5

INTRODUCTION TO FINANCIAL STATEMENTS

LEARNING OBJECTIVES

After studying this chapter, you should be able to

- discuss the role and purpose of financial analysis in the commercial lending process
- describe the analytical considerations of financial statement analysis
- explain the basic steps in the financial analysis process: obtaining, processing, spreading, and interpreting financial statements
- describe the types of externally prepared financial statements
- define the key terms listed in this chapter

KEY TERMS

accrual accounting
adverse audit opinion
audit
cash accounting
common-sizing
compilation statement
disclaimer audit opinion
Financial Accounting Standards Board (FASB)
financial statement analysis
footnotes
Generally Accepted Accounting Principles (GAAP)
management letter
qualified audit opinion
review statements
Securities and Exchange Commission (SEC)
spreading financial statements
unqualified audit opinion

INTRODUCTION

"Numbers talk and bankers need to listen." For commercial lenders, this statement is a maxim, and commercial lender, Thomas Scott, presents a case-in-point. It is 8 a.m. on a bright sunny day when Scott enters his office. He is feeling optimistic, full of energy. In one hand, he holds a cup of coffee and in the other a thick file. He places the file on his desk, takes a sip of coffee, turns on his computer, and sits down. Looking at the file, Scott smiles and says, "Okay, from what I've learned from you and from those with whom you do business, it appears:

- you operate the type of business we want to have as a customer
- the loan purpose is compatible with our loan policy
- the loan request has a defined source of repayment
- the business has compiled an operating and credit record consistent with the bank's lending standards.

Now let's go over your statements and see whether your past financial performance is also satisfactory and whether all signs indicate that it will remain so throughout the life of the loan."

With that undertaking in mind, Scott uploads his spreadsheet program, takes a pencil in hand, opens the file and starts the analysis of the customer's financial statements.

By performing financial statement analysis, Scott is "listening to the numbers," assessing the customer's financial performance to date, and making conclusions about the future prospect for loan repayment.

Although entire textbooks have been devoted to financial analysis as used in commercial lending, this chapter will focus on the role and purpose of financial analysis, the basic steps in financial statement analysis, from obtaining and processing statements to analyzing and interpreting the information in those statements; some basic analytical techniques; and the types of statements prepared and analyzed.

ROLE AND PURPOSE OF FINANCIAL STATEMENT ANALYSIS

Financial statement analysis is the systematic examination and interpretation of financial data to evaluate a business's past performance, its present condition, and its likelihood of future success. It is the basic review a commercial lender conducts when deciding whether or not to make a commercial loan. Financial statement analysis is, as well, essential for determining possible terms and conditions and for identifying the type of monitoring needed until the loan is repaid

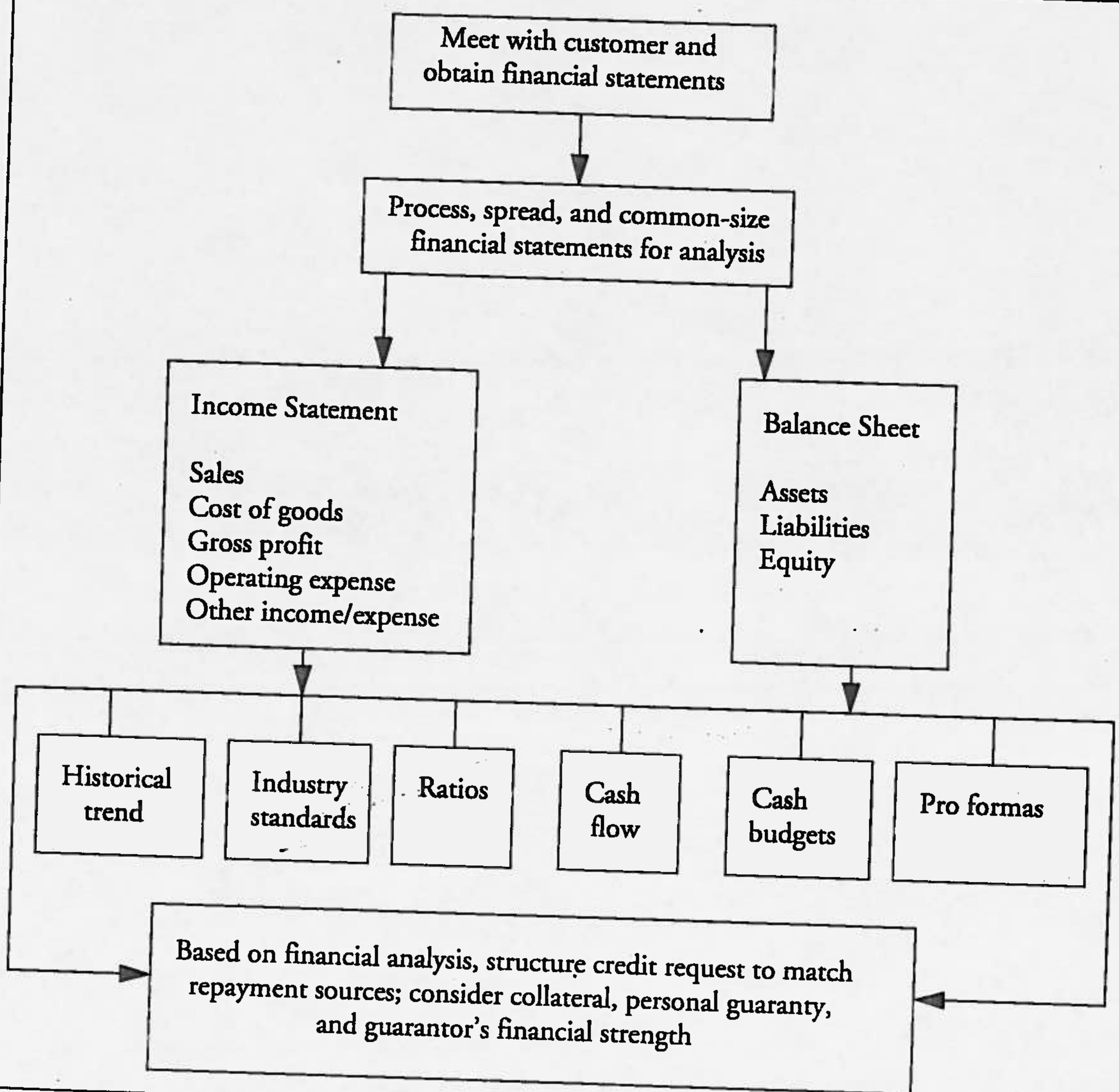
As an indispensable follow-up to loan interviewing, credit investigation, and preliminary negotiated terms, financial statement analysis moves from the investigation of the customer to an in-depth examination of operating performance, as revealed by the customer's historical and, in many cases, projected financial statements.

Good communication and analytical skills are required when conducting a proper financial statement analysis. However, in a financial analysis, the business's financial statements do the "talking." By knowing what questions to ask and how to "listen" and interpret the answers, a commercial lender can pinpoint a business's strengths, weaknesses, and critical issues. From these determinations, the lender can begin to predict a customer's future capacity to repay debt. Financial statement analysis is fundamentally important to the lending decision and to the monitoring process that begins once the loan is closed, including early identification of problem loans.

FINANCIAL STATEMENT ANALYSIS PROCESS

When conducting a financial analysis, most banks follow a systematic approach to obtain statements, organize and present the information on those statements, and evaluate and interpret the data by using several analytical techniques. Exhibit 5.1 summarizes the financial analysis process. Delegation of these tasks varies with the size of the bank.

Exhibit 5.1
Financial Analysis Process



In a large bank with separate lending and credit departments, different individuals are responsible for receiving and logging-in statements, spreading statements and calculating ratios, and interpreting data. In a small bank, the commercial lender may be responsible for every aspect of financial analysis. Another practice followed by some banks is for the commercial lender to spread and analyze financial statements received on active loans as part of an ongoing periodic monitoring process, whereas the credit department performs these functions for statements received from business prospects. Financial analysis, regardless of the division of responsibility, involves the same process at all banks. The first step is for the banker to obtain all necessary financial information.

