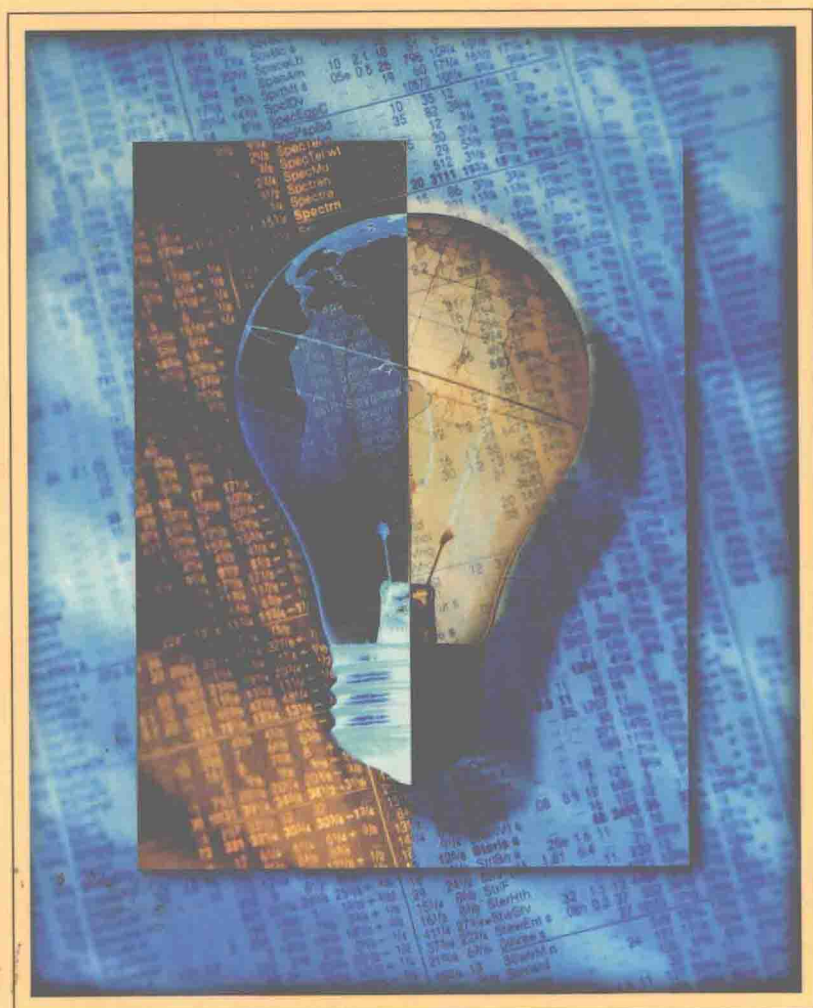


# FINANCIAL STATEMENTS

F I F T H E D I T I O N



LYN M. FRASER • AILEEN ORMISTON

**FIFTH EDITION**

# **Understanding Financial Statements**

**Lyn M. Fraser**

**Aileen Ormiston**



**Prentice Hall, Upper Saddle River, New Jersey 07458**

Acquisitions Editor: *Paul Donnelly*  
 Associate Editor: *Gladys Soto*  
 Editorial Assistant: *Jodi Hirsh*  
 Editor-in-Chief: *James Boyd*  
 Marketing Manager: *Patrick Lynch*  
 Production Editor: *Maureen Wilson*  
 Managing Editor: *Dee Josephson*  
 Manufacturing Buyer: *Diane Peirano*  
 Manufacturing Supervisor: *Arnold Vila*  
 Manufacturing Manager: *Vincent Scelta*  
 Composition: *Impressions Book & Journal Services, Inc.*  
 Copyeditor: *Donna Mulder*  
 Cover image: *Tony Stone Images*



Copyright © 1998, 1995, 1992, 1988, 1984 by Prentice-Hall, Inc.  
 A Simon & Schuster Company  
 Upper Saddle River, New Jersey 07458

All rights reserved. No part of this book may be reproduced, in any form or by any means, without permission in writing from the Publisher.

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

Fraser, Lyn M.

Understanding financial statements / Lyn M. Fraser, Aileen  
 Ormiston. — 5th ed.  
 p. cm.

Includes index.

