

# Financial Analysis

*The Next Step*

Revised Edition

**James O. Gill**  
**Moira Chatton**

***A Crisp Fifty-Minute™ Series Book***

This Fifty-Minute™ book is designed to be “read with a pencil.” It is an excellent workbook for self-study as well as classroom learning. All material is copyright-protected and cannot be duplicated without permission from the publisher. *Therefore, be sure to order a copy for every training participant through our Web site, [www.courseilt.com](http://www.courseilt.com).*

**NOT FOR PRINTING OR INSTRUCTIONAL USE**

# Financial Analysis

## *The Next Step*

Revised Edition

**James O. Gill**  
**Moira Chatton**

### **CREDITS:**

Editor: **L.K. Woodbury**

Product Manager: **Debbie Woodbury**

Copy Editor: **Charlotte Bosarge**

Production Editor: **Genevieve McDermott**

Production Artists: **Nicole Phillips, Rich Lehl, and Betty Hopkins**

Text Design: **Amy Shayne**

Cartoonist: **Ralph Mapson**

Production Artists: **Carol Lindahl, June Layton, Darin Stumme**

COPYRIGHT © 1992, 2001 Axzo Press. All Rights Reserved.

No part of this work may be reproduced, transcribed, or used in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, Web distribution, or information storage and retrieval systems—without the prior written permission of the publisher.

Visit us online at [www.courseilt.com](http://www.courseilt.com)

### **Trademarks**

Crisp Fifty-Minute Series is a trademark of Axzo Press.

Some of the product names and company names used in this book have been used for identification purposes only and may be trademarks or registered trademarks of their respective manufacturers and sellers.

### **Disclaimer**

We reserve the right to revise this publication and make changes from time to time in its content without notice.

**ISBN 10:** 1-56052-588-6

**ISBN 13:** 978-1-56052-588-2

Library of Congress Catalog Card Number 00-106653

Printed in the United States of America

10 11 12 09 08

**NOT FOR PRINTING OR INSTRUCTIONAL USE**

# Learning Objectives For:

## Financial Analysis, Revised Edition

The objectives for *Financial Analysis, Revised Edition* are listed below. They have been developed to guide the user to the core issues covered in this book.

### **THE OBJECTIVES OF THIS BOOK ARE TO HELP THE USER:**

- 1) Review of the basics of financial analysis
- 2) Become familiar with the contents of corporate financial statements
- 3) Learn about special statements such as inventory, depreciation, and retained earnings
- 4) Understand ratios concerning capitalization by common stock
- 5) Explore ways that ratios interact when one is changed
- 6) Learn how to use quick decision-making techniques
- 7) Gain tips on how to interpret an annual report

### **ASSESSING PROGRESS**

A Crisp Series **assessment** is available for this book. The 25-item, multiple-choice and true/false questionnaire allows the reader to evaluate his or her comprehension of the subject matter.

To download the assessment and answer key, go to [www.courseilt.com](http://www.courseilt.com) and search on the book title.

*Assessments should not be used in any employee selection process.*

# Preface

This book is a follow-up to *Understanding Financial Statements: A Primer of Useful Information*. It is written for someone who has a basic understanding of financial statements, knows the difference between cash and income, is familiar with the use of ratios, and can analyze expenses. These skills should be reviewed by either reading *Understanding Financial Statements*, taking a course in basic finance, or both.

The material and tools presented in this book should be reviewed several times. Go through the checklists and work the sample problems until you understand and feel comfortable with what is happening and why. Take it step-by-step; some of the concepts may be new, but with practice you will achieve a working relationship with each analytical tool. Your comprehension will help you know where and when to apply these tools and increase your understanding of the financial information available from corporations.

Good luck!

*Moira Chatton*  
Moira E. Chatton

## *About the Authors*

The late James O. Gill worked as Division Manager and Projects Manager with the Naval Weapons Support Center in Crane, Indiana. He was the author of *Financial Basics of Small Business Success*, *Financial Analysis*, and the first edition of *Understanding Financial Statements*, all published by Crisp Publications, Inc.

Moira E. Chatton has revised *Financial Analysis* as well as its companion book, *Understanding Financial Statements*. She earned a degree in biochemistry from the University of California, Berkeley, and an M.B.A. from the University of Georgia. Employed initially as a financial analyst by Chevron Chemical Company in San Francisco, she held a series of increasingly responsible and challenging positions in other Chevron companies. Since retiring from Chevron, Ms. Chatton provides in-house financial training to local businesses and teaches small business and finance courses at Santa Rosa Junior College and the University of Phoenix.