Obtaining Statements

Most banks have guidelines for the type and number of statements to obtain for a comprehensive financial analysis. When considering a loan request from a new customer who operates an established business, a bank might require three year's worth of income statements, balance sheets for the most recent years, and two or three interim statements for consecutive periods (such as quarterly or monthly). The commercial lender may ask the customer to bring this information to the initial loan interview.

During the interview or credit investigation, the commercial lender may discover the financial statements do not provide enough information. The customer, rather than a certified public accountant (CPA), for example, may have prepared the statements. The commercial lender, to crosscheck that the financial information provided is reasonably accurate, should obtain and review the income tax returns for the same period. Similarly, copies of pro forma statements or cash budgets are necessary if, after reviewing past statements, an examination of the business's future direction is needed. For privately held corporations, personal financial statements are reviewed.

Credit Files Contain

- copies of loan documents such as the promissory note and the security agreement
- financial informaiton such as tax returns and financial statements
- credit inquiries and reports
- collateral information
- correspondence and memos
- other company-related information such as annual reports and brochures

PROCESSING STATEMENTS

Whether mailed to the bank or delivered personally by the customer, all statements should indicate the date of the statement and be signed and dated by the customer or the customer's accountant. Where possible, the statements should say that they are meant for use by the bank to which they are submitted. The statements are then placed in the customer's credit file along with the spread and summary comments. Most banks use a computer to track when each statement is received and when the next statement should be received. If the due date of the next financial statement passes, the computer generates an exception list summarizing items not received from the customer.

SPREADING STATEMENTS

Spreading financial statements is the process of extracting information from various financial statement accounts and inputting the data into a spreadsheet in a consistent format. This process is called *spreading*, and the result is referred to as a *spread*. Having all the data in an easily readable format allows a lender to spot trends and quickly make comparisons. Various types of spreadsheets are available. The choice of a spreadsheet de-pends on the statement source for the information, such as a forecasted income statement or balance sheet, the number of statements to be spread, and the nature of the analysis, for example, comparative or trend analysis.

If a commercial lender works extensively with companies in a particular industry, spreadsheets are customized with information specifically for that industry. Customized spreadsheets, for example, are available for the construction industry or auto dealerships. Exhibits 5.2 and 5.3 (see page 128) present income statement and balance sheet spreadsheets typically used to manually spread a financial statement.

To give additional perspective to financial analysis, the numbers in the statements are common-sized. **Common-sizing** expresses each account on the income statement as a percentage of net sales and each account on the balance sheet as a percentage of total assets. If net sales are $100 and operating expenses are $34, for example, common-sized operating expenses are expressed as 34 percent.

In addition to evaluating several year's worth of data for a customer's company, the commercial lender often will compare the company's performance with an industry standard, using the company's North American Industry Classification System (NAICS) code, available from the Census Bureau. With a spreadsheet, the commercial lender can extract information from the customer's income statements and balance sheets, calculate the appropriate ratios, and compare the information to the industry standard.

Spreading financial statements demands attention to detail and an ability to perform or review certain mathematical tasks, including calculating ratios, preparing cash flow statements, and determining the amount and percent of change in accounts from one statement to the next. Even when accurate, the process can be time-consuming and costly. Many banks, for these and other reasons, have computerized the statement-spreading function. Although most banks use computerized programs for spreading financial statements, it is important to understand where the numbers originated and how to interpret the results.

Dry Supply Case Study

Dry Supply, a fictitious company, is a wholesaler of dry cleaning and laundry products. An established company, Dry Supply is owned by two sisters. One sister's four children are employed in the business. Dry Supply will be used as an example company to illustrate various financial statements. Exhibit 5.4 (see page 129) summarizes the income statement for Dry Supply. Exhibit 5.5 (see page 130) summarizes the balance sheet. These exhibits are more detailed than exhibits 5.2 and 5.3 because the company provided additional accounts on the financial statement.

Financial Statement Basics

Financial statements prepared by accountants normally present data for the current year first on the left, followed by prior years to the right. The spreadsheet format, however, typically begins with the oldest year on the left and succeeding years on the right. Lenders should be cautious when transposing data from the accountant's statements to the bank spreadsheet, to ensure that the dates are in proper order.

A lender, before analyzing a company's financial statement, should follow several basic rules for analyzing a spreadsheet:

Annual and interim statements are spread and analyzed separately. Compare interim statements only with interim statements of the same date from previous years. If quarterly or monthly statements are available, the lender makes multiple spreadsheets that contain fiscal years, first quarters, second quarters, third quarters, and fourth quarters. Spreadsheets allow the lender to review, simultaneously, several years of financial performance.

Exhibit 5.2
Income Statement Spreadsheet

Income Statement	*Date*		*Date*		*Date*	
	Amount	*%*	*Amount*	*%*	*Amount*	*%*
Net sales		100.0		100.0		100.0
Cost of goods sold						
Gross profit						
Operating expenses						
Operating profit (loss)						
Other income						
Interest expense						
Other expense						
Net profit before tax						
Taxes						
Net profit after tax						

Exhibit 5.3
Balance Sheet Spreadsheet

Assets	*Date*		*Date*		*Date*	
	Amount	***%***	***Amount***	***%***	***Amount***	***%***
Cash						
Accounts receivable						
Inventory						
Other current assets						
Total current assets						
Land						
Buildings						
Equipment						
Other fixed assets						
Depreciation						
Net fixed assets						
Prepaid expenses						
Other noncurrent assets						
Total assets		100.0		100.0		100.0

Liabilities	*Date*		*Date*		*Date*	
	Amount	***%***	***Amount***	***%***	***Amount***	***%***
Notes payable bank short-term						
Accounts payable—trade						
Accrued expenses						
Current maturities long-term debt						
Other current liabilities						
Total current liabilities						
Long-term debt—bank						
Other long-term debt						
Subordinated debt						
Total liabilities						

Net worth	*Date*		*Date*		*Date*	
	Amount	***%***	***Amount***	***%***	***Amount***	***%***
Common stock						
Retained earnings						
Treasury stock						
Paid in capital						
Total net worth						

Exhibit 5.4
Computer-Generated Income Statement: Dry Supply

Income Statement (000's omitted)	*Review 12/31/20x4*		*Review 12/31/20x5*		*Review 12/31/20x6*	
	Amount	*%*	*Amount*	*%*	*Amount*	*%*
Net sales	$895	100.0%	$937	100.0%	$918	100.0%
Cost of goods sold	645	72.1	667	71.2	631	68.7
Gross profit	250	27.9	270	28.8	287	31.3
Selling, general, and administrative expenses	157	17.5	173	18.5	180	19.6
Officer's compensation	36	4.0	31	3.3	28	3.1
Rent expenses	15	1.7	18	1.9	20	2.2
Bad debt expense	2	0.2	1	0.1	0	0.0
Profit sharing expense	7	0.8	7	0.7	0	0.0
Depreciation expense	12	1.3	12	1.3	13	1.4
Total operating expenses	229	25.6	242	25.8	241	26.3
Operating income	21	2.3	28	3.0	46	5.0
Other income	0	0.0	0	0.0	0	0.0
Interest income	2	0.2	2	0.2	2	0.2
Rental income	3	0.3	3	0.3	3	0.3
Interest expense	6	0.7	7	0.7	11	1.2
Net profit before tax	20	2.2	26	2.8	40	4.4
Taxes	11	1.2	12	1.3	17	1.9
Net profit after tax	$ 9	1.0%	$ 14	1.5%	$ 23	2.5%

The lender reads the CPA's opinion and footnotes before spreading the statement and beginning the analysis. Footnotes generally detail basic methods used to construct financial statements. It is essential, therefore, that they be read before spreading the statement. Information in some footnotes does not appear on the balance sheet, income statement, statement of cash flows, or reconciliation of equity. This information may pertain to potential lawsuits, warranties, and events that will take place after the statement date. The footnotes for Dry Supply will be reviewed later in the chapter.

