

Diana R. Harrington



Corporate
Financial Analysis
In a Global Environment

CORPORATE FINANCIAL ANALYSIS

In a Global Environment

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This book is printed on acid-free paper.

The author would like to dedicate this book to her daughter Maya Anna
Maria del Carmen Harrington and her Papa.

P R E F A C E

Corporate Financial Analysis was written with the objective of discussing financial analysis as it relates to managerial decision making. The goal of the manager is to enhance the value of the company. Managers can create value through the financial decisions they make, and good financial analysis can assist the manager in making better decisions—decisions that enhance the value of the firm. Companies that create value, especially if their stock prices are low, are of interest to investment managers. Value creation, and the role that good analysis can play in helping the manager to make value-enhancing decisions, is the topic of this book.

This book takes a practical orientation toward value. Thus it does not present abstract financial theory or rigorous mathematical proofs; rather, it explains how the tools, concepts, and theories of finance can be used to improve decision making. Current examples of actual business situations are used throughout the book to illustrate the application of modern financial theories and techniques. In acknowledgment of our shrinking world and the multinational character of the financial arena in which managers operate and students will enter, this sixth edition also contains explanations of commonly needed concepts in international finance.

USING THIS BOOK

The book was written for three different groups of readers. First, the book is intended to be used by students studying finance. Although written as a companion reference for students taking finance case courses, the book also has been and will continue to be useful for students who want a basic supplement to a more advanced textbook, a book in security analysis, or for instructors who wish to discuss the practical applications of concepts presented in more theoretical finance courses.

Second, the book is useful for executive management education in courses where basic techniques of financial analysis are needed or used. Experience in teaching executives suggests that a straightforward, pragmatic approach is required in such courses, and this book was written and revised with this requirement in mind.

Third, the book can serve as a useful reference for the practicing manager or investment analyst who wants a review of financial concepts and techniques. Thus the book can be used effectively as a stand-alone reference.

Since managers and students of management can best develop the ability to apply techniques and concepts of financial decision making through practice, problems are included at the end of each chapter. The reader is encouraged to work through these problems and refer to the solutions in the appendix at the end of the book.

ACKNOWLEDGMENTS

The book is a compilation of ideas and materials developed during the past few years at Babson College, the Darden Graduate School of Business at the University of Virginia, the Kellogg School of Management at Northwestern University, and by my previous author, Brent Wilson at Brigham Young University and Nexus Consulting Group. The material has benefited from the responses of colleagues and students in undergraduate and MBA classes, and has been refined through the comments of executives attending executive management courses.

Many people have directly or indirectly contributed to the quality of the material in this book. Brent Wilson co-authored the first three editions. Colleagues, students, and business executives not only encouraged the writing of each edition, but have made helpful suggestions for improving the presentation of the concepts and ideas. For this edition, James Parrino of the Nexus Consulting Group and Babson College, and Virginia Soybell of Babson College contributed directly in international accounting. Diane Lander of Babson College made significant contributions to the real options material. I thank them all.

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Analyzing Corporate Performance

Over the past decade, our world has changed more profoundly and more rapidly than we could ever have believed. Not only have political systems been challenged and changed, but many of the basic notions on which we have based personal and corporate financial decisions have been contested. Companies now have to compete with others from all over the world for customers and for suppliers of labor, goods, and capital. The markets for goods and capital have become increasingly integrated, and will continue to do so.¹ At the same time, the Internet has added both challenges to existing systems for doing business and opportunities to create totally new ways to market, sell, manage, communicate, and inform. Information that was once privately held or held only by experts now is widely available with the click of a computer mouse, and communications are virtually instantaneous. The Internet has made business truly global, and we have just begun to see the possibilities and implications for doing business using it. What is certain is that managers of companies have to be flexible, creative, and pay close attention to the world around them.²

These changes have profoundly affected all our lives, and it is important for corporate managers, shareholders, lenders, customers, and suppliers to understand the past and future performance of the companies on which they rely. All who depend on a company for products, services, or a job must be informed about the company's ability to meet their demands over time as the world changes and businesses adapt.

This chapter's purpose is to provide the basic tools that any individual can use to begin an analysis of business performance and strength. These tools are often mathematical and are simple to calculate, but they require some experience to use well. Your skill in using them will increase with experience.

