Fundamental Accounting Principles



John J. Wild

University of Wisconsin at Madison

Ken W. Shaw

University of Missouri at Columbia



Brief Contents

- 1 Accounting in Business 2
- 2 Analyzing and Recording Transactions 44
- 3 Adjusting Accounts for Financial Statements 84
- 4 Completing the Accounting Cycle 128
- 5 Accounting for Merchandising Operations 166
- 6 Inventories and Cost of Sales 214
- 7 Accounting Information Systems 258
- 8 Cash, Fraud, and Internal Control 290
- 9 Accounting for Receivables 326
- 10 Plant Assets, Natural Resources, and Intangibles 358
- 11 Current Liabilities and Payroll Accounting 396
- 12 Accounting for Partnerships 436
- 13 Accounting for Corporations 464
- **14** Long-Term Liabilities 500
- 15 Investments 536
- 16 Reporting the Statement of Cash Flows 568

- 17 Analysis of Financial Statements 612
- 18 Managerial Accounting Concepts and Principles 650
- 19 Job Order Costing 686
- 20 Process Costing 726
- 21 Cost-Volume-Profit Analysis 772
- 22 Master Budgets and Planning 814
- 23 Flexible Budgets and Standard Costs 864
- 24 Performance Measurement and Responsibility Accounting 912
- 25 Relevant Costing for Managerial Decisions 956
- 26 Capital Budgeting and Investment Analysis 990
- A Financial Statement Information A1
- B Time Value of Money B
- C Activity-Based Costing C
- D Lean Principles and Accounting D-1
- CA Chart of Accounts CA
- BR Brief Review BR-1



Contents

Preface iv

Accounting in Business 2

Importance of Accounting 3

Users of Accounting Information 4 Opportunities in Accounting 4

Fundamentals of Accounting 6

Ethics—A Key Concept 6 Generally Accepted Accounting Principles 7 Conceptual Framework 7

Business Transactions and Accounting 9

Accounting Equation 10 Transaction Analysis 11 Summary of Transactions 14

Communicating with Users 15

Income Statement 15 Statement of Owner's Equity 17 Balance Sheet 17 Statement of Cash Flows 17

Decision Analysis—Return on Assets 18 Appendix 1A Return and Risk 21 Appendix 1B Business Activities 22

2 Analyzing and Recording Transactions 44

Basis of Financial Statements 45

Source Documents 45 The "Account" Underlying Financial Statements 45 Ledger and Chart of Accounts 48

Double-Entry Accounting 49

Debits and Credits 49 Double-Entry System 49

Analyzing and Processing Transactions 51

Journalizing and Posting Transactions 51 Processing Transactions—An Example 52 Summarizing Transactions in a Ledger 57

Trial Balance 58

Preparing a Trial Balance 58 Financial Statements Prepared from Trial Balance 59 Decision Analysis—Debt Ratio 62

3 Adjusting Accounts for Financial Statements 84

Timing and Reporting 85

The Accounting Period 85 Accrual Basis versus Cash Basis 86 Recognizing Revenues and Expenses 86 Framework for Adjustments 87

Deferral of Expense 87

Prepaid Insurance 87 Supplies 88 Other Prepaid Expenses 89 Depreciation 89

Deferral of Revenue 91

Unearned Consulting Revenue 92

Accrued Expense 93

Accrued Salaries Expense 93 Accrued Interest Expense 94 Future Cash Payment of Accrued Expenses 94

Accrued Revenue 95

Accrued Services Revenue 96 Accrued Interest Revenue 96 Future Cash Receipt of Accrued Revenues 96 Links to Financial Statements 97

Trial Balance and Financial Statements 98

Adjusted Trial Balance 98 Preparing Financial Statements 99

Decision Analysis—Profit Margin 101 Appendix 3A Alternative Accounting for Prepayments 104

4 Completing the Accounting Cycle 128

Work Sheet as a Tool 129

Benefits of a Work Sheet (Spreadsheet) 129 Use of a Work Sheet 129 Work Sheet Applications and Analysis 130

Closing Process 133

Temporary and Permanent Accounts 134 Recording Closing Entries 134 Post-Closing Trial Balance 137

Accounting Cycle 137

Contents

Classified Balance Sheet 138

Classification Structure 138 Classification Categories 139

Decision Analysis—Current Ratio 141 Appendix 4A Reversing Entries 143

5 Accounting for Merchandising Operations 166

Merchandising Activities 167

Reporting Income for a Merchandiser 167 Reporting Inventory for a Merchandiser 168 Operating Cycle for a Merchandiser 168 Inventory Systems 168