Numbers usually are rounded off to four or five digits. This practice makes the spreadsheet easier to read. If financial statement entries are in the millions, the numbers are rounded to the thousands on the spreadsheet. If financial statement entries are in the thousands, the spreadsheet components are rounded to the hundreds. For example, if sales are $6,629,854, the spreadsheet would show $6,630 with the label "000's omitted" at the top.

Before spreading the statements, a lender also thinks about:

- methods the company uses to recognize revenue and expenses, that is, cash or accruals
- sales trends, product or service mix, order backlogs, discounts, allowances, returns, large nonrecurring sales, seasons, and cyclical factors
- cost of goods sold calculations
- larger than normal changes in expenses in relation to sales

Exhibit 5.5
Computer-Generated Balance Sheet Statement: Dry Supply

Common-sized report (000's omitted)	*Review 12/31/20x4*		*Review 12/31/20x5*		*Review 12/31/20x6*	
Assets	***Amount***	***%***	***Amount***	***%***	***Amount***	***%***
Cash	$ 3	1.2%	$ 12	4.6%	$ 22	8.1%
Accounts receivable	114	46.9	118	45.4	117	43.3
Less: allowance for doubtful accounts	5	2.1	5	1.9	5	1.9
Net accounts receivable	109	44.9	113	43.5	112	41.5
Inventory	73	30.0	72	27.7	67	24.8
Total current assets	185	76.1	197	75.8	201	74.4
Furniture and fixtures	76	31.3	75	28.8	78	28.9
Leasehold improvements	1	0.4	1	0.4	0	0.0
Transportation equipment	53	21.8	70	26.9	85	31.5
Gross fixed assets	130	53.5	146	56.2	163	60.4
Less: Accumulated depreciation	85	35.0	97	37.3	110	40.7
Net fixed assets	45	18.5	49	18.8	53	19.6
Cash-value life insurance	13	5.3	14	5.4	16	5.9
Total assets	$243	100.0%	$260	100.0%	$270	100.0%
	Review 12/31/20x4		*Review 12/31/20x5*		*Review 12/31/20x6*	
Liabilities	***Amount***	***%***	***Amount***	***%***	***Amount***	***%***
Notes payable bank short-term	81	33.3	68	26.2	59	21.8
Accounts payable—trade	42	17.3	46	17.7	31	11.5
Accrued taxes	5	2.1	6	2.3	7	2.6
Accrued bonuses	10	4.1	11	4.2	12	4.4
Total current liabilities	138	56.8	131	50.4	109	40.4
Subordinated debt officers	48	19.8	58	22.3	67	24.8
Total liabilities	186	76.5	189	72.7	176	65.2
	Review 12/31/20x4		*Review 12/31/20x5*		*Review 12/31/20x6*	
Net worth	***Amount***	***%***	***Amount***	***%***	***Amount***	***%***
Common stock	2	0.8	2	0.8	2	0.7
Retained earnings	55	22.6	69	26.5	92	34.1
Total net worth	57	23.5	71	27.3	94	34.8
Total liabilities and net worth	$243	100.0%	$260	100.0%	$270	100.0%

- how bad debt is recognized
- the inventory valuation method used
- the method used to depreciate fixed assets
- taxation issues

When analyzing spreadsheets, a commercial lender uses many techniques. One way to assess a company's performance is to look at the trend exhibited by a specific account over several consecutive periods. Examining the net profit after tax posted at the end of four or five consecutive years, for example, reveals whether it declined, increased, remained stable, or fluctuated. After considering the company's operating environment, a commercial lender may use the trend in net profits to support a prediction of the company's future profits.

OTHER CONSIDERATIONS

Throughout the process, a lender remains aware that financial analysis is more than just adding and subtracting figures, calculating ratios and percentages, and extrapolating numbers based on past trends. For analytical purposes, these numbers have little meaning unless the commercial lender understands the internal and external factors affecting the company's performance. Some factors to consider are

Economic and Regulatory Analysis. In addition to examining a business and its financial performance, a commercial lender also pays close attention to general business conditions, including inflation, interest rate forecasts, pending regulations, and taxation policies. All these factors may influence a company's ability to repay loans.

The Industry. A commercial lender determines whether the industry and its products are growing, declining, or stagnant. For example, is the industry highly competitive or controlled by a few companies? What is the customer's position within the company and the industry? Business cycles affect some industries. Cyclical industries include housing, auto, and clothing. Some industries are non-cyclical (not affected by business cycles), such as food, medical care, and education. Still others are counter-cyclical, actually improving when other industries are in declining business cycles. Auto servicing, home repair, and employment agencies tend to be counter-cyclical.

The Market. Commercial lenders consider whether the company's market is diversified or restricted, growing, or stagnant. Demographic and consumer preference trends influence sales, expenses, and key balance sheet accounts.

The Company. A company's legal structure, management goals and objectives, and operating characteristics affect spreadsheet analysis. A corporation's balance sheet, for example, will indicate an entry for common stock. Because a sole proprietor's net worth is composed of business and personal assets, the balance sheet will not have a common stock entry.

Other Events. Other events affect numbers on a spreadsheet. The poor health or death of an owner or a key manager, for example, influences events. The availability of well-trained, capable employees is important, especially to the growing number of service companies.

TECHNICAL AND INTERPRETIVE ANALYSIS

To analyze financial statements effectively, a commercial lender must possess the technical skills of an accountant and the interpretive skills of an investigator. Financial analysis involves, first, an understanding of the structure, organization, and contents of financial statements. An experienced commercial lender, for example, knows what "cost of goods sold" means, where it can be found on a financial statement, the accounts that make up its structure, how it is calculated, and how the choice of inventory valuation methods affects it. In short, a commercial lender must have an accountant's familiarity with the lexicon of financial statements.

Second, mathematical proficiency is essential. Data are calculated in specific, sometimes complex, ways. During technical analysis, the applications used include statement spreading, comparing ratios, preparing cash-flow calculations, and projecting future operating results. The commercial lender must

- know how to calculate the numerical and percentage changes in an account over time
- understand how the calculations were done
- make comparisons with data from other statements
- know how to calculate ratios and a cash flow statement
- be comfortable working with numbers
- know how to intrepret the results

Rounding

Numerous equations are used in this textbook. Numbers have been rounded up and stated in thousands. For example, \$286,542 would be rounded to \$287,000. The focus of the textbook is not whether the numbers add up but rather what they mean. Most commercial loans made today are greater than \$100,000. A one- or two-thousand dollar difference caused by rounding or typographical error should not be the focus of the analysis. However, a large error caused by poor preparation of the financial statements should concern the commercial lender and be investigated.

In financial analysis, an inability to look beyond the numbers is a serious failing. One of the first duties of a commercial lender is to get behind the numbers and not take them at face value. This is equally important whether the numbers are good or bad. A major objective of interpretive analysis, therefore, is to help a commercial lender understand a business's financial strengths and weaknesses better through technical calculation and data interpretation.

To review the distinction between technical and interpretive skills and their application to financial analysis, look at the income statement of Dry Supply illustrated in exhibit 5.4. Note the following trend in sales:

Year	*Sales*
20x4	\$895
20x5	\$937
20x6	\$918

The technical analysis of these number begins by looking at the annual increase in sale on both a numerical and percentage basis:

Period	*Growth*	*Percentage Growth*
20x4 - 20x5	\$42	4.7%
20x5 - 20x6	\$(19)	(2.0%)

To make the dollar percentage calculation, the dollar difference between the two years is divided by the base year of 20x4:

$$\frac{937 - 895}{895} \times 100 = 4.69\%$$

or 4.7% rounded.