ISBN 0-13-619115-0

I. Financial statements. II. Corporation reports. I. Ormiston,  
 Aileen. II. Title.  
 HF5681.B2F764 1998  
 657'.3—dc21

97-31757  
 CIP

Prentice-Hall International (UK) Limited, *London*  
 Prentice-Hall of Australia Pty. Limited, *Sydney*  
 Prentice-Hall Canada Inc., *Toronto*  
 Prentice-Hall Hispanoamericana, S.A., *Mexico*  
 Prentice-Hall of India Private Limited, *New Delhi*  
 Prentice-Hall of Japan, Inc., *Tokyo*  
 Simon & Schuster Asia Pte. Ltd., *Singapore*  
 Editora Prentice-Hall do Brasil, Ltda., *Rio de Janeiro*

Printed in the United States of America  
 10 9 8 7 6 5 4 3 2 1

# Understanding Financial Statements

**For Eleanor**

**For Mike, Josh, and Jacqui**

# Preface

For those of you who have read the prefaces to earlier editions of my book and are awaiting updates, you will be relieved to know that my daughter Eleanor graduated in December 1996 from Texas A&M University with a major in international studies, and she is now working in London; my hair is still grey; and I have upgraded my computer system so I can communicate reasonably comfortably via cyberspace, though I do occasionally still send letters using paper, envelope, and stamp.

It is a special treat for me to announce the collaboration on this fifth edition of *Understanding Financial Statements* with Aileen Ormiston. As a graduate student in my financial statement analysis course at Texas A&M in the early eighties, Aileen impressed me for a number of reasons, not the least of which was the fact that she could make an analysis of even the dullest of companies—like Maytag, then stable in all categories—sound interesting. For the first edition of *Understanding Financial Statements*, Aileen helped me create R.E.C., Inc., the company that provides the model for this text; and she is also largely responsible for the first edition being produced error-free, a feat which I have never managed to duplicate.

Aileen has moved on to a successful career as a professor of accounting, and for the fourth edition, she developed the chapter-end mini-cases, which have met with tremendously positive user response. For this fifth edition revision, Aileen agreed to participate as a coauthor.

*Understanding Financial Statements* is designed to serve a wide range of readers and purposes, which include:

1. Text or supplementary text for financial statement analysis courses.
2. Supplementary text for accounting, finance, and business management classes that cover financial statement analysis.
3. Study material for short courses on financial statements in continuing education and executive development programs.
4. Self-study guide or course material for bank credit analysis training programs.
5. Reference book for investors and others who make decisions based on the analysis of financial statements.

## Features of the Fifth Edition

In revising the text, we have paid close attention to the responses received from faculty who teach from the book, from students who take courses using the book as a primary or supplementary text, and from other readers of the book. Our primary ob-

jective remains to convey to readers the conceptual background and analytical tools necessary to understand and interpret business financial statements. Readers and reviewers of earlier editions have commented that the strengths of this book are its readability, concise coverage, and accessibility. We have attempted to retain these elements in the fifth edition.

Given the positive user response to the mini-cases, which are based on actual corporate annual reports, we have provided an additional set of cases in this edition. These cases allow students to explore practical and realistic applications of the concepts and analytical tools presented throughout the text.

This fifth edition incorporates all new requirements and changes in accounting reporting and standards, and any proposed change that we think may affect financial reporting in the future.

The footnotes provided throughout the text contain resources which may be used by instructors to form the basis of a reading list for students.

Many instructors have commented on the uniqueness and usefulness of Appendix A, "A Guide to Earnings Quality." We have retained the appendix as well as integrated some of the most relevant issues into chapter coverage.

The fifth edition includes other features of earlier editions that readers have found useful: appendices on the analysis of segmental data and understanding bank financial statements; self-tests at the ends of chapters, with solutions provided; chapter-end study questions and problems; and a glossary of key terms used in text.

The Instructor's Manual, which is available as a supplement, contains solutions to study questions, problems, and mini-cases; a sample course project with assignment, outline, and resources; and selected transparency masters from exhibits and tables from the text.

We hope that readers will continue to find the material in *Understanding Financial Statements* accessible, relevant, and useful.

**Lyn M. Fraser**

# Acknowledgments

We would like to acknowledge with considerable appreciation those who have contributed to the publication of this book.