# Introduction

Business is constantly facing new challenges; never with greater frequency than today. International competition, technology that didn't even exist a few years ago, regulations from environmental and safety agencies, and globalization make it difficult to stay in business, let alone *grow* a business. You can't stop taking risks, but you can minimize them by giving more attention to the financial implications of each decision.

That's what this book is about. It is designed to provide easy-to-follow instructions to analyze your financial position and make it better. It can also be used as a reference manual. It provides definitions and explains terms that you, as an aspiring manager or small business owner, may hear during meetings or business conversations. It provides examples to increase your understanding, and it will help you speak with confidence about the affairs of your company.

As you use the tools in this book, you will discover which ones can be most beneficial to you. Please, do not try to memorize all of them. There is no exam or final grade. These tools are to be applied to the actual situations you encounter on your job. A calculator will be helpful when you work through the examples and the review at the end of each part of this book.

*Financial Analysis: The Next Step* is designed to teach a new or experienced manager how to be a better manager by providing the tools to analyze your part of the business, make better decisions, and help you understand the terms and language of financial statements and analysis. Your efforts to understand and use these tools will help make you more effective on the job and an important member of the management team!

# Contents

## Part 1: Reviewing The Basics

A Quick Refresher .....	3
The Balance Sheet Equation .....	4
Glossary of Balance Sheet Terms .....	5
The Income Statement .....	7
Glossary of Income Statement Terms .....	8
Ratios and Percentages .....	9
Review .....	15

## Part 2: Corporate Financial Statements

The Consolidated Statement .....	21
Your Company's Consolidated Statement .....	23
Analysis .....	24
Glossary of Additional Terms .....	26
The Income Statement .....	27
Your Company's Income Statement .....	28
Changes in Financial Position .....	29
Your Company's Changes in Balance Sheet Accounts .....	30
Analysis .....	31
The Cash Flow Statement .....	32
Your Company's Cash Flow Statement .....	34
The Statement of Retained Earnings .....	35
Checklist .....	36

## Part 3: Asset Management

Management of Current Assets .....	39
Managing Receivables Policy .....	40
JOG Corporation Notes .....	42
Projected Analysis for Your Company .....	44
Calculations .....	45
Inventory Valuation Methods .....	46
Valuing Your Company's Inventory .....	49
Depreciation .....	50
Review .....	53

**Part 4: New Ratios**

Ratios Help Make Decisions .....	57
Capital Stock/Market Ratios .....	58
Limitations of Ratio Use .....	66
Review .....	67

**Part 5: The Interaction of Ratios**

How Ratios Affect Each Other .....	71
The Makeup of Ratios .....	76
Checklist .....	77

**Part 6: Financial Planning**

Financial Planning .....	81
Break-Even Analysis .....	82
Margin of Safety .....	86
Leverage .....	87
Financial Leverage .....	89
Drawbacks to Using Break-Even Analysis .....	91
Decision-Tree Analysis .....	92
Example of Decision-Tree Analysis .....	93
Cost-Benefit Analysis .....	97
Review .....	99