If financial analysis consisted only of technical manipulation of numbers, then it would be safe to say Dry Supply exhibited minor sales growth and, based on this trend, predict that sales should continue to increase annually in the 1 to 4 percent range. Interpretive analysis, however, requires a more penetrating look. A commercial lender will want to know what caused this growth in sales. If inflation climbed by 5 percent annually over that period, then the growth in sales revenue was partly a result of that factor. If sales of all other similar wholesalers increased by an average of 8 percent between 20x5 and 20x6, then the performance of this particular business was below inflation and the industry rate. The numbers must always be put in the proper context.

Interpretive analysis requires commercial lenders to know the reasons for the technical results obtained from financial analysis. All the background information from the interviews and investigations—ownership, industry, markets, economy, onsite visits, and more—are used. The key to financial analysis lies, therefore, in the ability to determine not only what happened in a company, but also why it happened and what it bodes for the future.

LIMITATIONS OF FINANCIAL ANALYSIS

A company's financial status is not always accuratley portrayed by calculating and interpreting financial data, because raw data may be misleading, inconsistent, or erroneous. Before analyzing statements, therefore, a commercial lender must be familiar with limitations, especially accuracy, involving the quality of information, accounting methods used, external environment, unlisted information, distortion in numbers, and aggregate accounts.

The bankruptcy filings of Enron, WorldCom, and Adelphia are perfect examples of where the commercial lender needed to be aware of limitations to the financial analysis. The financial failures of these firms illustrate the importance of a commercial lender being able to draw independent conclusions and to not rely solely on the accounting experts. Furthermore, many small, related businesses, caught up in the financial difficulties, failed or had operating losses that affected community banks.

QUALITY OF INFORMATION

Financial analysis is only as good as the information on which it is based. Lenders often use a term from the computer industry, GIGO (garbage-in, garbage-out), when referring to the quality of financial information and its effect on the quality of the related financial analysis. If accounts receivable are erroneously reported on a balance sheet, a commercial lender's calculation of the current ratio or accounts receivable turnover will be faulty. Statements prepared and attested to by a reputable accounting firm are more likely to be complete and accurate than those prepared by an inexperienced internal controller. Commercial lenders must be wary of any statement that appears to have been drawn up at the last minute or in an unprofessional manner.

ACCOUNTING METHODS

In preparing financial statements, many different accounting alternatives are available and acceptable. Three inventory valuation methods commonly used are First In, First Out (FIFO), Last In, First Out (LIFO), and Weighted Average. When production costs are rising, the FIFO method of valuing inventory could result in higher gross profits relative to current costs. Comparing a company that uses the LIFO method to a company that uses the FIFO method could result in erroneous conclusions. The accounting methods used are described usually in the footnotes to the financial statement.

EXTERNAL ENVIRONMENT

Economic, competitive, and regulatory conditions influence the environment in which a business operates. What may appear as a weakness on an income statement, such as a small decline in profits from one year to the next, might, in fact, be a strength, if the economy took a sharp downturn during that period. The constantly changing external environment can limit conclusions drawn from comparing statements from different periods.

UNLISTED INFORMATION

Honesty, willingness to repay debts, and other measures of character cannot be quantified and listed on a financial statement. This information is obtained primarily through loan interviews and credit investigation. Financial statements also do not include what may be relevant financial information, for example: a list of order backlogs, unfunded pension liabilities, proposed capital expenditures, pending lawsuits, or that some assets used by the business may be owned by the business owner. Dry Supply's financial statements do not reflect that the company has a $150,000 backlog in orders, is approaching shipping capacity, and is projecting an increase in capital expenditures.

Distortion in Numbers

A company's management may decide to distort the picture of the company as portrayed in its financial statements. For example, an owner may write off the business's accumulated bad debts (unpaid accounts receivable) over a single accounting period or obsolete inventory may not be written off quickly. Such action makes it difficult for the commercial lender to accurately assess a business's past profitability, accounts receivable turns, and inventory value.

Aggregate Accounts

Much of the data in financial statements is aggregated. Sales generated for each product are combined and listed as one account (net sales) on the income statement. Aggregation may limit a commercial lender's observations when assessing the financial condition and prospects of a company. Dry Supply's statements, for example, do not break out sales by dry cleaning and laundry products. Because this information is not listed in individual categories on the financial statements, a customer usually can provide the product mix of the business if needed.

In working with numbers, zeroing in on a final result while excluding other necessary considerations may lead to invalid conclusions. Financial analysis is one way of identifying the strengths and weaknesses of a company and making educated assumptions about the company's future capacity to repay debt.

BASIC ANALYTICAL TECHNIQUES

Just as with loan interviews, credit investigations, and negotiating loan terms, the underlying objective of financial statement analysis is to gauge a customer's ability to repay the loan. The focus is on past, current, and projected financial performance and not on, for example, personal character and credit history.

Nonfinancial considerations revealed in the interview help establish the direction and depth of financial analysis. A long-term loan to a business with a short operating record and an uncertain future carries a high risk value, for example. To make the loan decision, the commercial lender must conduct an in-depth evaluation using all available income statements and balance sheets and customer-prepared pro forma statements and cash budgets.

Strengths –Weaknesses > Uncertainties

Financial analysis is not a crystal ball that allows a commercial lender to peer into the future and predict, with absolute certainty, how a business will fare in the coming years. Uncertainty is ever present. Examples are the chance the economy will take a turn for the worse, that a well-financed competitor will set up shop down the street, or that a business's customers may stop paying their bills.

Financial analysis requires a constant process of inquiry to identify and evaluate a borrower's financial strengths and weaknesses. When done properly, the commercial lender will understand all of the risks involved in extending credit and how to minimize those risks through proper credit underwriting and loan structuring. If all the strengths outweigh the accumulated weaknesses by a margin sufficient to cover for uncertainties, the loan represents an acceptable credit risk. This conclusion is written as

Strengths –Weaknesses > Uncertainties

As a simple illustration, consider a loan request for a $250,000 line of credit by Dry Supply. The most recent balance sheet submitted by the customer shows current assets of $201,000 and current liabilities of $109,000. By all measures, a $92,000 differential is favorable. If the demand for product surges unexpectedly or, conversely, if demand falls off, the company has a margin of funds available to purchase inventory or to sustain short-term operating losses.

However, of the $201,000 in current assets, $67,000 is inventory—primarily liquid dry cleaning products purchased by the company. Inventory is not as easily converted to cash as other forms of current assets, and cash is needed to repay loans. The concentration of current assets in inventory should raise questions, for example: What is the demand for the product? Will dry cleaning prices be rising? When will the inventory be sold and the accounts receivable collected?

Next, uncertainties are considered. A prime uncertainty is the future demand for various types of dry cleaning products. If, for example, due to environmental reasons, many dry cleaners switch from using liquid to using powder in dry cleaning, then the inventory will not be sold and the cash the business needs to repay and meet operating costs will not be generated.

Of course, financial analysis involves more than looking at the amount of current assets, current liabilities, inventory, and the characteristics of a particular industry. Every financial statement should draw out numerous questions about every aspect of a business's financial performance. Applying specific analytical techniques to this task begins with a look at the types of financial statements and the quality of information they contain.

Evaluating Statement Quality and Reliability

When analyzing financial statements, a critical consideration is the quality and reliability of information. Statement quality and reliability can vary significantly depending on who prepared the statement and how it was prepared. The least reliable statements are prepared internally by the owner or company controller and have not been compiled, reviewed, or audited by an accountant. This is particularly true when the person preparing the statements has no background in accounting. Although it is desirable to obtain accountant-prepared statements whenever possible, the expense of bringing in an independent accountant may be unwarranted, especially when the loan request is small or presents little risk. If accepted, borrower-prepared statements should be verified by checking the information in the statements against other company records and income tax returns.