¹ In fact, we have been seeing the formation of economic cartels. The first of these was in the European Common Market, where much more complete economic integration culminated in Europe in 1992 and in currency integration in 1999. In addition, other economic unions, such as NAFTA and MERCOSUR, have been or are forming in South and North America and Asia.

² In fact, one of the biggest changes management must face is in the rapid introduction of substitute products and methods of delivery that have been created by the Internet.

I. WHO NEEDS TO ANALYZE AN ENTERPRISE'S PERFORMANCE?

All kinds of people need insight into business performance:

Customers: The company's customers are concerned with the company's viability as a vendor of goods or services. Qualified vendors are able to fulfill both their contractual obligations and the customers' needs, and will be able to provide product innovations and future service for their products.

Suppliers: Suppliers provide the resources that a company uses:

Goods and services: Individuals and companies that provide goods and/or services to a company are concerned with whether the company can pay its obligations on time and whether it will continue to be a customer. These suppliers also include those who work for the company, supplying labor.³

Capital: Money is a good that is provided to businesses by lenders and by shareholders. Lenders are concerned with the company's ability to pay the interest, repay the loan, and abide by the loan covenants (the requirements) during the time that the loan is outstanding. Shareholders (the company's owners and potential owners) are interested in evaluating the skill of the company's management and in determining the financial strength of a company as they think about the company's future and its value.⁴

Employees: Employees are a special group of suppliers. They supply the labor needed by the company, and because of their intimate relationship with the company they need to better understand the forces affecting it. The future of their company, the industry, and their jobs depends upon them understanding the company's potential and contributing to its innovation.

The topic of this chapter is evaluating and interpreting a company's historical financial performance. First, you will be introduced to the basic financial statements provided by companies. Second, you will be shown how to calculate and interpret ratios created from information contained in the company's financial statements. Finally, using three simple ratios, you will see how to relate corporate financial performance to the shareholders' response to past and anticipated performance. The chapter uses information from an actual com-

³ In the 1980s and 1990s, a significant number of the largest U.S. companies with publicly traded stock changed ownership. Many of these ownership changes also resulted in serious reductions in their work forces. In the late 1990s the increasing number of cross-border mergers had serious implications for employees in many countries.

⁴ The value of a company is determined by many things—its earning power, the sustainability of its earnings, the riskiness of the business it is in, and how management conducts the business. Each of these topics will be explored in this book.

pany operating in the United States, and the appendix to this chapter shows you how to extend this analysis to companies operating in different countries.⁵

Remember, the past performance of a company, as shown in its financial statements, may help predict future performance. However interesting past performance may be though, managers and analysts really are more interested in what will happen in the future. Chapter 2 will describe how historical statements and analysis of those statements can be used to help forecast the future. To start this analysis let's look first at the raw material we have to work with: the various financial statements that most companies provide to their internal and external analysts.

II. FINANCIAL STATEMENTS

The types of financial information published in financial statements vary among countries, each of which has different requirements for disclosure of information. Most industrialized countries require that financial statements disclose sufficient data to allow a meaningful analysis of performance. Regulations in the United States, the United Kingdom, other Commonwealth countries, and the European Union require the most complete disclosure. The growing trend of major international companies to raise funds in foreign capital markets has meant that these multinational companies provide at least the minimum level of financial information expected by investors in the countries where they are raising capital.

In all countries, public disclosure requirements apply only to publicly owned companies.⁶ Privately owned companies—companies owned by a small group, such as management or a family—may not be required to disclose any financial information to the public. However, some groups, such as lenders or private investors, often have access to financial statements from privately owned companies.

In the United States, publicly owned companies are required to prepare four financial statements: statements of earnings, of financial position, of cash flows, and of changes in shareholders' equity. Typically, these statements are prepared quarterly.

1. Statement of Earnings

The **statement of earnings**, also known as the **income statement** or **profit and loss statement**, shows the total revenues earned and the total expenses in-

⁵ In this chapter we will use U.S. companies because many of you are based in the United States, or deal with U.S.-based companies. Thus you are more familiar with U.S. accounting principles. A truly useful and comprehensive analysis of a company should, however, include the performance of its worldwide components and competitors. For that, a knowledge of other countries' accounting standards is needed. A brief discussion of this topic appears in the appendix to this chapter.