Several individuals have made critical comments and suggestions on the manuscript. In particular, we would like to thank: Eric L. Blazer, Millersville University; Steven Grossman, Texas A&M University; Suzanne Hartley, Franklin University; Leon Korte, University of South Dakota; James L. Kuhle, California State University–Sacramento; Dong Woo Lee, California State University–Los Angeles; Abe Qastin, Lakeland College; and Thomas Robinson, University of Miami.

We would also like to thank the editorial, production, and marketing departments of Prentice Hall for their assistance at each stage of the writing and production process.

The list would be incomplete without mentioning the pets in our households who helped keep us in good humor throughout the revision of this edition. Little Bit, Picadilly Circus, Babe, R. T., and Ruthie kept Lyn smiling. Dogs Cedric and Dieter kept things lively in Aileen's household, while the horses, Toby, Tucker, Teddi, and her newborn colt Torin were a great source of amusement in the barn.

**Lyn M. Fraser**  
**Aileen Ormiston**



# Contents

**Preface**      xi

**Acknowledgments**      xiii

## **CHAPTER 1 Financial Statements: An Overview**      1

Map or Maze	1
<i>Organization</i>	2
<i>Usefulness</i>	4
Volume of Information	4
<i>The Financial Statements</i>	5
<i>Notes to the Financial Statements</i>	5
<i>Auditor's Report</i>	9
<i>Other Required Information</i>	14
<i>Pandora (a.k.a. "PR Fluff")</i>	15
Complexity	16
<i>Alphabet Soup</i>	16
<i>Mythical Mountain</i>	18
Quality of Financial Reporting	23
<i>Accounting Policies, Estimates—Choices and Changes</i>	23
<i>Timing of Revenue and Expense Recognition</i>	25
<i>Discretionary Items</i>	26
<i>Nonrecurring and Nonoperating Items</i>	27
Impact of Inflation	28
Missing and Hard-to-Find Information	31
Self-Test	33
Study Questions and Problems	36
La-Z-Boy Mini-Case	37
Chambers Development Company, Inc. Mini-Case	42

## **CHAPTER 2 The Balance Sheet**      49

Financial Condition	49
<i>Consolidation</i>	50
<i>Balance Sheet Date</i>	50
<i>Comparative Data</i>	50
Assets	50

<i>Current Assets</i>	50
<i>Cash and Marketable Securities</i>	52
<i>Accounts Receivable</i>	53
<i>Inventories</i>	55
<i>Inventory Accounting Methods</i>	56
<i>Prepaid Expenses</i>	58
<i>Property, Plant, and Equipment</i>	59
<i>Other Assets</i>	61
Liabilities	61
<i>Current Liabilities</i>	61
<i>Accounts Payable</i>	62
<i>Notes Payable</i>	62
<i>Current Maturities of Long-Term Debt</i>	63
<i>Accrued Liabilities</i>	63
<i>Unearned Revenue or Deferred Credits</i>	63
<i>Deferred Federal Income Taxes</i>	64
<i>Long-Term Debt</i>	66
<i>Other Liabilities</i>	66
Stockholders' Equity	67
<i>Common Stock</i>	67
<i>Additional Paid-In Capital</i>	67
<i>Retained Earnings</i>	67
<i>Other Equity Accounts</i>	68
<i>Other Balance Sheet Items</i>	69
Self-Test	69
Study Questions and Problems	73
Intel Corporation Mini-Case	75
The Rival Company Mini-Case	80
<b>CHAPTER 3 The Income Statement and Statement of Retained Earnings</b>	<b>86</b>
The Income Statement	87
<i>Net Sales</i>	89
<i>Cost of Goods Sold</i>	90
<i>Gross Profit</i>	91
<i>Operating Expense</i>	91
<i>Depreciation and Amortization</i>	92
<i>Operating Profit</i>	93
<i>Other Income (Expense)</i>	94
<i>Earnings Before Income Taxes</i>	94
<i>Net Earnings</i>	95
<i>Earnings per Common Share</i>	95
The Statement of Retained Earnings	96
Statement of Shareholders' Equity	97
Other Issues—Cost vs. Equity Method	99