Credit Scoring Versus Financial Analysis

For efficiency, a bank may credit score certain commercial loans. Credit scoring is the process of giving points for a variety of factors, such as length of time in business, number of years of consecutive profits, amount of debt verses equity, type of collateral, and loan term. The total of the points helps a commercial lender estimate repayment probability based the financial statements. An applicant who scores high enough is granted the loan. A full financial analysis is completed on the larger loan requests only.

When credit scoring is used, one or more senior lenders may have authority to override the credit score and approve loans on an exception basis. Approval is warranted based on other factors not considered in the credit score, such as a financially strong guarantor.

Community banks normally perform a complete credit analysis on all commercial loans, including nonfinancial considerations such as character, number of jobs in the community, and length of time in business. Full financial analysis involves investigating the business to understand the "story" behind the numbers.

ACCOUNTING STANDARDS

When analyzing financial statements, a commercial lender can be reasonably certain that consistent accounting practices were applied to calculating the numbers in those statements, particularly if the statements were prepared by a certified public accountant (CPA) or were compiled, reviewed, or audited by a CPA. It is critically important that consistent standards be applied in preparing statements so that valid comparisons can be made, both between statements from two different time periods and between statements of similar companies.

A set of rules, referred to as **generally accepted accounting principles (GAAP)**, has been prepared to be sure information accountants report in financial statements follows consistent accounting techniques. These rules are for accountants and companies that analyze and summarize records to make financial statements. GAAP is continuously being refined to accommodate:

- innovations in the ways credit is extended and debt financed
- innovations by accountants as to calculating and presenting financial information
- legal considerations such as changes in tax laws

The principal group responsible for setting accounting policy is the **Financial Accounting Standards Board (FASB)**, a private organization made up of accounting professionals. FASB usually has the final say in adopting accounting standards. However, the **Securities and Exchange Commission (SEC)** is the final arbiter when it comes to publicly traded stocks. The SEC is the federal agency that regulates the public sale of securities and related disclosures. Because FASB and SEC cooperate in developing standards, it is rare that the SEC would override a FASB decision. FASB also works closely with the accountant's trade group, the American Institute of Certified Public Accountants (AICPA); and before any standard is approved, public companies, financial institutions, regulatory agencies, and trade associations are given an opportunity to comment. Accounting standards are constantly being changed and updated. When a standard is adopted, it can significantly affect a company's financial statements. FASB publishes up-to-date changes on their web site.

Sample FASB Rulings

Goodwill and Other Intangible Assets

This statement addresses financial accounting and reporting for acquired goodwill and other intangible assets. It addresses how intangible assets, acquired individually or with a group of other assets, but not acquired in a business combination, should be accounted for in financial statements upon acquisition. It also addresses how goodwill and other intangible assets should be accounted for after the initial recognition in financial statements.

Intangible assets, an important economic resource for many companies, are an important part of assets acquired in many transactions, and so better information is needed. On the other hand, goodwill amortization expense is not regarded as useful information in analyzing investments.

Now financial statements of companies that acquire goodwill and other intangible assets will better reflect the underlying economics of those assets. Financial statement analysts will be able to understand the investments made in those assets and the performance of the investments. Disclosures about goodwill and intangible assets subsequent to acquisition will provide a better understanding about expectations and changes in the assets over time, thereby improving profitability and cash flows assessments.

Acquisitions of Certain Financial Institutionsæan amendment of FASB Statements No. 72 and 144 and FASB Interpretation No. 9 (Issued 10.02).

ACCRUAL VERSUS CASH ACCOUNTING

Before analyzing a financial statement, a commercial lender considers the method of accruing revenue and the period covered by the statement. This information will help the lender analyze the type of information summarized in each of the various statement categories. It is important to understand a company's operations in terms of its accounting methods. To prepare financial statements, most corporations and partnerships use accrual accounting rather than cash accounting methods.

Accrual accounting recognizes revenues when earned—when sales are transacted—regardless of when the company receives cash from the sale. All expenses—the costs to produce a product or provide a service—are likewise recognized when costs are incurred rather than when cash payment is made.

Cash accounting recognizes revenues as earned when payment is received, regardless of the timing of the transaction. Likewise, the company recognizes the cost associated with producing these revenues only when cash is actually paid out. Under the accrual method, if a company with a calendar-year fiscal period sold $2,000 worth of products on December 20, 20x6, with payments collected on January 20, 20x7, the $2,000 would be recognized as 20x6 revenues; under the cash method, it would be recognized as 20x7 revenues.

Although cash accounting is of special interest to the lender, because loans are repaid in cash, most companies use accrual accounting for financial reporting because it matches related revenues and expenses. Matching revenue and expenses provides a more accurate measure of the company's ability to generate profits. Profits are the primary source of cash flow to repay term debt. Assume that Camera's Etc.opened for business on November 1, 20x6. The company buys cameras for $125 each, paying at the time of purchase. It rents office and warehouse facilities for $500 per month and pays an average of $200 per month for utilities. The company pays the rent and utility bills in cash on the 15th day of each month.

On November 1, Camera's Etc. purchases 40 cameras for $125 each (for a total of $5,000). The next day, the company sells 30 cameras at $200 each to a commercial business. The cameras will be delivered to Camera's Etc.'s customer during November. The cameras are sold on 30-day terms, due December 2nd. From December 8th to December 20th, Camera's Etc. sells 10 cameras to consumers at $100 each—a 50 percent year-end discount intended to sell the remaining inventory. These cameras are delivered at the time of purchase in December, with payment due upon receipt of the merchandise. On a cash basis, the business lost money in November, whereas profits in December were excellent. The company's interim income statement for November and December, prepared on a cash basis, is shown in exhibit 5.6.

Exhibit 5.6
Camera's Etc. Income Statement (Cash Basis)

Item	*Month Ended 11/30/x6*	*Month Ended 12/31/x6*
Sales (revenues)*	—	$7,000
Purchases**	$5,000	—
Gross Profit	(5,000)	7,000
Utilities and rent expense	700	700
Profit (loss)	$(5,700)	$6,300

* 30 cameras at $200 and 10 cameras at $100
** 40 cameras at $125 each

Accrual accounting matches revenues with expenses and tells a different story. It shows that November was a profitable month for Camera's Etc., whereas December was un-profitable. During November, Camera's Etc. sold 30 cameras for $200 each, resulting in a $75 profit on each camera. In December, the company sold 10 cameras for $100 each, for a $25 loss per camera. Although the business had excess cash in December, as shown in the cash-basis statement, the extra cash was not the result of an effective sales strategy. Exhibit 5.7 on page 138 shows the company's interim income statement calculated on an accrual basis.

In the two income statements for Camera's Etc., the total profits for the two-month period equal the amount of cash generated ($600 in each case). In an actual situation, the amount of profit or loss shown on an accrual-basis income statement normally would be quite different from the company's cash flow. Analyzing cash flow allows the lender to understand the timing and amount of a company's cash requirements over time and its ability to repay debt—information that may not be evident from examining a company's accrual-basis financial statements. Nevertheless, the income statement, constructed using the accrual method, is a better reflection of true company profits.

The components of the income statement involve a company's recognition of income and related expenses as well as the resulting profit or loss. It is important to understand that recognition of profit does not generally coincide with a company's cash flow. In fact, while all companies seek to maximize their cash flow in order to pay loans, salaries, dividends, and so on, not all companies try to maximize profits.

Many sole proprietorships use cash basis accounting. The lender can determine which method is used from the financial statements and the company's tax return. Cash basis financial statements will not have accounts receivable or accounts payable listed, because the sale is not recognized until collected and the related expense until paid. It is important to understand that these companies often have accunts receivable and accounts payable, even though they don't appear on the financial statements. The companies typically keep a separate listing of accounts receivable and accounts payable. The income tax return should reflect lower taxes if cash accounting is used.