⁶ Publicly held companies are those whose equity (common stock) is traded in the capital markets.

curred to generate these revenues during a specific period of time. The difference between revenues and expenses is termed **net income** (also known as earnings, profit, or margin) or **net loss** for the period.

This statement of earnings summarizes all revenue or expense transactions during a specified period of time, the reporting period. A **quarterly report** includes the transactions made during a three-month reporting period. An **annual report** includes all income and expense items for a year.⁷ Exhibit 1-1 is an example of an annual statement of earnings.⁸ It is the 1998 statement for Hannaford Bros. Co., a U.S. supermarket chain.⁹ The company is involved in the distribution and retail sale of food, prescription drugs, and related products through supermarkets and combination stores. Hannaford is a multi-regional food retailer, with 148 supermarkets located throughout Maine and New Hampshire, and in parts of Vermont, Massachusetts, New York, Virginia, North Carolina, and South Carolina, primarily under the names Shop'n Save, Sun Foods, and Wilson's. Its private brands are under the labels of Shop'n Save, Bonnie Maid, and Green Meadow. During 1998 Hannaford remodeled stores in

EXHIBIT 1-1 Hannaford Bros. Co.

CONSOLIDATED STATEMENT OF EARNINGS FOR THE YEARS ENDED DECEMBER 31 (in thousands)

Summary of Operations:	1998	1997
Sales and other revenues	\$3,323,588	\$3,226,433
Cost of sales	2,480,346	2,427,287
Gross margin	843,242	799,146
Selling, general, and administrative expenses	664,357	635,355
Impairment loss		39,950
Operating profit	178,885	123,841
Interest expense, net	26,577	26,425
Earnings before income taxes and minority interest	152,308	97,416
Income taxes	57,661	37,769
Net earnings	\$ 94,647	\$ 59,647

⁷ For many companies the year end coincides with the end of the calendar year; for others the year end is chosen to coincide with an appropriate time in its business cycle. For instance, for a seasonal business the year end might be when inventories and accounts receivable are low.

⁸ Note that expenses, or negative numbers, are identified by parentheses in some financial statements. In others, for instance, in Hannaford's statement of earnings, the reader is expected to know that expenses are deductions. As a reader of financial statements you will become accustomed to the variety of reporting schemes.

⁹ Note that the Hannaford financial statements used in this chapter's examples use the term **consolidated**. This means that subsidiaries owned by Hannaford are operated and treated as if they were fully integrated into the company's activities.

the northeast where Wal-Mart was expected to enter the grocery business, opened eight new stores, and continued to invest in HomeRuns®, its home delivery business operating primarily in the Boston area. The company also operated 100 pharmacies within its supermarkets and combination stores and sold goods to independent wholesale customers.

2. Statement of Financial Position

The **statement of financial position** is also referred to as the **balance sheet**. This statement reports the corporation's assets, liabilities, and owners' equity at a particular date in time, which is usually the end of the reporting period. The corporation's assets must equal or balance the funds used to purchase the assets (hence the term balance sheet). Funds provided by lenders are recorded on the balance sheet as liabilities; funds provided by shareholders are recorded as owners' equity, or shareholders' equity for publicly held corporations.

The statement of financial position, the balance sheet, differs from the statement of earnings in that it reports the firm's status at a point in time, the end of the reporting period. While the statement of earnings reports on the flow of transactions or funds, the statement of financial position reports on the resulting financial status. Thus a quarterly report specifies the status of the assets, liabilities, and owners' equity at the end of a quarter; an annual report indicates status at the conclusion of the reporting year. The Hannaford statements of financial position, or balance sheets, for the years ended 1998 and 1997 are presented in Exhibit 1-2. Note that Hannaford Bros. Co.'s fiscal year is the same as the calendar year.

3. Statement of Cash Flows

A company generates new financial resources in several ways: by borrowing additional funds, issuing new owners' equity, retaining the period's earnings, and/or decreasing assets (for instance, selling excess equipment). The resources thus generated can be used to increase assets by purchasing new equipment, decrease liabilities by paying off loans, or decrease owners' equity by paying a dividend or repurchasing outstanding shares. Previously known as the **statement of changes in financial position** or **funds flow statement**, the **cash flow statement** reports the amounts of cash generated by the company during the period, as well as the disposition of cash. The difference between the sum of the sources of cash and the sum of its uses is typically reported as a change in cash, as used by Hannaford, or as a change in net working capital.¹⁰

The cash flow statements for 1998 and 1997 from the 1998 Hannaford Bros. Co. Annual Report are shown in Exhibit 1-3.