Accounting for Merchandise Purchases 169

Purchases <u>without</u> Cash Discounts 169 Purchases <u>with</u> Cash Discounts 169 Purchases <u>with</u> Returns and Allowances 171 Purchases and Transportation Costs 172

Accounting for Merchandise Sales 174

Sales <u>without</u> Cash Discounts 174 Sales <u>with</u> Cash Discounts 175 Sales <u>with</u> Returns and Allowances 175

Adjusting and Closing for Merchandisers 177

Adjusting Entries for Merchandisers 177 Preparing Financial Statements 178 Closing Entries for Merchandisers 178 Summary of Merchandising Entries 179

More on Financial Statement Formats 177

Multiple-Step Income Statement 180 Single-Step Income Statement 181 Classified Balance Sheet 182

Decision Analysis—Acid-Test and Gross Margin Ratios 183 Appendix 5A Periodic Inventory System 187 Appendix 5B Adjusting Entries under New Revenue Recognition Rules 191 Appendix 5C Net Method for Inventory 192

Inventories and Cost of Sales 214

Inventory Basics 215

Determining Inventory Items 215 Determining Inventory Costs 216 Internal Controls and Taking a Physical Count 216

Inventory Costing under a Perpetual System 217

Inventory Cost Flow Assumptions 217 Inventory Costing Illustration 218 Specific Identification 218 First-In, First-Out 219 Last-In, First-Out 219 Weighted Average 220 Financial Statement Effects of Costing Methods 221 Tax Effects of Costing Methods 222

Valuing Inventory at LCM and the Effects of Inventory Errors 224

Lower of Cost or Market 224 Financial Statement Effects of Inventory Errors 225

Decision Analysis—Inventory Turnover and Days' Sales in Inventory 227 Appendix 6A Inventory Costing under a Periodic System 233 Appendix 6B Inventory Estimation Methods 238

7 Accounting Information Systems 258

System Principles 259

System Components 260

Special Journals and Subsidiary Ledgers 261

> Basics of Special Journals 261 Subsidiary Ledgers 261

Sales Journal 263

Cash Receipts Journal 265

Purchases Journal 267

Cash Payments (Disbursements) Journal 268 General Journal Transactions 269

Technology-Based Accounting Systems 270

Technology in Accounting 270 Data Processing in Accounting 270 Computer Networks in Accounting 270 Enterprise Resource Planning Software 271 Data Analytics and Data Visualization 271 Cloud Computing 271

Decision Analysis—Days' Payable Outstanding 271

8 Cash, Fraud, and Internal Control 290

Fraud and Internal Control 291

Purpose of Internal Control 291 Principles of Internal Control 292 Technology, Fraud, and Internal Control 293 Limitations of Internal Control 293

Control of Cash 294

Cash, Cash Equivalents, and Liquidity 294 Cash Management 295 Control of Cash Receipts 295 Control of Cash Payments 297 xix

Banking Activities as Controls 301

Basic Bank Services 301 Bank Statement 302 Bank Reconciliation 303

Decision Analysis—Days' Sales Uncollected 306 Appendix 8A Documentation and Verification 308

9 Accounting for Receivables 326

Valuing Accounts Receivable 327

Direct Write-Off Method 330

Allowance Method 331

Estimating Bad Debts 334

Percent of Sales Method 334 Percent of Receivables Method 334 Aging of Receivables Method 335

Notes Receivable 337

Computing Maturity and Interest 338 Recording Notes Receivable 339 Valuing and Settling Notes 339 Disposal of Receivables 341

Decision Analysis—Accounts Receivable Turnover 341

10 Plant Assets, Natural Resources, and Intangibles 358

SECTION 1—PLANT ASSETS 359

Cost Determination 360

Machinery and Equipment 360 Buildings 360 Land Improvements 360 Land 360 Lump-Sum Purchase 361

Depreciation 361

Factors in Computing Depreciation 361 Depreciation Methods 362 Partial-Year Depreciation 365 Change in Estimates 366 Reporting Depreciation 366

Additional Expenditures 367

Ordinary Repairs 368 Betterments and Extraordinary Repairs 368

Disposals of Plant Assets 368

Discarding Plant Assets 369 Selling Plant Assets 369

SECTION 2—NATURAL RESOURCES 371

Cost Determination and Depletion 371 Plant Assets Tied into Extracting 372

SECTION 3—INTANGIBLE ASSETS 373

Cost Determination and Amortization 373 Types of Intangibles 373

Decision Analysis—Total Asset Turnover 376 Appendix 10A Exchanging Plant Assets 379