Many privately held companies try to minimize reported earnings to reduce taxes. However, this is, only a temporary situation. Eventually, revenues will be recognized with no offsetting expenses. The commercial lender needs to be aware of this future tax liability and determine whether the company is reserving sufficient money for taxes.

Exhibit 5.7
Camera's Etc. Income Statement (Accrual Basis)

Item	*Month Ended 11/30/x6*	*Month Ended 12/31/x6*
Sales (revenue)	$6,000 *	$1,000 **
Purchases	3,750 ***	1,250 ****
Gross profit	2,250	250
Utilities and rent expenses	700	700
Profit (loss)	$1,550	$ (950)

* 30 cameras at $200
** 10 cameras at $100
*** 30 cameras at $125
**** 10 cameras at $125

TYPES OF FINANCIAL STATEMENTS

Financial statements are a business's report card. They help the lender understand the borrower's ability to repay debt, assist in loan monitoring, and document management's ability to make decisions and manage changes. Financial statements may be prepared internally or externally. Internal statements are prepared by someone employed by the business. External statements are generally prepared for a fee by someone from outside the company.

INTERNALLY PREPARED STATEMENTS

Internally prepared financial statements by the company owner, controller, or other employees are typically created either monthly or quarterly. For smaller companies, these statements are considered the least reliable because the preparer typically does not have all the required accounting expertise. Larger companies may employ a CPA to prepare these statements. Although generally reliable, they are usually less accurate than externally prepared financial statements. Most internal statements need adjustments at fiscal year-end, such as adjustments for depreciation expenseæan account often omitted in internally prepared interim statements. Most banks use internally prepared financial statements primarily to compare year-to-year trends. To verify the accuracy of the financial statements, all internally prepared fiscal year-end financial statements should be supported by an externally prepared tax return.

Internally Prepared Financial Statements Include

- income statement
- balance sheets
- cash flow statements
- interim financial statement
- tax returns
- personal financial statements

EXTERNALLY PREPARED STATEMENTS

External financial statements, usually prepared by independent, certified public accountants, are classified as compilations, reviews, or audits.

External Financial Statement Components

- opinion
- statement of income
- balance sheet
- statement of retained earnings
- statement of cash flows
- footnotes

FOOTNOTES

Although footnotes are listed last in the financial statement, they should be read first. Footnotes tell commercial lenders what they are about to analyze. **Footnotes** allow the auditor to comment on the statements and their compliance with GAAP. Usually, they are found only in audited or reviewed financial statements prepared by a certified public accountant. Exhibit 5.8 on the following page illustrates the current footnotes for Dry Supply.

After reading the footnotes, the commercial lender writes out any questions or comments that come to mind. In the case of Dry Supply, Anne Schippel will want to address the following questions with the owner or controller of the company:

- How many customers are in Kansas?
- When are estimates used in financial reports?
- What has been the amount of bad debts expensed to the allowance?
- What is the inventory?
- How long has the company had a credit line?
- Does the credit line have any covenants?
- What are terms of officer debt?
- Which employees are eligible for the profit-sharing plan?

Exhibit 5.8
Notes to Financial Statements: Dry Supply

December 31, 20x5 and 20x6

Note 1 ***Description of business***

Dry Supply is a wholesaler of dry cleaning and other laundry supplies. The primary area served is central Kansas.

Note 2 ***Summary of significant accounting polices***

Estimates. Management uses estimates and assumptions in preparing financial statements in accordance with generally accepted accounting principles. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Actual results could vary from the estimates used.

Cash. Cash includes demand deposits held at a financial institution. At times, the amount held on deposit may exceed federally insured limits.

Accounts receivable. Accounts receivable uses the allowance method and is shown net of an allowance for doubtful accounts of $5,000 on December 31, 20x5 and 20x6. The company actively monitors its receivable balances and generally requires no collateral. In certain instances, the company requires a partial or full-advance deposit from customers prior to delivery.

Inventory. Inventories are valued using the last-in first-out (LIFO) method.

Depreciation. Depreciations of property and equipment are computed using accelerated methods during the estimated useful lives of the assets as follows:

Furniture and fixtures	5 to 10 years
Machinery and equipment	5 years
Leasehold improvements	10 years
Automobiles and trucks	5 years

Income taxes. By unanimous consent of the shareholders, the company has elected to be treated as a corporation under the Internal Revenue Code.

Note 3 ***Inventory***

Inventories consist of finished products only.

Note 4 ***Notes payable—bank***

Notes payable—bank consists of a revolving credit note payable to State bank. The note is secured by substantially all assets of the company and the personal guarantees of the shareholders. Interest is due monthly at prime plus 0.75 percent (6.25 percent on December 31, 20x6). The maximum borrowing under the agreement is the lesser of $250,000 or availability under a borrowing base, as defined. The note agreement expires April 30, 20x7. The outstanding balances on December 31, 20x6 and 20x5 were $59,000 and $68,000, respectively.

Note 5 ***Long-term debt***

Note payable to Officers unsecured were $58,000 and $67,000 in 20x5 and 20x6, respectively.

Note 6 ***Profit-sharing plan***

Exhibit 5.8 (Continued)
Notes to Financial Statements: Dry Supply

December 31, 20x5 and 20x6

Effective January 1, 20x5, the company adopted a profit-sharing plan covering substantially all employees. Contributions to the plan are at the discretion of management.

Compilation Statements

Compilation statements, available to privately owned entities only and providing no assurance of the quality or value of the statement figures, are the least informative externally CPA prepared financial statement. The numbers are simply restated from company records with little or no verification. Persons preparing a compilation statement do not have to be independent of the customer's business but must disclose the fact that they are not independent if that is the case.

Most externally prepared financial statements are compilations. Because of the limited process used by the accountant, the lender must take the time to thoroughly understand all the entries on the statement. This requires the commercial lender to understand accounting principles. Exhibit 5.9 shows a compilation for Dry Supply.

Review Statements

Review statements, generally an improvement over compiled statements, often include additional information, such as a statement of cash flow and footnotes explaining the statement. **Review statements** are so named because an outside CPA reviews, but does not verify, the company's balance sheet and/or income statement. This accounting engagement is available to nonpublicly owned entities only. Exhibit 5.10 on the following page illustrates a review opinion for the Dry Supply example.

Compilation Qualifications

- possess general understanding of the customer's industry, business transactions, and the form of accounting records
- be familiar with stated qualifications of the customer's accounting personnel to consider the need for adjustments to the account records
- read the financial statements and con sider whether they are appropriate in form and content and free from obvious material errors

Exhibit 5.9
Compilation Statement: Dry Supply

We have compiled the accompanying balance sheet of Dry Supply as of December 31, 20x6, and the related statements of income, retained earnings, and changes in financial position for the year ended, in accordance with standards established by the American Institute of Certified Public Accountants.

A compilation is limited to presenting, in the form of financial statements, information that is the presentation of management. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or any other form of assurance on them.

Exhibit 5.10
Review Statement: Dry Supply

We have reviewed the accompanying balance sheet of Dry Supply as of December 31, 20x6, and the related statements of income, retained earnings, and cash flows for the year ended, in accordance witl standards established by the American Institute of Certified Public Accountants. All information included in these financial statements is the representation of management of Dry Supply.

A review consists principally of inquiries of company personnel and analytical procedures applied financial data. It is substantially less in scope than an examination in accordance with generally accept auditing standards, the objective of which is the expression of an opinion about the financial standard taken as a whole. Accordingly, we do not express such an opinion.

Based on our review, we are not aware of any material modifications that should be made to the accompanying financial statements for them to be in conformity with generally accepted accounting principles.

