# Financial and Managerial Accounting



**INFORMATION FOR DECISIONS** 

John J. Wild

University of Wisconsin at Madison

Ken W. Shaw

University of Missouri at Columbia

Barbara Chiappetta

Nassau Community College



#### Preface iii

## Introducing Accounting in Business 2



#### Importance of Accounting 4

Users of Accounting Information 5 Opportunities in Accounting 6

#### Fundamentals of Accounting 7

Ethics—A Key Concept 7
Fraud Triangle 8
Generally Accepted Accounting Principles 9
International Standards 9
Conceptual Framework and Convergence 10
Sarbanes—Oxley (SOX) 13
Dodd-Frank 14

## Transaction Analysis and the Accounting Equation 15

Accounting Equation 15
Transaction Analysis 16
Summary of Transactions 19

#### Financial Statements 20

Income Statement 20 Statement of Retained Earnings 20 Balance Sheet 20 Statement of Cash Flows 22

Global View 22
Decision Analysis—Return on Assets 23
Appendix 1A Return and Risk Analysis 27
Appendix 1B Business Activities and the Accounting
Equation 27

## 2 Analyzing and Recording Transactions 50



#### Analyzing and Recording Process 52

Source Documents 52
The Account and Its Analysis 53

#### **Analyzing and Processing Transactions 56**

Ledger and Chart of Accounts 56
Debits and Credits 57
Double-Entry Accounting 57

Journalizing and Posting Transactions 58 Analyzing Transactions—An Illustration 61 Accounting Equation Analysis 65

#### Trial Balance 67

Preparing a Trial Balance 67
Using a Trial Balance to Prepare Financial
Statements 68

Global View 70 Decision Analysis—Debt Ratio 71

## 3 Adjusting Accounts and Preparing Financial Statements 96



#### Timing and Reporting 98

The Accounting Period 98 Accrual Basis versus Cash Basis 99 Recognizing Revenues and Expenses 100

#### Adjusting Accounts 100

Frameworks for Adjustments 100
Prepaid (Deferred) Expenses 101
Unearned (Deferred) Revenues 104
Accrued Expenses 105
Accrued Revenues 107
Links to Financial Statements 109
Adjusted Trial Balance 110

## Preparing Financial Statements 110 Closing Process 112

Temporary and Permanent Accounts 112
Recording Closing Entries 112
Post-Closing Trial Balance 114
Accounting Cycle 116

#### Classified Balance Sheet 117

Classification Structure 117 Classification Categories 118

Global View 120

Decision Analysis—Profit Margin and Current Ratio 121

Appendix 3A Alternative Accounting for Prepayments 125 Appendix 3B Work Sheet as a Tool 127 Appendix 3C Reversing Entries 129

# 4 Accounting for Merchandising Operations 160



#### Merchandising Activities 162

Reporting-Income for a Merchandiser 162 Reporting Inventory for a Merchandiser 163 Operating Cycle for a Merchandiser 163 Inventory Systems 163

#### Accounting for Merchandise Purchases 164

Purchase Discounts 165
Purchase Returns and Allowances 166
Transportation Costs and Ownership Transfer 167

#### Accounting for Merchandise Sales 169

Sales of Merchandise 169 Sales Discounts 170 Sales Returns and Allowances 170

#### Completing the Accounting Cycle 172

Adjusting Entries for Merchandisers 172 Preparing Financial Statements 173 Closing Entries for Merchandisers 173 Summary of Merchandising Entries 173

#### Financial Statement Formats 174

Multiple-Step Income Statement 175 Single-Step Income Statement 176 Classified Balance Sheet 176

Global View 177
Decision Analysis—Acid-Test and Gross Margin
Ratios 178
Appendix 4A Periodic Inventory System 183
Appendix 4B Work Sheet—Perpetual System 187



## 5 Inventories and Cost of Sales 208

#### **Inventory Basics 210**

Determining Inventory Items 210
Determining Inventory Costs 211
Internal Controls and Taking a Physical Count 211

#### Inventory Costing under a Perpetual System 211

Inventory Cost Flow Assumptions 212
Inventory Costing Illustration 213
Specific Identification 213
First-In, First-Out 215
Last-In, First-Out 215
Weighted Average 216
Financial Statement Effects of Costing Methods 218
Consistency in Using Costing Methods 219