**Part 7: Reading an Annual Report**

How to Read an Annual Report .....	103
Checklist .....	108

PREVIEW



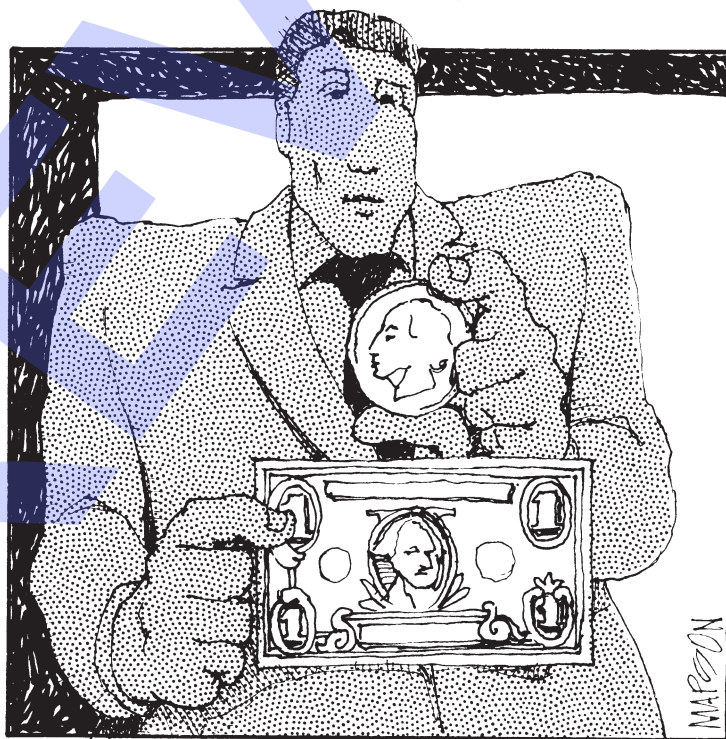
---

*P A R T*

---

1

# Reviewing the Basics



---

NOT FOR PRINTING OR INSTRUCTIONAL USE

PREVIEW

# A Quick Refresher

This part of the book is a quick review of the basics covered in the previous book, *Understanding Financial Statements*. This review will help you make the transition to a more complex balance sheet (sometimes called a statement of financial position) and income statement (often called a profit and loss statement or P&L).

In most corporate income statements, accounts are consolidated. This means that all revenues no matter what division or subsidiary they apply to are added together to reflect the parent company's total revenues. The same holds true for expenses. Detailed financial information, useful to individual managers, isn't always presented in an annual report, but managers usually receive an "internal" report detailing financial data relative to his or her area. If you get these reports at work and wish to analyze them, you can use the analysis techniques covered in the basic book, *Understanding Financial Statements*. That book is available from Crisp Publications, Inc., 1200 Hamilton Court, Menlo Park, California 94025, or from your bookstore.

If you are familiar with basic ratio and expense analysis, Part 1 of this book will serve as a quick refresher for you. Depending on your level of expertise, you may want to move directly on to Part 2, on page 21.

# The Balance Sheet Equation

The basic formula is:

$$\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity (often called Net Worth)}$$

A simple balance sheet looks like this:

XYZ HARDWARE AND BUILDING SUPPLY BALANCE SHEET YEAR END 20XX			
<b>ASSETS</b>		<b>LIABILITIES</b>	
<i>Current Assets</i>		<i>Current Liabilities</i>	
Cash	\$ 2,000	Notes Payable	\$ 18,000
Accounts Receivable	85,000	Accts Payable	205,000
Inventory	210,000	Accruals	6,000
Total Current Assets	\$ 297,000	Total Current Liabilities	\$ 229,000
<i>Fixed Assets</i>		<i>Long-Term Debt</i>	
Land/Bldg	\$ 60,000	Mortgage	\$ 25,000
Equip/Fix	55,000	Total Long-Term Debt	\$ 25,000
Depreciation	(15,000)		
Total Fixed Assets	\$ 100,000		
		Shareholders' Equity	\$ 143,000
<b>Total Assets</b>	<b>\$ 397,000</b>	<b>Total Liab &amp; Equity</b>	<b>\$ 397,000</b>

The balance sheet shows *assets*, *liabilities*, and *shareholders' or owners' equity*. The assets are divided into *current assets* and *fixed or long-term assets*. The liabilities are divided into *current liabilities* and *long-term debt*. The shareholders' equity is the difference between assets and liabilities.

**Note:**  $\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$ . Assets are what a company owns. *Liabilities* and *Shareholders' Equity* tells you how the company has paid for what it owns. Liabilities represent debt to outsiders, such as banks and other lenders. *Shareholders' Equity* represents what owners have invested in the company.

# Glossary of Balance Sheet Terms

## **Accounts payable**

Sometimes called trade payables, these are the total of all monies owed by the company to suppliers or vendors for raw material, products, services, or merchandise.

## **Accounts receivable**

The monies owed to the company (but not yet collected) for merchandise or products sold, or services performed.

## **Accruals**

Expenses, such as taxes or wages, that are accumulated against current profits but not yet due to be paid.

## **Assets**

The money, merchandise, receipts, land, buildings, and equipment that a company owns and that have monetary value. Assets are represented on the balance sheet at their historic cost (what the company paid for them).

## **Cash**

Money a business has control of and access to.

## **Current assets**

The sum of cash, notes, and accounts receivable (minus reserves for bad debts), advances on inventories, inventories, and any other item that can be converted into cash in a short time, usually less than a year.

