

# FINANCIAL STATEMENT ANALYSIS

USING FINANCIAL ACCOUNTING INFORMATION

Charles H. Gibson

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# CHARLES H. GIBSON

THE UNIVERSITY OF TOLEDO



SOUTH-WESTERN College Publishing

An International Thomson Publishing Company

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Production House: CompuText Productions, Inc.

Internal Design: The Book Company Cover Design: Matulionis Design Cover Photo: Amos Chan/Direct Stock

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

Gibson, Charles H.

Financial statement analysis: using financial accounting information / Charles H. Gibson. -- 7th ed.

p. cm.

Includes bibliographical references and index.

ISBN 0-538-86689-6 (hc : alk. paper)

1. Financial statements. I. Title.

HF5681.B2G49 1997

657' .3--dc21

97-12998

CIP

2 3 4 5 6 7 C5 3 2 1 0 9 8

# **Preface**

Tell me, I'll forget. Show me, I may remember. Involve me, I'll understand.

This old proverb describes the approach of the 7th edition—involving students in actual financial statements and their analysis and interpretation. Its premise is that students are better prepared to understand and analyze real financial reports when learning is not based on oversimplified financial statements.

#### **ACTUAL COMPANIES**

The text explains financial reporting differences among industries, including manufacturing, retailing, and service firms, and regulated and nonregulated industries. Statements of actual companies, such as Delta Air Lines (page 129), Lands' End (page 149), and Intel Corporation (page 373) are used in illustrations, problems, and cases. The actual financial statements highlight current financial reporting problems, including leases, pensions, options, postretirement benefits, financial instrument disclosures, deferred taxes, and the harmonization of international accounting standards. The text includes a new section on using the Internet in financial analysis (pages 221-223).

#### EXTENSIVE USE OF ONE FIRM

An important feature of this text is that one firm, Cooper Tire & Rubber Company, is used extensively as an illustration. By using Cooper's 1995 financial statements and industry data, readers become familiar with a typical competitive market and a meaningful example for viewing financial statement analysis as a whole. (See Chapters 6 and 12 and pages 126, 273, 386, 482, and 572.) In addition, in an appendix at the end of the text, another actual company—Worthington Industries—is used as the basis for a comprehensive case.

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#### FLEXIBLE ORGANIZATION

This book provides the flexibility necessary to meet the needs of accounting and finance courses varying in content and length. Sufficient text, problem materials, and cases are presented to allow the instructor latitude in the depth of coverage. Accounting principles are the basis for all discussion so that students may understand the methods used as well as the implications for analysis.

Chapter 1 develops the basic principles of accounting on which financial reports are based. A review of the evolution of GAAP and the traditional assumptions of the accounting model helps the reader understand the statements and thus analyze them better.

Chapter 2 describes the forms of business entities and introduces financial statements. This chapter also reviews the sequence of accounting procedures completed during each accounting period. This chapter includes other financial reporting topics that contribute to the understanding of financial reporting, such as the auditor's report, management's responsibility for financial statements, and the SEC's integrated disclosure system.

Chapter 3 presents an in-depth review of the balance sheet and introduces consolidated statements and problems in balance sheet presentation. This chapter gives special emphasis to inventories and tangible assets.

Chapter 4 presents an in-depth review of the income statement, including special income statement items. Other topics included are the reconciliation of retained earnings and dividends and stock splits.

Chapter 5 is an introduction to analysis and comparative statistics. Techniques include ratio analysis, common-size analysis, examination of relative size among firms, comparison of results with other types of data, study of differences of components of financial statements among industries, and review of descriptive material.

Chapter 6 introduces Cooper Tire & Rubber Company and information about the tire industry. Information from Cooper's financial statements is used in illustrations of ratios in subsequent chapters. Chapter 12 summarizes the analysis of Cooper.

Chapter 7 covers short-term liquidity. This chapter includes suggested procedures for analyzing short-term assets and the short-term debt-paying ability of an entity. This chapter includes a detailed discussion of four very important assets: cash, marketable securities, accounts receivable, and inventory.

Chapter 8 covers long-term debt-paying ability. Topics reviewed in this chapter include: financial instruments with off-balance-sheet risk, financial instruments with concentrations of credit risk, and disclosures about fair value of financial instruments.

PREFACE

Chapter 9 covers the analysis of profitability, which is of vital concern to stockholders, creditors, and management.

Chapter 10, although not intended as a comprehensive guide to investment analysis, introduces analysis useful to the investor.

Chapter 11 reviews the statement of cash flows, including ratios that relate to this statement. A brief historical presentation conveys a perspective on the development of the statement of cash flows.

Chapter 13 covers an expanded utility of financial ratios. This includes the perception of financial ratios, the degree of conservatism and quality of earnings, forecasting financial failure, analytical review procedures, management's use of analysis, use of LIFO reserves, and graphing financial information.

Chapter 14 reviews the impact of changing prices on financial statements.

Chapter 15 covers problems in analyzing six specialized industries: banks, electric utilities, oil and gas, transportation, insurance, and real estate. The chapter notes the differences in statements and suggests changes or additions to their analysis.

Chapter 16 covers personal financial statements and financial reporting for governments and other not-for-profit institutions.

Worthington Industries, another actual company, is used as the basis for a comprehensive case at the end of the text.

An extensive glossary defines terms frequently found in annual reports. The text also includes a bibliography of references that can be used in exploring further the topics in the text.

#### SUPPLEMENTARY MATERIALS

#### For the student:

A Study Guide includes objective problems that aid in reviewing chapter material. The types of problems provided are: (1) fill-ins, (2) multiple choice, (3) true/false, (4) matching, (5) classification, (6) effect of selected transactions, and (7) problems.