Earnings Quality, Inflation, Cash Flow, Segmental Accounting	100
Self-Test	101
Study Questions and Problems	105
Time Warner Mini-Case	107
IBM Corporation Mini-Case	110

## **CHAPTER 4 Statement of Cash Flows 114**

Preparing a Statement of Cash Flows	116
Calculating Cash Flow from Operating Activities	121
<i>Direct Method</i>	121
<i>Indirect Method</i>	123
Cash Flow from Investing Activities	125
Cash Flow from Financing Activities	125
Change in Cash	126
Analyzing the Statement of Cash Flows	126
<i>Cash Flow from Operations</i>	126
<i>Nocash Corporation</i>	128
<i>Help from a Statement of Cash Flows</i>	130
<i>Summary Analysis of the Statement of Cash Flows</i>	131
Supplement to Chapter 4: Adjusting Net Income from Accrual to Cash— An Illustration	133
Self-Test	135
Study Questions and Problems	139
PetsMart Mini-Case	145
Royal Appliance Mfg. Co. and Subsidiaries Mini-Case	147

## **CHAPTER 5 The Analysis of Financial Statements 150**

Objectives of the Analysis	150
Sources of Information	151
<i>Auditor's Report</i>	151
<i>Management's Discussion and Analysis</i>	152
<i>Supplementary Schedules</i>	152
<i>Form 10-K and Form 10-Q</i>	152
<i>Other Sources</i>	152
Tools and Techniques	153
<i>Common Size Financial Statements</i>	154
<i>Key Financial Ratios</i>	156
<i>Liquidity Ratios: Short-Term Solvency</i>	157
<i>Activity Ratios: Asset Liquidity, Asset Management Efficiency</i>	160
<i>Leverage Ratios: Debt Financing and Coverage</i>	163
<i>Profitability Ratios: Overall Efficiency and Performance</i>	165

## **x** Contents

Analyzing the Data	167
<i>Background: Economy, Industry, and Firm</i>	168
<i>Short-Term Liquidity</i>	169
<i>Net Trade Cycle</i>	171
<i>Capital Structure and Long-Term Solvency</i>	172
<i>Example of Financial Leverage</i>	172
<i>Operating Efficiency and Profitability</i>	175
<i>Ratio Analysis Summary</i>	177
<i>Projections, Pro Formas, and Market Ratios</i>	178
<i>Summary of Analysis</i>	180
<i>Map</i>	181
Self-Test	181
Study Questions and Problems	186
First Team Sports, Inc. Mini-Case	200
L.A. Gear, Inc. Mini-Case	207

## **Appendixes**

A	A Guide to Earnings Quality	213
B	The Analysis of Segmental Data	227
C	Understanding Bank Financial Statements	235
D	Solutions to Self-Tests	245
E	Summary of Financial Ratios	247
F	Glossary	249

<b>Index</b>	261
--------------	-----

# 1

## CHAPTER

# Financial Statements: An Overview

## Map or Maze

One of the major purposes of a *map* is to help its user reach a desired destination through clarity of representation. A *maze*, on the other hand, attempts to confuse its user by purposefully introducing conflicting elements and complexities that prevent reaching the desired goal. Business financial statements have the potential for being both map and maze.

As a map, financial statements form the basis for understanding the financial position of a business firm and for assessing its historical and prospective financial performance. Financial statements have the capability of presenting clear representations of a firm's financial health, leading to informed business decisions.

Unfortunately, there are mazelike interferences in financial statement data that hinder understanding the valuable information they contain. The sheer quantity of in-

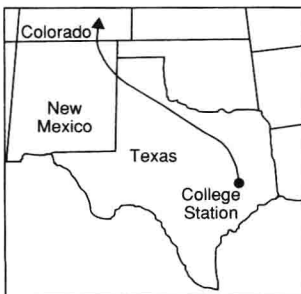


FIGURE 1.1

formation contained in financial statements can be overwhelming and intimidating. Independent auditors attest to the fairness of financial statement presentation, but many lawsuits have been filed and won against accounting firms for issuing “clean” auditors’ reports on companies that subsequently failed. The complexity of accounting policies underlying the preparation of financial statements can lead to confusion and variations in the quality of information presented. And these rules are constantly evolving and changing. Management discretion in a number of areas influences financial statement content and presentation in ways that affect and even impede evaluation. Changing prices can erode the usefulness of financial statement numbers. Some key information needed to evaluate a company is not available in the financial statements, some is difficult to find, and much is impossible to measure.