## **Current liabilities**

The total of all monies owed by the company that will fall due within one year.

## **Depreciation**

The estimated decrease in value of a fixed asset over its useful life. This is classified as an expense on the income statement, thus reducing taxes. You will learn more about this in Part 3.

## **Fixed assets**

Land, buildings, building equipment, fixtures, machinery, tools, furniture, office devices, patterns, drawings; minus depreciation.

## **Inventory**

For a manufacturing firm, it is the sum of finished merchandise on hand, raw material, and material in process. For retailers and wholesalers, it is the stock of goods on hand that are for sale.

## Glossary of Balance Sheet Terms (CONTINUED)

### **Liabilities**

Liabilities are the company's debts. They include notes payable, accounts payable, and accruals. There are two categories of liabilities: current liabilities and long-term debt.

### **Long-term debt**

Sometimes called long-term liabilities, this represents all the obligations such as mortgages, bonds, term loans, and any other monies that come due more than one year from the date of the balance sheet.

### **Mortgage**

A legal document that pledges property (as security or collateral) to cover a debt.

### **Notes payable**

Money borrowed by the company that is to be paid back within one year.

### **Salvage value**

The estimated price for which a fixed asset can be sold at the end of its useful life.

### **Shareholders' Equity or Owners' Equity**

What the owners (the shareholders) have left when all the company's liabilities have been met. It is represented on a balance sheet as the difference between total assets and total liabilities. *Also called Net Worth, but remember this does not represent market or appraised value as most assets and liabilities appear on the balance sheet at their historic cost.*

# The Income Statement

Shown below is a simple profit and loss statement for a sole proprietorship:

PROFIT AND LOSS STATEMENT YEAR END 20XX	
Net Sales (Minus Allowances and Discounts)	\$ 700,000
Cost of Goods Sold	<u>500,000</u>
Gross Profit	200,000
Expenses	
Drawings (Owner's salary)	\$ 74,000
Wages	65,000
Delivery	7,000
Bad Debt	4,000
Telephone	2,000
Depreciation	4,000
Insurance	7,000
Taxes (Local)	8,000
Interest	8,700
Advertising	3,000
Miscellaneous	<u>2,000</u>
Total Expenses	\$ 184,700
<b>Net Earnings (Before Federal Taxes)</b>	<b><u>\$ 15,300</u></b>

The corporate statement looks like this:

JOG CORPORATION – INCOME STATEMENT YEAR END 20XX	
Net Sales	\$21,108,000
Cost of Goods Sold	<u>13,546,000</u>
Gross Profit	7,562,000
Operating expenses	<u>4,958,000</u>
Operating Profit	2,604,000
Interest charges	<u>278,000</u>
Earnings before taxes	2,326,000
Income taxes (35%)	<u>814,100</u>
Net earnings	1,511,900
Retained earnings at the beginning of the year	<u>3,080,000</u>
	4,591,900
Dividends paid (\$ .30/share; 1,000,000 shares outstanding)	<u>300,000</u>
Retained earnings at the end of the year	<u>\$ 4,291,900</u>

# Glossary of Income Statement Terms

## **Cost of goods sold**

For a retail or wholesale business, it is the total price paid for the products sold during the accounting period, plus the cost of having the products delivered to the store. For a manufacturing firm, it is the beginning inventory plus purchases, delivery costs, material, labor, and overhead, minus the ending inventory.

## **Dividend**

The portion of a corporation's net earnings paid to shareholders at a specified rate per share.

## **Earnings before interest and taxes (EBIT)**

As used in this book, it refers to earnings before interest costs or federal taxes are deducted.

## **Earnings before taxes (or Net profit)**

As used in this book, it refers to the profit before paying federal taxes.

## **Expenses**

The cost of doing business. It includes such items as wages, telephone, insurance, depreciation, interest, and advertising. Often called *operating expenses*.

## **Gross profit**

The profit before expenses, interest, other charges, and federal taxes have been deducted.

## **Net earnings**

The amount left over after deducting all due bills for the accounting period and paying off all due interest and federal taxes.

## **Net sales**

The total dollar value of all sales minus returns, allowances, discounts, and rebates. *Net sales rather than gross sales are used to reflect the actual economic or revenue generating sales of the company.*

## **Retained earnings**

The portion of a corporation's net earnings not paid to shareholders in the form of dividends. Retained earnings are reinvested in the company. They accumulate over the life of the company.