#### For the instructor:

- 1. A Solutions Manual includes a suggested solution for each question, problem, and case.
- A Test Bank includes problems, multiple-choice, true/false, and other objective material for each chapter. The Test Bank is available in both printed and microcomputer versions.

#### **ACKNOWLEDGMENTS**

I am grateful to many people for their help and encouragement during the writing of this book. Comments received from colleagues and students who used the first six editions resulted in many changes. I especially want to thank Susan Mangiero of Sacred Heart University for her valuable comments, and Jim Emig of Villanova University for verifying the Solutions Manual, Test Bank, and Study Guide. I also want to extend my appreciation to Cooper Tire & Rubber Company for permission to use its statements as illustrations. I am grateful to the numerous other firms and organizations that granted permission to reproduce their materials. Special thanks go to the American Institute of Certified Public Accountants, the Institute of Chartered Financial Analysts, the Institute of Certified Management Accountants, and the Financial Accounting Standards Board.

Charles H. Gibson

#### **ACTUAL COMPANIES**

Real-world business examples were used extensively in the text, illustrations, problems, and cases. Organizations and companies include the following:

**AMP** 

Aetna Life & Casualty

Amerada Hess Corporation

American Accounting Association

American Airlines

American Institute of Certified Public

Accountants (AICPA)

American Maise-Products Company

Amgen

Arbor Drugs, Inc.

Ashland Coal, Inc.

**Bassett Furniture Industries** 

Best Buy Co., Inc.

Bristol-Myers Squibb Company

Chesapeake Utilities Corporation

Chevron Corporation

Chrysler Corporation

Cooper Tire & Rubber Company Crown Cork & Seal Company, Inc.

Dana Corporation

Delta Air Lines

Dibrell Brothers, Inc. Eastman Kodak Company

Electronic Data Systems Corporation

Financial Accounting Standards Board

(FASB)

Flowers Industries, Inc.

Fluor

Foote, Cone & Belding Communica-

tions, Inc.

Ford Motor Company

Freeport-McMoran Inc.

General Dynamics

General Motors Corporation

Georgia Power Company

HFS Incorporated

Harsco Corporation

Hewlett-Packard Company

Honeywell, Inc.

Houston Industries Incorporated

**Huntington Bancshares** 

Institute of Management Accountants,

Inc.

Intel

The Interpublic Group of Companies

JC Penney

JLG Industries

Johanson Company

LTV Corporation

Lands' End, Inc.

La-Z-Boy Chair Company

Lucas County, Ohio

Lufkin Industries, Inc.

McDonnell Douglas Corporation

Micron Technology, Inc.

Mid Am, Inc.

The Money Store Inc.

Mosinee Paper Corporation

Motorola

Nacco Industries

New England Electric System

Nordson Corporation

Norfolk Southern

Novell

Orange and Rockland Utilities, Inc.

Osmonics

Overseas Shipholding Group, Inc.

Potash Corporation

Procter & Gamble Company

Public Service Company of Colorado

Quanex

Reeves Industries, Inc.

The Roose Company

Seaway Food Town, Inc.

Securities and Exchange Commission

(SEC)

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Snap On, Inc. The Southern Company Southern Indiana Gas and Electric Company Southern New England Telecommunications Corporation Spectrum Control, Inc. Sylvania Savings Bank Telephone and Data Systems, Inc. City of Toledo Tribune Company Tyco International Ltd. Company Union Carbide Union Texas Petroleum Holdings United Airlines Corporation

United Realty Trust
United States Surgical Corporation
United Technologies
Utilicorp United
Vivra
W. T. Grant
Warford Corporation
Warner-Lambert
Wausau Paper Mills Company
Wisconsin Energy Corporation
Worthington Industries
York
Zapata
Zurn

# About the Author

Charles Gibson is a certified public accountant who practiced with a big six accounting firm for four years and has had more than twentyfive years of teaching experience. His teaching experience encompasses a variety of accounting courses, including financial, managerial, tax, cost, and financial analysis.

Professor Gibson teaches seminars on financial analysis to financial executives, bank commercial loan officers, lawyers, and others. He has also taught financial reporting seminars for CPAs and review courses for both CPAs and CMAs.

Dr. Gibson has written more than sixty articles in such journals as the Journal of Accountancy, Accounting Horizons, Journal of Commercial Bank Lending, CPA Journal, Ohio CPA, Management Accounting, Risk Management, Taxation for Accountants, Advanced Management Journal, Taxation for Lawyers, California Management Review, and Journal of Small Business Management. He is a co-author of the Financial Executives Research Foundation Study entitled "Discounting in Financial Accounting and Reporting."

Dr. Gibson has co-authored Cases in Financial Reporting, published by PWS-KENT Publishing Company. He has also co-authored two continuing education courses consisting of books and cassette tapes, published by the American Institute of Certified Public Accountants. These courses are entitled "Funds Flow Evaluation" and "Profitability and the Quality of Earnings."

Professor Gibson is a member of the American Accounting Association, American Institute of Certified Public Accountants, Institute of Management Accountants, Ohio Society of Certified Public Accountants, Institute of Internal Auditors, and Financial Executives Institute. He has been particularly active in the American Accounting Association and the Ohio Society of Certified Public Accountants.

Dr. Gibson received the 1989 Outstanding Ohio Accounting Educator Award jointly presented by The Ohio Society of Certified Public Accountants and the Ohio Regional American Accounting Association. In 1993, he received the College of Business Research Award at The University of Toledo. In 1996, Dr. Gibson was honored as an "Accomplished Graduate" of the College of Business at Bowling Green State University.

# Dedication

This book is dedicated to my wife Patricia and daughters Anne Elizabeth and Laura.

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