Review Statement Qualifications

In preparing a Review Statement, one must

- know the accounting principles and practices of the customer's industry
- understand the customer's business, including its organization and operations
- inquire about accounting policies, recordkeeping procedures, and actions of owners and management that may affect financial statements and changes in business, activities or transactions
- identify and explain unusual items or trends in the financial statements
- determine that financial statements conform to generally accepted accounting principles
- be independent of the company

Audits

Audits are more thorough and expensive than compilations or reviews, and therefore are least often available to the commercial lender. Most small, privately held companies cannot justify the cost of an audit. In an **audit**, the accountant performs a comprehensive evaluation of the borrower's accounting systems to evaluate the accuracy of the financial information and to verify that the statements conform to GAAP. Depending on the CPA's findings, several types of op ions can be rendered: unqualified, qualifi adverse, and disclaimer.

When analyzing audited financial sta ments, a commercial lender refers to accountant's opinion, which provides valua insight into the quality of the data provided. I analysis, the qualified opinion is comparable an unqualified opinion and, depending on t reason for the qualification, is usually suitable financial statement with the disclaimer opini would be considered unaudited but could prepared in accordance with GAAP. T adverse opinion is of questionable value.

With audited financial statements, a CI usually issues a **management letter**. This lett sent to the board of directors or management the company, expresses concerns or deficienci not referred to in the audit. The auditing CP includes information describing the reportab condition as well as information about ar material weaknesses that do not reduce risk error or irregularities. Reportable condition include accuracy of computer-generated info mation due to obsolete software or lack of du control over certain procedures. Material weak nesses include inventory not properly mon tored or employee theft.

Exhibit 5.11 illustrates a management lette for the Dry Supply example. Because it is no part of the audit, the commercial lender mus request a copy of the management letter.

Exhibit 5.11
Management Letter: Dry Supply

To the Board of Directors of Dry Supply:

In planning and performing our audit of the financial statements of Dry Supply for the year ended December 31, 20x6, we considered its internal control structure in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control structure. However, we noted certain matters involving the internal control structure and its operation that we consider to be reportable conditions under standards established by the American Institute of Certified Public Accountants. Reportable conditions involve matters coming to our attention relating to significant deficiencies in the design or operation of the internal control structure that, in our judgment, could adversely affect the organization's ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements.

Note: The auditor would include paragraph(s) to describe any reportable conditions noted. If material conditions were present, the auditor would include the following discussion and then describe the material weakness found.

A material weakness is a reportable condition in which the design or operation of one or more of the internal control structure elements do not reduce the risk of errors or irregularities to a relatively low level that would be material to the financial statements being audited. Such a weakness may not be detected within a timely period by employees in the normal course of performing their assigned functions. Our consideration of the internal control structure would not necessarily disclose all matters that might be reportable conditions and, accordingly, would not necessarily disclose all reportable conditions that are considered to be material weaknesses as defined above.

This report is intended solely for the information and use of the audit committee (board of directors, board of trustees, or owners in owner-managed enterprises), management, and others within the organization.

Unqualified Audit Opinion

An **unqualified audit opinion** means that management receives the highest accolade for accurately reporting the financial position, along with any changes, and the operation results for the reported periods. The three paragraphs of an opinion are described best as what the auditor found, how they found it, and what the auditors think about the findings. Exhibit 5.12 on the following page illustrates an unqualified opinion for the Dry Supply example.

Qualified Audit Opinion

A **qualified audit opinion** means that the statements fairly present the financial position and results of the operations, with reservations. Reservations include certain qualifications about the scope of the auditor's engagement at the audited company or uncertainties about the future that cannot be resolved or the effects of which cannot be estimated. Reservations may be expressed by phrases such as "except for or subject to." Exhibit 5.13 on the following page exemplifies a qualified opinion for Dry Supply. The company has excluded from reported liabilities certain lease obligations, which violates GAAP reporting. GAAP requires certain lease obligations to be reported as liabilities.

Adverse Audit Opinion

With an **adverse audit opinion** (exhibit 5.14, page 145) the statements do not fairly present the financial position or results of operations in conformity with generally accepted principles.

Exhibit 5.12
Unqualified Audit Opinion: Dry Supply

To the Board of Directors of Dry Supply:

We have audited the accompanying balance sheets of Dry Supply as of December 31, 20x6, and December 31, 20x5, and the related statements of income, retained earnings, and cash flows for the years ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion of these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial Statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also assesses the accounting principles used and significant estimates made by management, and evaluates the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Dry Supply at December 31, 20x6, and December 31, 20x5, and the results of its operations and its cash flows for the years then ended, in conformity with generally accepted accounting principles.

Exhibit 5.13
Qualified Audit Opinion: Dry Supply

To the Board of Directors of Dry Supply:

We have audited the accompanying balance sheets of Dry Supply as of December 31, 20x6, and December 31, 20x5, and the related statements of income, retained earnings, and cash flows for the years then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also assesses the accounting principles used and significant estimates made by management and evaluates the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The company has excluded from property and debt in the accompanying balance sheets certain lease obligations that, in our opinion, should be capitalized in order to conform to generally accepted accounting principles. If these lease obligations were capitalized, property would be increased by $X thousand and $X thousand, long-term debt would be increased by $X thousand and $X thousand, the current portion of long-term debt would be increased by $X thousand and $X thousand, and retained earnings would increase by $X thousand and $X thousand as of December 31, 20x6, and 20x5, respectively. Additionally, net income would be increased by $X thousand and $X thousand and earnings per share would be increased by $X.XX and $X.XX, respectively, for the years ended

In our opinion, except for the effects of not capitalizing certain lease obligations as disclosed in the above paragraph, the financial statements referred to above present fairly, in all respects the financial position of Dry Supply at December 31, 20x6, and December 31, 20x5, and the results of its operations and cash flows for the years then ended, in conformity with generally accepted accounting principles.

Exhibit 5.14
Adverse Audit Opinion: Dry Supply

To the Board of Directors of Dry Supply:

We have audited the accompanying balance sheets of Dry Supply as of December 31, 20x6, and December 31, 20x5, and the related statements of income, retained earnings, and cash flows for the years then ended. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also assesses the accounting principles used and significant estimates made by management and evaluates the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

As discussed in Note X to the financial statements, the company carries its property, plant, and equipment accounts at appraisal values, and provides depreciation on the basis of such values. Further, the company does not recognize deferred income taxes with respect to differences between financial income and taxable income arising because of the use, for income tax purposes, of the installment method of reporting gross profit from certain types of sales. Generally accepted accounting principles require that property, plant and equipment be stated at an amount not in excess of cost, reduced by depreciation based on such amount, and that deferred income taxes be recognized.

Because of the departures from generally accepted accounting principles discussed in the preceding paragraph, as of December 31, 20x5, inventories have been increased by $X thousand and $X thousand by inclusion in manufacturing overhead of depreciation in excess of that based on cost; property, plant and equipment, less accumulated depreciation, is carried at $X thousand and $X thousand in excess of an amount based on the cost to the company; and deferred income taxes of $X thousand and $X thousand have not been recognized, resulting in an increase of $X thousand in retained earnings and in appraisal surplus of $X thousand and $X thousand, respectively. For the years ended December 31, 20x6, and December 31, 20x5, cost of goods sold has been increased $X thousand and $X thousand, respectively, because of the effects of the depreciation accounting referred to above, and deferred income taxes of $X thousand and $X thousand have not been recognized, resulting in an increase in net income of $X thousand and $X thousand, respectively.

In our opinion, because of the effects of the matters discussed in the preceding paragraphs, the financial statements referred to above do not present fairly, in conformity with generally accepted accounting principles, the financial position of Dry Supply at December 31, 20x6, and December 31, 20x5, or the results of its operations or its cash flows for the years then ended.

Dry Supply uses undesirable accounting procedures that are not permitted by GAAP; it carries its property, plant, and equipment at current appraised value. GAAP requires a company to carry these items at cost less depreciation.