11 Current Liabilities and Payroll Accounting 396

Known Liabilities 397

Characteristics of Liabilities 397 Examples of Known Liabilities 398 Accounts Payable 399 Sales Taxes Payable 399 Unearned Revenues 399 Short-Term Notes Payable 399

Payroll Liabilities 402

Employee Payroll and Deductions 402 Employer Payroll Taxes 403 Internal Control of Payroll 404 Multi-Period Known Liabilities 404

Estimated Liabilities 405

Health and Pension Benefits 405 Vacation Benefits 406 Bonus Plans 406 Warranty Liabilities 406 Multi-Period Estimated Liabilities 407

Contingent Liabilities 408

Accounting for Contingent Liabilities 408 Applying Rules of Contingent Liabilities 409 Uncertainties That Are Not Contingencies 409

Decision Analysis—Times Interest Earned Ratio 409 Appendix 11A Payroll Reports, Records, and Procedures 412 Appendix 11B Corporate Income Taxes 417

12 Accounting for Partnerships 436

Partnership Formation 437

Characteristics of Partnerships 437 Organizations with Partnership Characteristics 438 Choosing a Business Form 438 Accounting for Partnership Formation 438

Dividing Partnership Income or Loss 439

Partnership Financial Statements 441

Partner Admission 442

Purchase of Partnership Interest 442 Investing Assets in a Partnership 443

Partner Withdrawal 444

No Bonus 444 Bonus to Remaining Partners 445

Contents

Bonus to Withdrawing Partner 445 Death of a Partner 445

Liquidation of a Partnership 446

No Capital Deficiency 446 Capital Deficiency 448

Decision Analysis—Partner Return on Equity 449

13 Accounting for Corporations 464

Corporate Form of Organization 465

Corporate Advantages 465 Corporate Disadvantages 465 Corporate Organization and Management 466 Corporate Stockholders 466 Corporate Stock 467

Common Stock 468

Issuing Par Value Stock 468 Issuing No-Par Value Stock 469 Issuing Stated Value Stock 469 Issuing Stock for Noncash Assets 469

Dividends 471

Cash Dividends 470 Stock Dividends 471 Stock Splits 473 Financial Statement Effects of Dividends and Splits 473

Preferred Stock 474

Issuance of Preferred Stock 474 Dividend Preference of Preferred Stock 475 Reasons for Issuing Preferred Stock 475

Treasury Stock 477

Purchasing Treasury Stock 477 Reissuing Treasury Stock 477

Reporting of Equity 479

Statement of Retained Earnings 479 Statement of Stockholders' Equity 480

Decision Analysis—Earnings per Share, Price-Earnings Ratio, Dividend Yield, and Book Value per Share 480

14 Long-Term Liabilities 500

Basics of Bonds 501

Bond Financing 501 Bond Issuing 502 Bond Trading 502

Par Bonds 502

Discount Bonds 503

Bond Discount or Premium 503 Issuing Bonds at a Discount 504

Premium Bonds 506

Issuing Bonds at a Premium 506 Bond Retirement 508

Long-Term Notes Payable 510

Installment Notes 510 Mortgage Notes and Bonds 511

Decision Analysis—Debt Features and the Debt-to-Equity Ratio 512 Appendix 14A Bond Pricing 515 Appendix 14B Effective Interest Amortization 517 Appendix 14C Leases and Pensions 518

15 Investments 536

Basics of Investments 537

Purposes and Types of Investments 537 Classification and Reporting 538

Debt Investments 538

Debt Investments—Basics 538

Debt Investments—Trading 539

Debt Investments—Held-to-Maturity 540

Debt Investments—Available-for-Sale 541

Equity Investments 543

Equity Investments—Insignificant Influence, Under 20% 543

Equity Investments—Significant Influence, 20% to 50% 545

Equity Investments—Controlling Influence, More Than 50% 547

Accounting Summary for Debt and Equity Investments 548

Decision Analysis—Components of Return on Total Assets 549

16 Reporting the Statement of Cash Flows 568

Basics of Cash Flow Reporting 569

Purpose of the Statement of Cash Flows 569 Importance of Cash Flows 569 Measurement of Cash Flows 569 Classification of Cash Flows 570 Noncash Investing and Financing 571 Format of the Statement of Cash Flows 571 Preparing the Statement of Cash Flows 572

Cash Flows from Operating 573

0

Indirect and Direct Methods of Reporting 573 Applying the Indirect Method 573 Summary of Adjustments for Indirect Method 576

