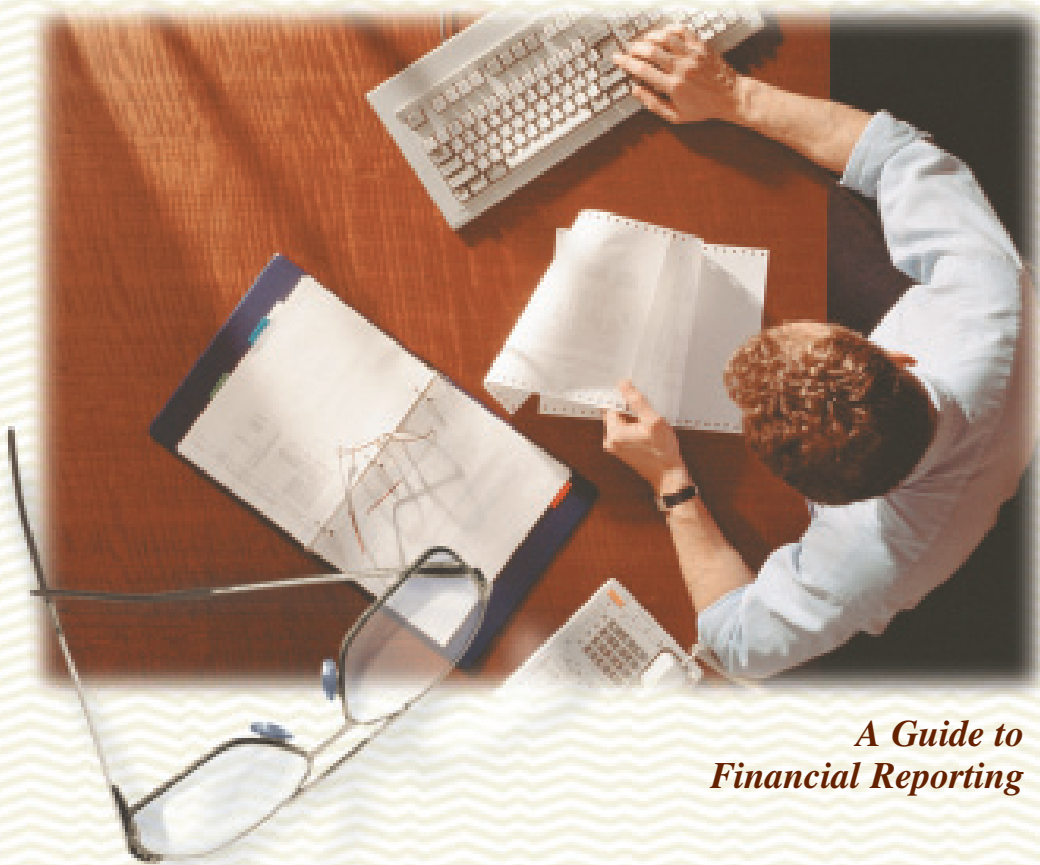


# Reading & Understanding Financial Statements



*A Guide to  
Financial Reporting*

# Introduction

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Financial statements are an important management tool. When correctly prepared and properly interpreted, they contribute to an understanding of the current financial condition, problems, and possibilities of a company.

This explanation has been prepared to help financial and nonfinancial managers and owners make better use of the information in financial statements.

Specifically, this brochure describes five financial statements:

**The Balance Sheet**, which is sometimes referred to as the Statement of Financial Condition or Statement of Financial Position.

**The Income Statement**, which is sometimes referred to as the Statement of Income, Statement of Operations or the Profit and Loss Statement.