Disclaimer Audit Opinion

In a **disclaimer audit opinion,** accountants cannot express an opinion because of limitations in the scope of the auditing firm's engagement, uncertainties about the future that cannot be resolved, and other effects of those limitations that cannot be estimated. For example, lawsuits may be pending against the business that, in the accountant's opinion, would cause the business to fail if lost. A disclaimer opinion includes the review and compilation opinions. Exhibit 5.15 illustrates a disclaimer opinion for Dry Supply. The company did not count its inventory or provide documents to support the cost of property and equipment. GAAP requires inventory to be counted at least annually. Furthermore, GAAP requires companies to retain records to support the cost of fixed assets. Exhibit 5.1 compares the CPA required procedures an their effects on financial statements.

Exhibit 5.15
Disclaimer Audit Opinion: Dry Supply

To the Board of Directors of Dry Supply:

We have been engaged to audit the accompanying balance sheets of Dry Supply as of December 31, 20x6, and December 31, 20x5, and related statements of income, retained earnings, and cash flows for the years then ended. Financial statements are the responsibility of the company's management.

The company did not make a count of its physical inventory in 20x6 or 20x5, stated in the accompanying financial statements at $X thousand as of December 31, 20x6, and at $X thousand as of December 31, 20x5. Furthermore, evidence supporting the cost of property and equipment acquired prior to December 31, 20x6, is no longer available. The company's records do not permit the application of other auditing procedures to inventories or property and equipment.

Because the company did not take physical inventories and we were not able to apply other auditing procedures to satisfy ourselves as to inventory quantities and the cost of property and equipment, the scope of our work was not sufficient to enable us to express, and we do not express, an opinion on these financial statements.

Exhibit 5.16
Comparison of CPA Required Procedures

Procedure	*Audit*	*Review*	*Compilation*	*Effect on Financial Statement*
Verifying clerical accuracy of books and records	Yes	No	No	Over (under) statement of various accounts
Testing transaction	Yes	No	No	Erroneous classifications
Internal control evaluation	Yes	No	No	Records and internal statements reliability
Ratio analysis and other techniques	Yes	Yes	No	Test for reasonableness of amounts
Accounts receivable verification	Yes	No	No	Over (under) statement of amount, accounts may not exist
Accounts payable verification	Yes	No	No	Accounts may be omitted
Physical inventory	Yes	No	No	Inventory values may not be correct
Accounts receivable aging	Yes	No	No	Allowance for bad debts
Accounts payable aging	Yes	No	No	Business as going concern
Inventory price testing	Yes	No	No	Value of inventory cost of goods sold and income

SUMMARY

The commercial loan screening process, which began with the initial interview of the customer by the commercial lender, now has progressed to financial analysis. In a sense, financial analysis is an interview on paper. Financial analysis, the systematic examination and interpretation of financial data, is used to evaluate a business's past performance, present condition, and future prospects. It is essential for the commercial lender to determine the borrower's ability to repay the loan.

Financial analysis begins with obtaining and processing statements. Then, the commercial lender applies technical and analytical skills to spread the statements in various ways to obtain a more precise understanding of the company's financial position and operations. Financial statements are spread in a consistent format for easy comparison, common-sizing, and identifying trends. Financial statements are prepared by using cash or accrual accounting methods. Today, financial statement spreading and other assorted tasks, such as calculating ratios and the percentage change in accounts, are often computer-generated.

Technical data analysis and interpretation, however, is still the province of the commercial lender, and it is here that the essence of financial analysis lies. Lenders need to know accounting principles and how to apply various analytical forms to financial data. The interpretation of data remains the essence of financial analysis. The commercial lender must know what happened and why it happened. Financial statements limitations are determined by their source, quality of information, accounting methods, external environmental changes, and possibly unlisted information, distortion of facts, and aggregation of accounts.

Financial statements are prepared internally or externally. Overall, internally prepared statements, considered to be fairly reliable, are generally less accurate than externally prepared statements. External financial statements, usually prepared by certified public accountants (CPAs), may be compilations, reviews, or audits. Audits must be prepared by CPAs. Compilations, used by nonpublic companies, are the least reliable externally prepared statement, because there is no verification of the company's reported financial statements. There are four types of audit opinions: unqualified, qualified, disclaimer, and adverse opinions. With an audit, the CPA usually issues a management letter expressing operating issue concerns. Footnotes, which are read first, also provide valuable information about the preparation of financial statements. The extent of work performed on a compilation, review, and audit varies. Although an audit is the preferred external financial statement, it might not always be available due to the expense.

REVIEW QUESTIONS

1. What is the role of financial statement analysis?
2. What are the basic steps in the financial analysis process?
3. Explain the difference between cash and accrual accounting.
4. What type of external financial statements is the least reliable? Why?
5. What is a management letter?
6. What is common-sizing and why is it important in financial statement analysis?
7. Explain the difference between technical and interpretive analysis.

ADDITIONAL RESOURCES

Financial Accounting, 9th edition, Beleverd E. Needles, Jr. and Marian Powers, Ph.D., Houghton Mifflin Company, Boston, 2007.

Financial Accounting Standards Board
www.fasb.org

Generally Accepted Accounting Principles
http://cpaclass.com/gaap/gaap-us-01a.htm

Risk Management Association
www.rmahq.org

Securities and Exchange Commission
www.sec.gov

EXERCISE 1

Read the footnotes for H&B's Bakery. What questions do you have based on the footnotes?

EXERCISE 2

The local retail hardware store purchases a snow thrower for $300 on November 3 for cash. On November 10, the snow thrower is sold for $500 on credit due in 30 days.

What would the accrual financial statement show for sales, costs, and profit in November? In December?

What would the cash financial statement show for sales, costs, and profit in November? In December?

Notes to Financial Statements

December 31, 20x4 and 20x3

Note 1 *Description of business*

H & B's Bakery is a retailer of fresh bakery products. The primary area served is Colorado Springs.

Note 2 *Summary of significant accounting polices*

Estimates. Management uses estimates and assumptions in preparing financial statements in accordance with generally accepted accounting principles. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Actual results could vary from the estimates that were used.

Cash. Cash includes demand deposits held at a financial institution. At times, the amount held on deposit may exceed federally insured limits.

Accounts receivable. Accounts receivable uses the allowance method and is shown net of an allowance for doubtful accounts of $15,000 on December 31, 20x4, and 20x3. The company actively monitors its receivable balances and generally requires no collateral. In certain instances, the company requires a partial or full-advance deposit from customers prior to delivery.

Inventory. Inventories are valued using the first-in first-out (FIFO) method.

Depreciation. Depreciation of property and equipment are computed using accelerated methods during the estimated useful lives of the assets as follows:

Furniture and fixtures	5 to 10 years
Machinery and equipment	5 years
Leasehold improvements	10 years
Automobiles and trucks	5 years

Income taxes. By unanimous consent of the shareholders, the company has elected to be treated as a partnership and therefore no company taxes are paid

Note 3 *Inventory*

Inventory consists of raw materials and finished products only.

Notes to Financial Statements (Continued)

December 31, 20x4 and 20x3

Note 4 *Notes payable-bank*

Note payable—bank consists of a revolving credit note payable to Colorado Springs Bank. The note is secured by substantially all assets of the company and the personal guarantees of the partners. Interest is due monthly at prime plus 1.75 percent (7.25 percent on December 31, 20x4). The maximum borrowing under the agreement is the lesser of $50,000 or availability under a borrowing base, as defined. The note agreement expires April 30, 20x5. The outstanding balances on December 31, 20x4 and 20x3 were $20,000 and $5,000, respectively.

Note 5 *Long-term debt 20x4, 20x3*

Note payable to Colorado Springs Bank secured by equipment. In 20x4, the balance was $25,000; in 20x3, the balance was $50,000.

Note 6 *Profit-sharing plan*

Effective January 1, 19x2, the company adopted a profit-sharing plan covering substantially all employees. Contributions to the plan are at the discretion of management. In 20x4, the company contributed $23,000 to the plan.