sunk Costs 538		The Budget Period 633
	Practical Insight 539		Human Factors in Budgeting 633
14	Accounting for Costs 554		Practical Insight 636
	Product Costing Systems 555		The Budget Committee 634
	Job Order Costing 556		Components of the Master Budget 634
	Overhead Application 556		Budget Interrelationships 635
	Job Order Costing Inventories, Accounts,		•
	and Documents 557		8
	Job Order Costing Illustrated 560		Sales 639 Cash Collections 640
	A Job Started, Completed, and Sold 560		Production 641
	A Job Started and Completed 561		Raw Material Purchases 641
	A Job Started but not Completed 562		Cash Disbursements for Purchases 643
	Actual and Applied Overhead 563		Direct Labor 643
	A Schedule of Cost of Goods Sold 564		Factory Overhead 644
	Process Costing 565		Selling and Administrative Expenses 645
	Process Costing Inventories, Accounts, and		Cash 646
	Documents 565		Financial Statements 648
	Practical Insight 566	17	Flexible Budgeting and Standard
	Materials Costs and Conversion Costs 567		Costing 674
	Actual Units and Equivalent Units 567		<u> </u>
	Assigning Costs to Units 568		Flexible Budgeting 675
	Process Costing Illustrated 569		Analyzing Results 676
	Process Costing with Multiple		Standard Costing 679
	Departments 571		Standard Setting—An Example 680
			Establishing Standards 681
15	Cost Behavior Analysis 589		Illustration of the Computation of Standard
	Cost Behavior Patterns 590		Costs and Variances 682

Classes of Standards 682
Trading Variances 690
Recording Variances in the Accounting
Records 691
Practical Insight 692

#### 18 Capital Budgeting and Long-Range Planning 715

The Nature of Capital Expenditure
Decisions 716
The Capital Budgeting Process 716
Capital Budgeting and the Time Value of
Money 717

The Capital Budgeting Process Illustrated 718 Payback Period 719 Accounting Rate of Return 720 Net Present Value Method 721 Profitability Index Internal Rate of Return Method 725 Depreciation and Taxes 726 Practical Insight Universal Applicability 729

Glossary 749 Index 776

### Review Cases

PART	T
FANI	- 1

Review Case 1

Chapters 1-4

#### Alex Lindoski, Attorney at Law

Students are required to follow a legal practice through an accounting cycle and to develop an appropriate accounting system.

#### PART II

Review Case 2

Chapters 5-8

#### The Del Norte Hotel and Casino

Students evaluate the restoration of a historical hotel and casino and consider its investment potential.

#### PART III

Review Case 3

Chapters 9-12

#### **Hudson and Pensock Engineers**

Students advise an engineering partnership about the viability of a new project with unusual terms of payment.

#### PART IV

Review Case 4

Chapters 13-18

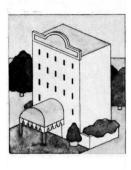
#### Central States Regional Health Laboratories

Students analyze the merits of different types of equipment for a nonprofit water testing laboratory.

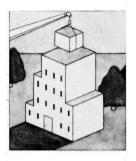


#### PART I

# The Accounting Cycle



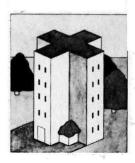
Chapter 1
Fundamental Accounting Concepts



**Chapter 2** Processing Accounting Information

**Chapter 3**Completion of the Accounting Cycle

Chapter 4
Accounting for Merchandising
Operations





# Fundamental Accounting Concepts

This chapter begins by defining the function of accounting. Next, it presents some fundamental concepts and describes the three forms of business organizations. It then introduces the accounting equation and illustrates the impact of business transactions on the accounting equation and on three financial statements. Finally, it discusses the authoritative bodies affecting accounting practice and the role of the accountant in the various sectors of accounting practice.

# At the conclusion of this chapter you should be able to:

- 1. Define the function of accounting.
- Describe three fundamental accounting concepts: business entity, monetary unit, and historical cost.
- 3. Delineate the three forms of business organization.
- 4. Explain the accounting equation and its elements.
- 5. Describe the impact of business transactions on the accounting equation.
- Identify the functions of three major financial statements.
- Identify the authoritative bodies influencing accounting practice.
- 8. Describe the role of accountants employed in the three sectors of the accounting profession.

#### THE FUNCTION OF ACCOUNTING

1. Define the function of accounting.

Accounting provides information about the economic activities of a business that is useful in making decisions. The economic activities of a business include acquiring resources, selling products and services, and paying wages to employees. All information about the economic activities of businesses must be quantified, processed, and communicated by the accounting system in order to be useful. Consequently, accounting can be viewed as a service activity that provides information to decision makers. This process is termed the accounting decision-making information system and is illustrated in Exhibit 1–1 below.

As Exhibit 1–1 illustrates, accounting links decision makers with the economic activities of a business. This text is designed to assist future users of accounting information to (1) understand the quantification, processing, and communication of accounting information and (2) make sound business decisions.

The decision makers or users of accounting information are classified as external users and internal users. *External users* include current or potential investors (owners and creditors), employees, taxing authorities, financial analysts, brokers, and labor unions. *Internal users* are the managers who work within the business.

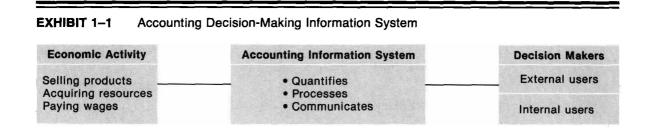
Investors and creditors are the external users with the closest relationship to the business. They make three basic decisions based on accounting information:

Buy A potential investor decides to invest in the business. A creditor decides to extend credit to a business.

Hold A current investor decides to retain an investment in the business.

A creditor decides to continue a credit relationship with the business.

Sell A current investor decides to dispose of an investment in the business.



A creditor decides to discontinue a credit relationship with the business.

Since these decisions are constantly being reviewed by external users, the timely quantification, processing, and communication of information by the accounting decision-making information system is essential.

In making decisions, external users generally rely on the financial statements published by the business. These financial statements (discussed later in the chapter) are the end product of the quantification, processing, and communication process.

Internal users are responsible for the daily planning and control of operations. In performing their duties, internal users may require, in addition to the published financial statements, various other reports to be prepared from the company's accounting decision-making information system. Later in the text we will discuss some of these reports and the information they provide. For example,

- How does a production manager determine the cost of producing the company's product? (Chapter 14)
- How can a financial manager prepare a budget for the next accounting period? (Chapter 16)

#### ACCOUNTING MEASUREMENT AND CONCEPTS

2. Describe the three fundamental accounting concepts: business entity, monetary unit, and historical cost. The accounting decision-making information system is designed to provide information to users to help them make business decisions. These decisions can have a significant impact on and may cause the success or failure of a particular business. Consequently, it is necessary to have standards to guide accountants in the quantification, processing, and communication of economic activities. The standards for reporting to external users are termed *generally accepted accounting* principles (GAAP). Generally accepted accounting principles are defined as the methods and procedures used in the preparation of financial statements.

Several broad concepts are related to the selection of the specific principle to use in different situations. Among these concepts are business entity, unit of measure, and historical cost. Knowledge of these and other concepts introduced later in the text will assist in developing an understanding of the accounting process.

#### **Business Entity**

Business organizations are frequently referred to as accounting entities or business entities. A business entity is any business organization that exists as an economic unit. In accounting each business entity is con-