THE FRANK J. FABOZZI SERIES

Analysis of Financial Statements

Second Edition

WILEY FINANCE



Pamela P. Peterson & Frank J. Fabozzi

Financial Statements

Second Edition

PAMELA P. PETERSON FRANK J. FABOZZI



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In Analysis of Financial Statements, we introduce you to the tools and techniques of financial analysis. We also provide a foundation for financial analysis with the goal of assisting you in the analysis of the financial condition and operating performance of a company.

This book is the second edition of Analysis of Financial Statements, which was first published in 1999. The most significant difference between this book and the previous edition is the role of the Sarbanes-Oxley (SOX) Act of 2002, which affects disclosures, the role of auditors, the role of financial analysts, and even the information set with which analysts have to work. We have incorporated the changes from the SOX Act throughout this book and discuss the key events that inspired the SOX Act.

You will notice throughout this book that we emphasize the importance of assessing the quality of the financial data. Though it is important to understand how to calculate financial ratios and measures, look at trends, use credit models, and the like, it is even more important to understand the data with which you are working. The recent corporate scandals, in which the managers of some high profile companies had manipulated financial data, have brought to the forefront the need to understand the quality of the data that we work with in financial analysis. Though the SOX Act has enhanced disclosures and, through significant penalties, discouraged financial data misdeeds, the financial analyst must continue to be diligent in assessing the quality of the data that is available for analysis.

We structure the book into three parts. In Part One, we introduce you to financial analysis, discuss the available financial information, and then focus on the quality of the information. In Part Two, we present different ways of analyzing financial data, including financial ratios and cash flow analysis. We also discuss the pitfalls that you may encounter in analysis, citing numerous actual cases to illustrate these pitfalls. In Part Three, we apply these financial analysis tools developed in Part Two to valuation, credit analysis, and fundamental factor models. We close the book with a recap of the lessons that we have learned.

Pamela P. Peterson Frank J. Fabozzi

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One

The Basics

Introduction

The investments arena is large, complex, and dynamic. These characteristics make it interesting to study, but also make it challenging to keep up with. What changes? Laws and regulations, the introduction of new types of securities and derivatives, innovations in markets and trading, an economy that is persistently changing, and company events, to name a few. Add to this mix the political, technological, and environmental changes that occur throughout the world every day, and you have quite a task to understand investment opportunities and investment management.

There is a wealth of financial information about companies available to financial analysts and investors. The Internet has made vast amounts of information available to everyone, displacing print as a means of communication. Consider the amount of information available about Microsoft Corporation. Not only can investors find annual reports, quarterly reports, press releases and links to the companies' filings with regulators on Microsoft's web site, anyone can download data for analysis in spreadsheet form and can listen in on Microsoft's management's conversations with analysts.

Availability and convenience has eased the data-gathering task of financial analysis. What remains, however, is the more challenging task of analyzing this information in a meaningful way. Recent scandals involving financial disclosures increase the importance of knowing just how to interpret financial information. In response to these scandals, Congress passed the Sarbanes-Oxley (SOX) Act of 2002, which increases the responsibility of publicly traded corporations, accounting firms performing audits, companies' management, and financial analysts. And while this Act is an attempt to restore faith in financial disclosures, investors and analysts must still be diligent in interpreting financial data

in a meaningful way. The purpose of this book is to assist the analyst and investor in understanding financial information and using this information in an effective manner.

WHAT IS FINANCIAL ANALYSIS?

We focus on financial analysis in this book, which is the selection, evaluation, and interpretation of financial data and other pertinent information to assist in evaluating the operating performance and financial condition of a company. The operating performance of a company is a measure of how well a company has used its resources—its assets, both tangible and intangible—to produce a return on its investment. The financial condition of a company is a measure of its ability to satisfy its obligations, such as the payment of interest on its debt in a timely manner.

Financial reporting is the collection and presentation of current and historical financial information of a company. This reporting includes the annual reports sent to shareholders, the filings with the Securities and Exchange Commission for publicly traded companies, and press releases and other reports made by the company. Financial analysis takes that information—and much more—and makes sense out of in terms of what it says about the company's past performance and condition and—more importantly—what it says about the company's future performance and condition.