## Valuing Inventory at LCM and the Effects of Inventory Errors 219

Lower of Cost or Market 219 Financial Statement Effects of Inventory Errors 220

Global View 222

Decision Analysis—Inventory Turnover and Days' Sales in Inventory 223

Appendix 5A Inventory Costing under a Periodic System 229

Appendix 5B Inventory Estimation Methods 234

#### 6 Cash and Internal Controls 256



#### **Internal Control 258**

Purpose of Internal Control 258 Principles of Internal Control 259 Technology and Internal Control 261 Limitations of Internal Control 262

#### Control of Cash 263

Cash, Cash Equivalents, and Liquidity 263
Cash Management 264
Control of Cash Receipts 264
Control of Cash Disbursements 266

#### Banking Activities as Controls 270

Basic Bank Services 270 Bank Statement 272 Bank Reconciliation 273

Global View 276
Decision Analysis—Days' Sales Uncollected 277
Appendix 6A Documentation and Verification 280
Appendix 6B Control of Purchase

Discounts 283

## Accounts and Notes Receivable 300



#### Accounts Receivable 302

Recognizing Accounts Receivable 302
Valuing Accounts Receivable—Direct Write-Off
Method 306

Valuing Accounts Receivable—Allowance Method 307 Estimating Bad Debts—Percent of Sales Method 308 Estimating Bad Debts—Percent of Receivables

Method 309

Estimating Bad Debts-Aging of Receivables Method 310

#### Notes Receivable 312

Computing Maturity and Interest 312 Recognizing Notes Receivable 313 Valuing and Settling Notes 314

#### Disposal of Receivables 315

Selling Receivables 315 Pledging Receivables 315

Global View 316

Decision Analysis—Accounts Receivable Turnover 317



#### 0 Long-Term Assets 334

#### SECTION 1—PLANT ASSETS 336

#### Cost Determination 337

Land 337 Land Improvements 338 Buildings 338 Machinery and Equipment 338 Lump-Sum Purchase 338

#### Depreciation 339

Factors in Computing Depreciation 339 Depreciation Methods 340 Partial-Year Depreciation 344 Change in Estimates for Depreciation 345 Reporting Depreciation 345

#### Additional Expenditures 346

Ordinary Repairs 347 Betterments and Extraordinary Repairs 347

#### Disposals of Plant Assets 348

Discarding Plant Assets 348 Selling Plant Assets 348

#### SECTION 2—NATURAL RESOURCES 350

Cost Determination and Depletion 350 Plant Assets Used in Extracting 351

#### SECTION 3—INTANGIBLE ASSETS 351

Cost Determination and Amortization 351 Types of Intangibles 352

Global View 354

Decision Analysis—Total Asset Turnover 355 Appendix 8A Exchanging Plant Assets 358



#### 9 Current Liabilities 376

#### Characteristics of Liabilities 378

Contents

Defining Liabilities 378 Classifying Liabilities 378 Uncertainty in Liabilities 379

#### **Known Liabilities 380**

Accounts Payable 380 Sales Taxes Payable 380 Unearned Revenues 381 Short-Term Notes Payable 381 Payroll Liabilities 383 Multi-Period Known Liabilities 386

#### **Estimated Liabilities 387**

Health and Pension Benefits 387 Vacation Benefits 388 Bonus Plans 388 Warranty Liabilities 388 Multi-Period Estimated Liabilities 389

#### Contingent Liabilities 390

Accounting for Contingent Liabilities 390 Reasonably Possible Contingent Liabilities 390 Uncertainties that Are Not Contingencies 391

Global View 391 Decision Analysis—Times Interest Earned Ratio 392 Appendix 9A Payroll Reports, Records, and Procedures 395 Appendix 9B Corporate Income Taxes 401



#### 10 Long-Term Liabilities 420

#### Basics of Bonds 422

Bond Financing 422 Bond Trading 423 Bond-Issuing Procedures 424

#### **Bond Issuances 424**

Issuing Bonds at Par 424 Bond Discount or Premium 425 Issuing Bonds at a Discount 425 Issuing Bonds at a Premium 428 Bond Pricing 430