One of the main objectives of this book is to ensure that financial statements serve as a map, not a maze; that they lead to a determination of the financial health of a business enterprise which is as clear as possible for purposes of making sound business decisions about the firm.

The material in this book will convey information about how to read and evaluate business financial statements; and the authors will attempt to present the material in a straightforward manner that will be readily accessible to any reader, regardless of background or perspective. The book is designed for use by those who would like to learn more about the content and interpretation of financial statements for such purposes as making investment or credit decisions about a company, evaluating a firm for current or prospective employment, advancing professionally in the current business environment, or even passing an examination or course.

The reader can expect more than a dull exposition of financial data and accounting rules. Throughout these pages we will attempt with examples, illustrations, and explanations to get behind the numbers, accounting policies, and tax laws to assess how well companies are actually performing. The chapters and appendixes in the book show how to approach financial statements in order to obtain practical, useful information from their content. Although the examples in the book are based on corporate financial statements, the discussion also applies to the financial statements of small business firms that use generally accepted accounting principles.

The emphasis throughout the book is on *analysis*. We will break financial statements into parts for individual study in order that we might better understand the whole of their content as a map to intelligent decisionmaking.

## ORGANIZATION

Chapter 1 provides an overview of financial statements and presents approaches to overcoming some of the challenges, obstacles, and blind alleys that may confront the user of financial statements: (1) the volume of information, with examples of specific problems encountered in such areas as the auditor’s report and the management discussion and analysis section as well as material that is sometimes provided by management but is not useful for the analyst; (2) the complexity of the accounting rules that underlie the preparation and presentation of financial statements; (3) the variations in quality of financial reporting, including management discretion in some important areas that affect analysis; (4) the impact of inflation on financial statement data; and (5)

the importance of financial information that is omitted or difficult to find in conventional financial statement presentations.

Chapters 2 through 5 describe and analyze financial statements for a mythical but potentially real company: Recreational Equipment and Clothing, Incorporated (R.E.C., Inc.), which sells recreational products through retail outlets in the southwestern United States. The specifics of this particular firm should be helpful in illustrating how financial statement analysis can provide insight into a firm's strengths and weaknesses. But the principles and concepts covered throughout the book apply to any set of published financial statements (other than for specialized industries, such as financial institutions and public utilities; the interpretation of financial statements for commercial banks is covered in Appendix C).

As no one company can provide every account and problem the user will encounter in financial statements, additional company examples are introduced throughout the text where needed to illustrate important accounting and analytical issues.

Chapters 2 through 4 discuss in detail a basic set of financial statements: the balance sheet in Chapter 2; the income (earnings) statement, including the evaluation of earnings quality, and statement of retained earnings (or statement of shareholders' equity) in Chapter 3; and the statement of cash flows in Chapter 4. The emphasis in each of these chapters is on what the financial statements convey about the condition and performance of a business firm as well as how the numbers have been derived.

With this material as background, Chapter 5 covers the interpretation and analysis of the financial statements discussed in Chapters 2 through 4. This process involves the calculation and interpretation of financial ratios, an examination of trends over time, a comparison of the firm's condition and performance with its competitors, and an assessment of the future potential of the company based on its historical record. The chapter also reviews additional sources of information that can enhance the analytical process.

Self-tests at the ends of Chapters 1 through 5 provide an opportunity for the reader to assess comprehension of major topics with solutions to the self-tests listed in Appendix D. For more extensive student assignments, there are also Study Questions and Problems at the ends of the chapters. Mini-cases drawn from actual company annual reports are used to highlight in a case problem format many of the key issues discussed in the chapters.

Appendix A discusses and illustrates issues that relate to the quality and, thus, the usefulness of financial reporting. The appendix contains a step-by-step checklist of key items to help the analyst assess the quality of reporting, with examples of each step provided.

Appendix B shows how to evaluate the segmental accounting data reported by diversified companies that operate in several unrelated lines of business.