Cash Flows from Investing 577

Three-Step Analysis 577 Analyzing Noncurrent Assets 577

Cash Flows from Financing 579

Three-Step Analysis 579 Analyzing Noncurrent Liabilities 579 Analyzing Equity 580 Proving Cash Balances 580

Summary Using T-Accounts 582

Decision Analysis—Cash Flow Analysis 583 Appendix 16A Spreadsheet Preparation of the Statement of Cash Flows 586 Appendix 16B Direct Method of Reporting Operating Cash Flows 588

17 Analysis of Financial Statements 612

Basics of Analysis 613

Purpose of Analysis 613 Building Blocks of Analysis 613 Information for Analysis 614 Standards for Comparisons 614 Tools of Analysis 614

Horizontal Analysis 614

Comparative Statements 614 Trend Analysis 617

Vertical Analysis 618

Common-Size Statements 618 Common-Size Graphics 620

Ratio Analysis 622

Liquidity and Efficiency 622 Solvency 624 Profitability 625 Market Prospects 626 Summary of Ratios 627

Decision Analysis—Analysis Reporting 628 Appendix 17A Sustainable Income 631

18 Managerial Accounting Concepts and Principles 650

Managerial Accounting Basics 651

Purpose of Managerial Accounting 651 Nature of Managerial Accounting 652 Fraud and Ethics in Managerial Accounting 653 Career Paths 654

Managerial Cost Concepts 655

Types of Cost Classifications 655 Identification of Cost Classifications 657 Cost Concepts for Service Companies 657

Managerial Reporting 658

Manufacturing Costs 658 Nonmanufacturing Costs 658 Prime and Conversion Costs 659 Costs and the Balance Sheet 659 Costs and the Income Statement 659

Cost Flows and Cost of Goods Manufactured 662

Flow of Manufacturing Activities 662 Schedule of Cost of Goods Manufactured 663 Trends in Managerial Accounting 666

Decision Analysis—Raw Materials Inventory Turnover and Days' Sales in Raw Materials Inventory 668

19 Job Order Costing 686

Job Order Costing 687

Cost Accounting System 687 Job Order Production 687 Job Order vs. Process Operations 688 Production Activities in Job Order Costing 688 Cost Flows 689 Job Cost Sheet 689

Materials and Labor Cost 690

Materials Cost Flows and Documents 690 Labor Cost Flows and Documents 693

Overhead Cost 694

Set Predetermined Overhead Rate 695 Apply Estimated Overhead 695 Record Actual Overhead 697 Summary of Cost Flows 698 Using Job Cost Sheets for Managerial Decisions 699 Schedule of Cost of Goods Manufactured 700

Adjusting Overhead 701

Factory Overhead Account 701 Adjust Underapplied or Overapplied Overhead 701 Job Order Costing of Services 702

Decision Analysis—Pricing for Services 703

20 Process Costing 726

Process Operations 727

Organization of Process Operations 727 Comparing Process and Job Order Costing Systems 728 Equivalent Units of Production 729

Process Costing Illustration 730

Overview of GenX Company's Process Operation 730 Pre-Step: Collect Production and Cost Data 731 Step 1: Determine Physical Flow of Units 732 Step 2: Compute Equivalent Units of Production 732 Step 3: Compute Cost per Equivalent Unit 733 Step 4: Assign and Reconcile Costs 733 Process Cost Summary 735

•°

Accounting for Process Costing 736

Accounting for Materials Costs 737 Accounting for Labor Costs 738 Accounting for Factory Overhead 739 Accounting for Transfers 740 Trends in Process Operations 742

Decision Analysis—Hybrid Costing System 743 Appendix 20A FIFO Method of Process Costing 747

21 Cost-Volume-Profit Analysis 772

Identifying Cost Behavior 773

Fixed Costs 774 Variable Costs 774 Graphing Fixed <u>and</u> Variable Costs against Volume 774 Mixed Costs 774 Step-wise Costs 775 Curvilinear Costs 776

Measuring Cost Behavior 777

Scatter Diagram 777 High-Low Method 778 Regression 778 Comparing Cost Estimation Methods 778

Contribution Margin and Break-Even

Analysis 779

Contribution Margin and Its Measures 779 Break-Even Point 780 Cost-Volume-Profit Chart 782 Changes in Estimates 782

Applying Cost-Volume-Profit Analysis 783

Margin of Safety 783 Computing Income from Sales and Costs 784 Computing Sales for a Target Income 785 Evaluating Strategies 786 Sales Mix and Break-Even 787 Assumptions in Cost-Volume-Profit Analysis 789