Contents

#### **Bond Retirement 431**

Bond Retirement at Maturity 431 Bond Retirement before Maturity 431 Bond Retirement by Conversion 432

#### Long-Term Notes Payable 432

Installment Notes 433 Mortgage Notes and Bonds 434

Global View 435

Decision Analysis—Debt Features and the Debt-to-Equity Ratio 436

Appendix 10A Present Values of Bonds and Notes 440 Appendix 10B Effective Interest Amortization 442

Appendix 10C Issuing Bonds between Interest Dates 444

Appendix 10D Leases and Pensions 446

## 11 Corporate Reporting and Analysis 464



#### Corporate Form of Organization 466

Characteristics of Corporations 466 Corporate Organization and Management 467 Stockholders of Corporations 468 Basics of Capital Stock 469

#### Common Stock 470

Issuing Par Value Stock 470
Issuing No-Par Value Stock 471
Issuing Stated Value Stock 472
Issuing Stock for Noncash Assets 472

#### Dividends 473

Cash Dividends 473 Stock Dividends 474 Stock Splits 476

#### Preferred Stock 476

Issuance of Preferred Stock 477
Dividend Preference of Preferred Stock 477
Convertible Preferred Stock 478
Callable Preferred Stock 479
Reasons for Issuing Preferred Stock 479

#### Treasury Stock 480

Purchasing Treasury Stock 480 Reissuing Treasury Stock 481 Retiring Stock 482

#### Reporting of Equity 482

Statement of Retained Earnings 482 Statement of Stockholders' Equity 483 Reporting Stock Options 483

Global View 484

Decision Analysis—Earnings per Share, Price-Earnings Ratio, Dividend Yield, and Book Value per Share 485

#### 12 Reporting Cash Flows 508



#### Basics of Cash Flow Reporting 510

Purpose of the Statement of Cash Flows 510 Importance of Cash Flows 510 Measurement of Cash Flows 511 Classification of Cash Flows 511 Noncash Investing and Financing 513 Format of the Statement of Cash Flows 513 Preparing the Statement of Cash Flows 514

#### Cash Flows from Operating 516

Indirect and Direct Methods of Reporting 516
Application of the Indirect Method of Reporting 517
Summary of Adjustments for Indirect Method 522

#### Cash Flows from Investing 523

Three-Stage Process of Analysis 523 Analysis of Noncurrent Assets 523 Analysis of Other Assets 524

#### Cash Flows from Financing 525

Three-Stage Process of Analysis 525 Analysis of Noncurrent Liabilities 525 Analysis of Equity 526 Proving Cash Balances 527

Global View 527

Decision Analysis—Cash Flow Analysis 528 Appendix 12A Spreadsheet Preparation of the Statement of Cash Flows 532

Appendix 12B Direct Method of Reporting Operating Cash Flows 535

#### 13 Analysis of Financial Statements 562



#### Basics of Analysis 564

Purpose of Analysis 564 Building Blocks of Analysis 564 Information for Analysis 565 Standards for Comparisons 565 Tools of Analysis 566

#### **Horizontal Analysis 566**

Comparative Statements 566 Trend Analysis 569

#### Vertical Analysis 571

Common-Size Statements 571 Common-Size Graphics 573

#### Ratio Analysis 574

Liquidity and Efficiency 575 Solvency 579 Profitability 580 Market Prospects 581 Summary of Ratios 582

Global View 584 Decision Analysis—Analysis Reporting 584 Appendix 13A Sustainable Income 588

## 14 Managerial Accounting Concepts and Principles 608



#### Managerial Accounting Basics 610

Purpose of Managerial Accounting 610
Nature of Managerial Accounting 611
Managerial Decision Making 613
Fraud and Ethics in Managerial Accounting 613

#### Managerial Cost Concepts 614

Types of Cost Classifications 614 Identification of Cost Classifications 617 Cost Concepts for Service Companies 617

#### Reporting Manufacturing Activities 618

Manufacturer's Costs 618
Manufacturer's Balance Sheet 619
Manufacturer's Income Statement 620
Flow of Manufacturing Activities 622
Manufacturing Statement 623
Trends in Managerial Accounting 625