The financial analyst must determine what information to analyze (e.g., financial reports, market information, economic information) and how much information (Five years? Ten years?). The analyst must sift through the vast amount of information, selecting the information that is most important in assessing the company's current and future performance and condition. A part of this analysis requires the analyst to assess the quality of the information. Though publicly traded companies must report their financial information according to generally accepted accounting principles (GAAP), there is still some leeway that the reporting company has within these principles. The analyst must understand the extent of this leeway and what this implies for the company's future performance.

The analyst has many tools available in the analysis of financial information. These tools include financial ratio analysis and quantitative analysis. The analyst must understand how to use these tools in the most effective manner.

WHAT HAPPENS IF WE ARE NOT LOOKING CLOSELY AT FINANCIAL INFORMATION?

Several of the scandals that arose in the past few years were actually detectable using basic financial analysis and common sense. It is not possible to spot all cases of fraud and manipulation, but there are some telltale signs that should raise caution flags in analysis. Examples of these signs:

- Revenue growth that is out of line with others in the same industry or not reasonable given the current economic climate
- Profits that are increasing at a much faster rate than cash flows generated from operations
- Debt disappearing from the balance sheet

Consider Enron Corporation, Enron's revenues grew from a little over \$13.5 billion to over \$100 billion in the 10-year period from 1991 through 2000 as shown in Exhibit 1.1; in other words, its revenues grew at an average rate of over 25% per year. During this period, Enron's debts grew too, from 76% of its assets to over 82% of its assets. Enron experienced significant growth and reported significant debt, becoming one of the largest corporations in the United States within 15 years of becoming a publicly traded corporation.

Since 2001 Enron has been embroiled in a financial scandal that involved removing debt from its balance sheet into special purpose enti-

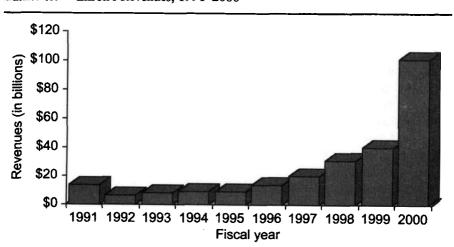


EXHIBIT 1.1 Enron's Revenues, 1991–2000

Source: Enron, Inc. 10-K filings, various years.

ties. While the scandal was shocking, Enron had actually provided information in its financial disclosures that hinted at the problems.

Enron disclosed in footnotes to its 2000 10-K filing that it had formed wholly owned and majority-owned limited partnerships "for the purpose of holding \$1.6 billion of assets contribute by Enron." [Enron 10-K, 2000] The result?

- 1. Assets and liabilities of Enron did not appear directly in its balance sheet.
- 2. Gains on Enron stock invested in by these partnerships found their way to Enron's income statement.

The most notorious deal involved Joint Energy Development Investment Limited Partnership II (JEDI II). Enron executives created this partnership using Enron funds and loans fed through Chewco Investments. Though accounted for as a special purpose entity, with its assets and liabilities removed from Enron's balance sheet, there was insufficient *independent* ownership of the entity to qualify JEDI II as a special purpose entity because Chewco was essentially Enron.

In all of this, keep in mind that Enron left a trail for the analyst to find in the filings of Enron and these entities. The limited partnerships and their relation to Enron were reported in the footnotes to Enron's filings and in other filings with the SEC. Not all the pieces were there, but enough to raise concerns.

WHERE DO WE FIND THE FINANCIAL INFORMATION?

There are many sources of information available to analysts and investors. One source of information is the company itself, preparing documents for regulators and distribution to shareholders. Another source is information prepared by government agencies that compile and report information about industries and the economy. Still another source is information prepared by financial service firms that compile, analyze, and report financial and other information about the company, the industry, and the economy.

The basic information about a company can be gleaned from publication (both print and Internet), annual reports, and sources such as the federal government and commercial financial information providers. The basic information about a company consists of the following:

- Type of business (e.g., manufacturer, retailer, service, utility)
- Primary products

- Strategic objectives
- Financial condition and operating performance
- Major competitors (domestic and foreign)
- Degree of competitiveness of the industry (domestic and foreign)
- Position of the company in the industry (e.g., market share)
- Industry trends (domestic and foreign)
- Regulatory issues (if applicable)
- **■** Economic environment
- Recent and planned acquisitions and divestitures

A thorough financial analysis of a company requires examining events that help explain the firm's present condition and affect on its future prospects. For example, did the firm recently incur some extraordinary losses? Is the firm developing a new product, or acquiring another firm? Current events can provide useful information to the financial analyst. A good place to start is with the company itself and the disclosures that it makes—both financial and otherwise.