Appendix C presents a guide to understanding and analyzing the financial statements of commercial banks. Given the impact of commercial banking on all aspects of financial operations in the United States and the spate of bank failures in recent years, it is important for a well-informed financial statement user to develop a working knowledge of bank financial statements. The financial statements of commercial banking institutions in the United States are, like their nonbank counterparts, based on generally accepted accounting principles. Because of the nature of a bank's assets and

liabilities, however, the financial statements are quite different in organization, content, and appearance from other types of business organizations.

Appendix D contains solutions to self-tests for Chapters 1 through 5.

Appendix E covers the computation and definition of the key financial ratios that are used in Chapter 5 to evaluate financial statements.

Appendix F presents a glossary of the key terms used throughout the book.

The ultimate goal of this book is to improve the reader's ability to translate financial statement numbers into a meaningful map for business decisions. It is hoped that the material covered in the chapters and the appendixes will enable each reader to approach financial statements with enhanced confidence and understanding of a firm's historical, current, and prospective financial condition and performance.

## USEFULNESS

Financial statements and their accompanying notes contain a wealth of useful information regarding the financial position of a company, the success of its operations, the policies and strategies of management, and insight into its future performance. The objective of the financial statement user is to find and interpret this information in order to answer questions about the company, such as the following:

- Would an investment generate attractive returns?
- What is the degree of risk inherent in the investment?
- Should existing investment holdings be liquidated?
- Will cash flows be sufficient to service interest and principal payments to support the firm's borrowing needs?
- Does the company provide a good opportunity for employment, future advancement, and employee benefits?
- How well does this company compete in its operating environment?
- Is this firm a good prospect as a customer?

The financial statements and other data generated by corporate financial reporting can help the user develop answers to these questions as well as many others. The remainder of this chapter will provide an approach to using effectively the information contained in a corporate annual report.<sup>1</sup>

## Volume of Information

The user of a firm's annual report can expect to encounter a great quantity of information that encompasses the required information—financial statements, notes to the financial statements, the auditor's report, a five-year summary of key financial data,

---

<sup>1</sup>Annual reports in this book will refer to the information package published primarily for shareholders and the general public. The Securities and Exchange Commission requires large, publicly held companies to file annually a 10-K report, which is generally a more detailed document and is used by regulators, analysts, and researchers. The basic set of financial statements and supplementary data is the same for both documents, and it is this basic set of information—financial statements, notes, and required supplementary data—that is explained and interpreted throughout this book.



high and low stock prices, management's discussion and analysis of operations—as well as material that is included in the report at the imagination and discretion of management.

## THE FINANCIAL STATEMENTS

A corporate annual report contains four basic financial statements, illustrated in Exhibit 1.1 for R.E.C., Inc.

1. The *balance sheet* shows the financial position—assets, liabilities, and stockholders' equity—of the firm on a particular date, such as the end of a quarter or a year.
2. The *income or earnings statement* presents the results of operations—revenues, expenditures, net profit or loss, and net profit or loss per share—for the accounting period.
3. The *statement of retained earnings*, frequently combined with the income statement, reconciles the beginning and ending balances of the retained earnings account. For example, this statement would show the profit or loss for the period less any cash dividends paid. Some firms prepare a more comprehensive *statement of shareholders' equity*, which reconciles the beginning and ending balances of all accounts that appear in the shareholders' equity section of the balance sheet.
4. The *statement of cash flows* provides information about the cash inflows and outflows from operating, financing, and investing activities during an accounting period.

Each of these statements will be illustrated, described, and discussed in detail in later chapters of the book.

## NOTES TO THE FINANCIAL STATEMENTS

Immediately following the four financial statements is the section entitled Notes to the Financial Statements (Exhibit 1.2). The notes are, in fact, an integral part of the statements and must be read in order to understand the presentation on the face of each financial statement.

The first note to the financial statements provides a summary of the firm's accounting policies. If there have been changes in any accounting policies during the reporting period, these changes will be explained and the impact quantified in a financial statement note. Other notes to the financial statements present detail about particular accounts, such as:

- inventory;
- property, plant, and equipment;
- investments;
- long-term debt; and
- equity accounts.

The notes also include information about

- any major acquisitions or divestitures that have occurred during the accounting period;
- officer and employee retirement, pension, and stock option plans;
- leasing arrangements;
- the term, cost, and maturity of debt;
- pending legal proceedings;