Global View 627

Decision Analysis—Raw Materials Inventory Turnover and Days' Sales of Raw Materials Inventory 628

## 15 Job Order Costing and Analysis 652

### Job Order Cost Accounting 654

Cost Accounting System 654 Job Order Production 654 Job Order Costing of Services 655 Events in Job Order Costing 655 Job Cost Sheet 656

#### Job Order Cost Flows and Reports 658

Materials Cost Flows and Documents 658 Labor Cost Flows and Documents 660 Overhead Cost Flows and Documents 661 Summary of Cost Flows 663

#### Adjusting Factory Overhead 665

Factory Overhead T-Account 665 Underapplied or Overapplied Overhead 666

Global View 666 Decision Analysis—Pricing for Services 667

## 16 Costing and Analysis 692



#### **Process Operations 692**

Comparing Job Order and Process Operations 693 Organization of Process Operations 693 GenX Company—An Illustration 693

#### **Process Cost Accounting 695**

Comparing Job Order and Process Cost Accounting Systems 695 Direct and Indirect Costs 695 Accounting for Materials Costs 696 Accounting for Labor Costs 697 Accounting for Factory Overhead 697

#### Equivalent Units of Production 699

Accounting for Goods in Process 699
Differences in Equivalent Units for Materials, Labor, and Overhead 699

#### **Process Costing Illustration 700**

Step 1: Determine the Physical Flow of Units 701

Step 2: Compute Equivalent Units of Production 701

Step 3: Compute the Cost per Equivalent Unit 702

Step 4: Assign and Reconcile Costs 702

Transfers to Finished Goods Inventory and Cost of Goods Sold 705

Trends in Process Operations 707

Global View 707

Decision Analysis—Hybrid Costing System 707 Appendix 16A FIFO Method of Process Costing 709

## 17 Activity-Based Costing and Analysis 736



#### Assigning Overhead Costs 738

Plantwide Overhead Rate Method 739 Departmental Overhead Rate Method 740 Activity-Based Costing Rates and Method 743

#### Applying Activity-Based Costing 744

Step 1: Identify Activities and the Costs They

Cause 744

Step 2: Trace Overhead Costs to Cost Pools 745

Step 3: Determine Activity Rates 746

Step 4: Assign Overhead Costs to Cost Objects 746

#### Assessing Activity-Based Costing 748

Advantages of Activity-Based Costing 748 Disadvantages of Activity-Based Costing 750 ABC for Service Providers 750 Types of Activities 750

Global View 752 Decision Analysis—Customer Profitability 752

#### 18 Cost Behavior and Cost-Volume-Profit Analysis 776



#### **Identifying Cost Behavior 778**

Fixed Costs 778 Variable Costs 780 Mixed Costs 780 Step-Wise Costs 780 Curvilinear Costs 781

#### Measuring Cost Behavior 781

Scatter Diagrams 782 High-Low Method 782 Least-Squares Regression 783 Comparison of Cost Estimation Methods 784

#### Using Break-Even Analysis 784

Contribution Margin and Its Measures 784
Computing the Break-Even Point 785
Computing the Margin of Safety 786
Preparing a Cost-Volume-Profit Chart 787
Making Assumptions in Cost-Volume-Profit
Analysis 788

#### Applying Cost-Volume-Profit Analysis 789

Computing Income from Sales and Costs 789 Computing Sales for a Target Income 790 Using Sensitivity Analysis 792 Computing a Multiproduct Break-Even Point 793

Global View 795

Decision Analysis—Degree of Operating Leverage 795 Appendix 18A Using Excel to Estimate Least-Squares Regression 797

#### 19 Variable Costing and Performance Reporting 814



Introducing Variable Costing and Absorption Costing 816

Computing Unit Cost 817

#### Performance Reporting (Income) Implications 818

Units Produced Equal Units Sold 818
Units Produced Exceed Units Sold 820
Units Produced Are Less Than Units Sold 821
Summarizing Income Reporting 822
Converting Income under Variable Costing to
Absorption Costing 823