Most of the company-specific information can be picked up through company annual reports, press releases, and other information that the company provides to inform investors and customers about itself. Information about competitors and the markets for the company's products must be determined through familiarity with the products of the company and its competitors. Information about the economic environment can be found in many available sources. We take a brief look at the different types of information in the remainder of this chapter.

WHO GETS WHAT TYPE OF INFORMATION AND WHEN?

Disclosures Required by Regulatory Authorities

Companies whose stock is traded in public markets are subject to a number of securities laws that require specific disclosures. Several of these securities laws are described briefly in Exhibit 1.2. Publicly traded companies are required by these securities laws to disclose information through filings with the Securities and Exchange Commission (SEC). The SEC is a federal agency that administers federal securities laws.

The SEC, established by the Securities and Exchange Act of 1934, carries out the following activities:

- Issues rules that clarify securities laws or trading procedure issues
- Requires disclosure of specific information

EXHIBIT 1.2 Federal Regulations of Securities and Markets in the United States

Law	Description
Securities Act of 1933	Regulates new offerings of securities to the public; requires the filing of a registration statement containing specific information about the issuing corporation and prohibits fraudulent and deceptive practices related to security offers
Securities and Exchange Act of 1934	Establishes the Securities and Exchange Commission (SEC) to enforce securities regulations and extends regulation to the secondary markets
Investment Company Act of 1940	Gives the SEC regulatory authority over publicly held companies that are in the business of investing and trading in securities
Investment Advisers Act of 1940	Requires registration of investment advisors and regulates their activities
Federal Securities Act of 1964	Extends the regulatory authority of the SEC to include the over-the-counter securities markets
Sarbanes-Oxley Act of 2002	Wide-ranging law that creates the Public Accounting Oversight Board, requires auditor independence, increases corporate responsibility for financial disclo- sures, enhances financial disclosures, and extends the authority of the SEC

- Makes public statements on current issues
- Oversees self-regulation of the securities industry by the stock exchanges and professional groups such as the National Association of Securities Dealers

A publicly traded company must make a number of periodic and occasional filings with the SEC. In addition, major shareholders and executives must make periodic and occasional filings. A number of these filings are described in Exhibit 1.3. Company filings to the Securities and Exchange Commission are available free, in real-time, from the SEC's EDGAR web site, at www.sec.gov.

By law the SEC has the authority to specify accounting principles for corporations under its jurisdiction. The SEC has largely delegated this responsibility to the Financial Accounting Standards Board (FASB). While recognizing FASB Statements of Financial Accounting Standards (SFAS) as authoritative, the SEC also issues accounting rules, often dealing with supplementary disclosures. Therefore, the financial information provided in the company's 10-K filing is more comprehensive than that provided in its annual report provided to shareholders.

Summary of Filings of Publicly Traded Companies, Their Owners, and Executives EXHIBIT 1.8

Statement	Purpose	Information
10-K report	Annual disclosure of financial information required of all publicly traded companies; due 90 days following the company's fiscal year-end	Description of the company's business, financial statement data found in the company's annual report, notes to the financial statements, and additional disclosures including a management discussion and analysis
10-Q report	Quarterly disclosure by publicly traded companies; required 45 days following the end of each of the company's first three fiscal quarters	A brief presentation of quarterly financial statements, notes, and management's discussion and analysis
8-K filing	Filed to report unscheduled, material events or events that may be considered of importance to shareholders of the SEC	Description of significant events that are of interest to investors and are filed as these events occur
Prospectus	Filing made by a company intending to issue securities, registration statement complying with the Securities Act of 1933	Basic company and financial information of the issuing company
Proxy statement (Schedule 14A) ^a	Issued by the company pertaining to issues to be put to a vote by shareholders; complies with Regulation 14A; circumstances that are required for a vote are determined by state law	Description of issues to be put to a vote; management's recommendations regarding these issues; compensation of senior management; shareholdings of officers and directors

^a There are different types of proxy: preliminary, confidential, and definitive. The most common is the definitive proxy, generally indicated with the abbreviation DEF (e.g., DEF 14A).

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