Decision Analysis—Degree of Operating Leverage 790 Appendix 21A Using Excel for Cost Estimation 792 Appendix 21B Variable Costing and Performance Reporting 793 Appendix 21C Preparing a CVP Chart 796

22 Master Budgets and Planning 814

Budget Process and Administration 815

Budgeting Process 815 Benefits of Budgeting 816 Budgeting and Human Behavior 816 Budget Reporting and Timing 817 Master Budget Components 817

Operating Budgets 818

Sales Budget 818 Production Budget 818 Direct Materials Budget 820 Direct Labor Budget 821 Factory Overhead Budget 822 Selling Expense Budget 823 General and Administrative Expense Budget 824

Investing and Financing Budgets 825

Capital Expenditures Budget 825 Cash Budget 825

Budgeted Financial Statements 829

Budgeted Income Statement 829 Budgeted Balance Sheet 830 Using the Master Budget 830 Budgeting for Service Companies 830

Decision Analysis—Activity-Based Budgeting 831 Appendix 22A Merchandise Purchases Budget 839

23 Flexible Budgets and Standard Costs 864

Fixed and Flexible Budgets 865

Fixed Budget Reports 866 Budget Reports for Evaluation 867 Flexible Budget Reports 867

Standard Costing 871

Standard Costs 871 Setting Standard Costs 871 Cost Variance Analysis 872

Materials and Labor Variances 874

Materials Variances 874 Labor Variances 876

Overhead Standards and Variances 877

Flexible Overhead Budgets 877 Standard Overhead Rate 877 Computing Overhead Cost Variances 879 Standard Costing—Management Considerations 882

Decision Analysis—Sales Variances 883 Appendix 23A Expanded Overhead Variances and Standard Cost Accounting System 888

Contents

24 Performance Measurement and Responsibility Accounting 912

Responsibility Accounting 913

Performance Evaluation 913 Controllable versus Uncontrollable Costs 914 Responsibility Accounting for Cost Centers 914

Profit Centers 916

Direct and Indirect Expenses 916 Expense Allocations 917 Departmental Income Statements 918 Departmental Contribution to Overhead 921

Investment Centers 922

Return-on-Investment and Residual Income 922 Investment Center Profit Margin and Investment Turnover 924

Nonfinancial Performance Evaluation Measures 925

Balanced Scorecard 925 Transfer Pricing 927

Decision Analysis—Cash Conversion Cycle 928 Appendix 24A Cost Allocations 931 Appendix 24B Transfer Pricing 933 Appendix 24C Joint Costs and Their Allocation 934

25 Relevant Costing for Managerial Decisions 956

Decisions and Information 957

Decision Making 957 Relevant Costs and Benefits 958

Production Decisions 958

Make or Buy 959 Sell or Process Further 960 Sales Mix Selection When Resources Are Constrained 961

Capacity Decisions 963

Segment Elimination 963 Keep or Replace Equipment 964

Pricing Decisions 965

Normal Pricing 965 Special Offers 967

Decision Analysis—Time and Materials Pricing 969

26 Capital Budgeting and Investment Analysis 990

Capital Budgeting 991

Capital Budgeting Process 991 Capital Investment Cash Flows 992

Methods Not Using Time Value of Money 992

Payback Period 992 Accounting Rate of Return 995

Methods Using Time Value of Money 996

Net Present Value 996 Internal Rate of Return 1000 Comparison of Capital Budgeting Methods 1002 Postaudit 1002

Decision Analysis—Break-Even Time 1004 Appendix 26A Using Excel to Compute Net Present Value and Internal Rate of Return 1006

Appendix A	Financial Statement Information A-1
	Apple A-2
	Google A-10
	Samsung A-14
Appendix B	Time Value of Money B
Appendix C	Activity-Based Costing C
Appendix D	Lean Principles and Accounting D-1
Index IND-1	
Chart of Acco	unts CA
Brief Review	Managerial Analyses and Reports BR-1
	Financial Reports and Tables BR-2
	Selected Transactions and
	Relations BR-3
	Fundamentals and Analyses BR-4

Design elements: Lightbulb: ©Chuhail/Getty Images; Blue globe: ©nidwlw/Getty Images and ©Dizzle52/Getty Images; Chess piece: ©Andrei Simonenko/Getty Images and ©Dizzle52/Getty Images; Mouse: ©Siede Preis/Getty Images; Global View globe: ©McGraw-Hill Education and ©Dizzle52/Getty Images; Sustainability: ©McGraw-Hill Education; Sustainability: Sustainability: Sustainability: Sustainability: Sustainability: Sustainability: Sustainability: Sustainabilit