## Comparing Variable Costing and Absorption Costing 823

Planning Production 823
Setting Prices 825
Controlling Costs 826
Limitations of Reports Using Variable Costing 826
Variable Costing for Service Firms 827
Global View 827
Decision Analysis—Break-Even Analysis 827

#### 20 Master Budgets and Performance Planning 846



#### **Budget Process 848**

Strategic Budgeting 848
Benchmarking Budgets 848
Budgeting and Human Behavior 849
Budgeting as a Management Tool 849
Budgeting Communication 849

#### **Budget Administration 850**

Budget Committee 850 Budget Reporting 850 Budget Timing 851

#### Master Budget 852

Master Budget Components 852 / Operating Budgets 854 Capital Expenditures Budget 858 Financial Budgets 858

Global View 862
Decision Analysis—Activity-Based Budgeting 862
Appendix 20A Production and Manufacturing
Budgets 868

## 21 Flexible Budgets and Standard Costs` 894



#### SECTION 1—FLEXIBLE BUDGETS 896 Budgetary Process 896

Budgetary Control and Reporting 896 Fixed Budget Performance Report 897 Budget Reports for Evaluation 898

#### Flexible Budget Reports 898

Purpose of Flexible Budgets 898 Preparation of Flexible Budgets 898 Flexible Budget Performance Report 900

#### SECTION 2—STANDARD COSTS 901

#### Materials and Labor Standards 902

Identifying Standard Costs 902 Setting Standard Costs 902

#### Cost Variances 903

Cost Variance Analysis 903 Cost Variance Computation 903 Computing Materials and Labor Variances 904

#### Overhead Standards and Variances 907

Setting Overhead Standards 907
Predicting Activity Levels 908
Computing Overhead Cost Variances 908

Global View 910

Decision Analysis—Sales Variances 911
Appendix 21A: Expanded Overhead Variances and
Standard Cost Accounting System 916

# 22 Performance Measurement and Responsibility Accounting 940



#### Responsibility Accounting 942

Motivation for Departmentalization 942 Departmental Evaluation 942 Controllable versus Uncontrollable Costs 943

#### Cost Centers 944

Responsibility Accounting System 944 Evaluating Cost Center Performance 944

#### Profit Center 945

Direct and Indirect Expenses 945
Allocation of Indirect Expenses 946
Departmental Income Statements 947
Departmental Contribution to Overhead 951

#### **Evaluating Investment Center Performance 953**

Financial Performance Evaluation Measures 953 Nonfinancial Performance Evaluation Measures 955

Global View 957
Decision Analysis—Cycle Time and Cycle
Efficiency 957
Appendix 22A Transfer Pricing 961
Appendix 22B Joint Costs and Their Allocation 962





#### **Decisions and Information 986**

Decision Making 986 Relevant Costs 986

#### Managerial Decision Scenarios 987

Additional Business 987
Make or Buy 989
Scrap or Rework 990
Sell or Process 990
Sales Mix Selection 991
Segment Elimination 993
Keep or Replace Equipment 993
Qualitative Decision Factors 994

Decision Analysis—Setting Product Price 994

## 24 Capital Budgeting and Investment Analysis 1014



Introduction to Capital Budgeting 1016

Methods Not Using Time Value of Money 1016

Payback Period 1016
Accounting Rate of Return 1019

#### Methods Using Time Value of Money 1020

Net Present Value 1020 Internal Rate of Return 1023 Comparison of Capital Budgeting Methods 1025

Global View 1026

Decision Analysis—Break-Even Time 1026 Appendix 24A Using Excel to Compute Net Present Value and Internal Rate of Return 1029

Appendix A Financial Statement Information A-1

Polaris A-2

Arctic Cat A-10

KTM A-14

Piaggio A-18

Appendix B Time Value of Money B

Appendix C Investments and International Operations C

- A ... C ... 1:

\*Appendix D Accounting for Partnerships

\*Appendix E Accounting with Special Journals

Glossary G

Credits CR

Index IND

**Chart of Accounts CA** 

<sup>\*</sup> Appendices D&E are available on the book's Website, mhhe.com/wildFINMAN5e, and as print copy from a McGraw-Hill representative.