Another handy way an analyst can determine the changes that occurred over the period is to create a **statement of sources and uses**. This statement is

¹⁰ **Net working capital** is current assets minus current liabilities.

EXHIBIT 1-2 Hannaford Bros. Co.**STATEMENT OF CONSOLIDATED FINANCIAL POSITION (in thousands)**

	<u>1/2/1998</u>	<u>1/3/1997</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 59,722	\$ 57,663
Accounts receivable, net	22,869	14,918
Inventories	201,219	188,767
Prepaid expenses	6,116	7,801
Deferred income taxes	5,952	6,912
Total current assets	295,878	276,061
Property, plant, and equipment, net	823,368	777,909
Leased property under capital leases, net	54,911	58,516
Other assets:		
Goodwill, net	63,517	67,552
Deferred charges, net	25,074	28,724
Computer software costs, net	19,318	16,551
Miscellaneous assets	2,472	1,877
Total other assets	110,381	114,704
Total assets	\$1,284,538	\$1,227,190
Liabilities and Shareholders' Equity		
Current liabilities:		
Current maturities of long-term debt	\$ 19,296	\$ 18,155
Obligations under capital leases	2,108	1,873
Accounts payable	186,626	182,252
Accrued payroll	27,254	25,526
Other accrued expenses	23,873	24,553
Income taxes	442	2,829
Total current liabilities	259,599	255,188
Deferred income tax liabilities	28,859	18,265
Other liabilities	38,734	41,171
Long-term debt	220,130	235,850
Obligations under capital leases	73,866	75,687
Shareholders' equity:		
Common stock, par value \$.75 per share		
Authorized 110,000 shares;		
42,338 shares issued.	31,754	31,754
Additional paid-in capital	109,664	115,130
Preferred stock purchase rights	423	423
Retained earnings	525,344	456,063
Total equity	667,185	603,370
Less common stock in treasury	3,835	2,341
Total shareholders' equity	663,350	601,029
Total liabilities and shareholders' equity	\$1,284,538	\$1,227,190

EXHIBIT 1-3 Hannaford Bros. Co.**STATEMENT OF CONSOLIDATED CASH FLOWS
AS OF DECEMBER 31 (in thousands)**

	1998	1997
Cash flows from operating activities:		
Net income	\$ 94,647	\$ 59,647
Adjustments to reconcile net income to net cash provided by operating activities:		
Impairment loss	0	39,950
Depreciation and amortization	96,739	93,953
Decrease (increase) in inventories	(12,452)	2,891
Decrease (increase) in receivables and prepaids	(6,202)	599
Increase (decrease) in accounts payable and accrued expenses	2,986	440
Increase (decrease) in income taxes payable	(2,387)	297
Increase (decrease) in deferred taxes	11,554	(7,815)
Other operating activities	(1,081)	(446)
Net cash provided by operating activities	183,804	189,516
Cash flows from investing activities:¹¹		
Acquisition of property, plant, and equipment	(135,904)	(152,862)
Sale of property, plant, and equipment	9,156	6,143
Increase in computer software costs	(7,262)	(6,205)
Decrease (increase) in deferred charges	911	(4,054)
Net cash used in investing activities	(133,099)	(156,978)
Cash flows from financing activities:¹²		
Principal payments under capital lease obligations	(1,740)	(1,788)
Proceeds from issuance of long-term debt	20,000	26,600
Payments of long-term debt	(34,580)	(14,418)
Issuance of common stock	11,048	9,648
Purchase of treasury stock	(18,008)	(14,379)
Dividends paid	(25,366)	(23,043)
Net cash (used in) provided by financing activities	(48,646)	(17,380)
Net increase in cash and cash equivalents	2,059	15,158
Cash and cash equivalents at beginning of year	57,663	42,505
Cash and cash equivalents at end of year	\$ 59,722	\$ 57,663

not one that you will find in an annual report, just a rather straightforward way for an analyst to determine where money went and where it came from. To create this statement the analyst simply compares the current statement of financial position with that of the previous reporting period. This analysis can highlight the changes that have occurred in the company's financial position

¹¹ Activities having to do with managing resources.

¹² Activities having to do with funding assets.