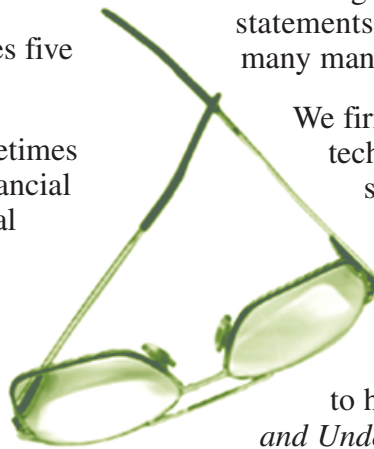
**The Statement of Cash Flows.**

**The Statement of Comprehensive Income.**

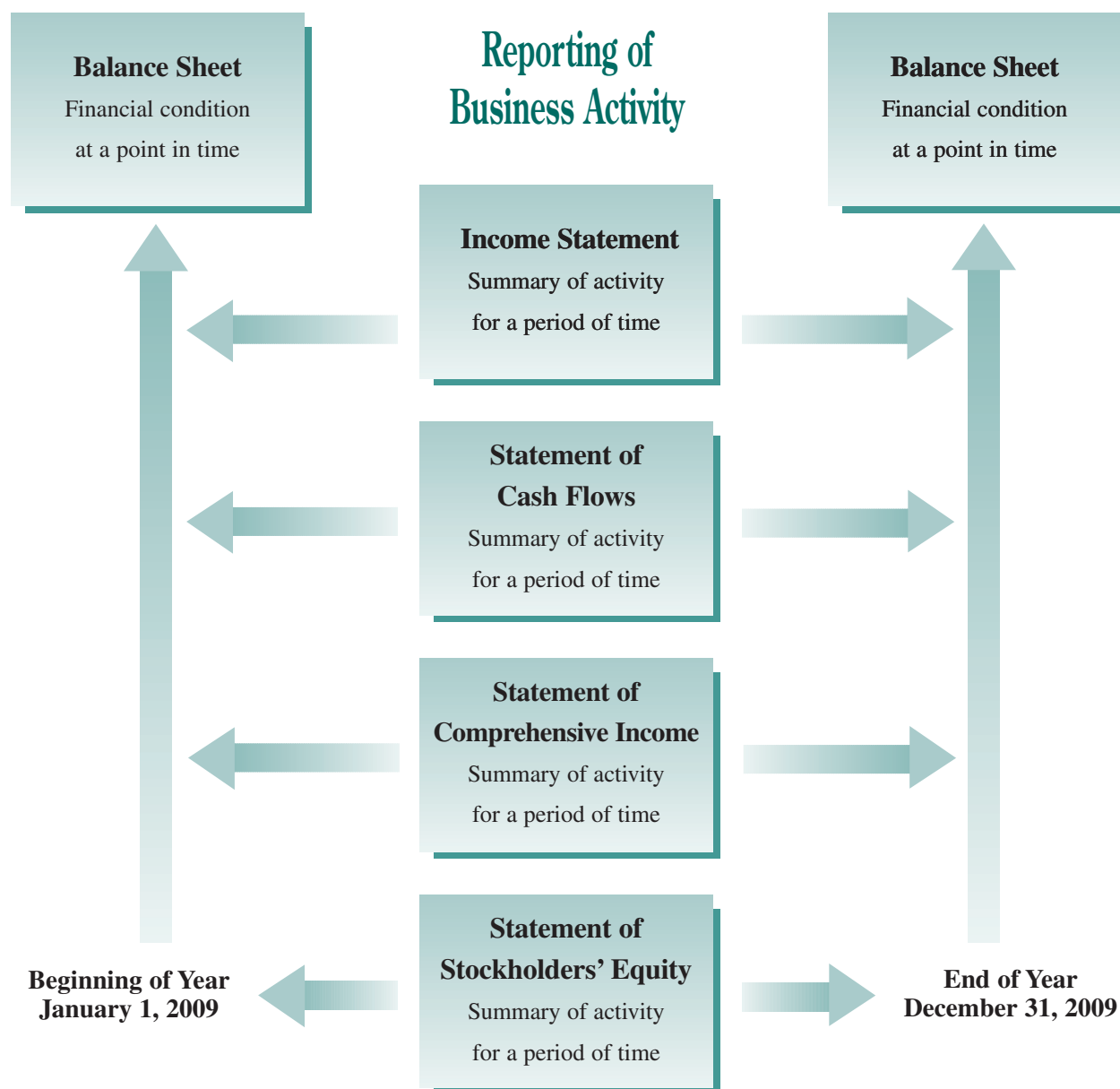
**The Statement of Stockholders' Equity**, also called the Statement of Changes in Stockholders' Equity. If the only change in the equity accounts is in retained earnings, this statement may be called a Statement of Retained Earnings or simply included on the face of the Income Statement.

These statements are prepared and presented using technical terms and rules that are becoming increasingly complex. Interpretation of these statements may be a formidable challenge to many managers and owners.

We firmly believe that — no matter how technically correct they are — financial statements are not *useful* unless they are actually *used* in making business decisions. When the statements “gather dust” because managers and owners do not understand what they are saying, we feel an obligation to help. We hope this guide to *Reading and Understanding Financial Statements* will help you to use financial statements in making decisions, monitoring your business, and planning for future growth.



## How Do Financial Statements Relate to the Passage of Time?



The *Balance Sheet* is a “photograph”: It represents, at a moment in time, the financial position of the business entity. It needs to be compared to other “photographs” to provide meaningful information on changes in financial position. For that reason, the balance sheet as of the end of one or more preceding years is usually presented with the balance sheet as of the end of the current year.

The other primary financial statements — the *Income Statement*, *Statement of Cash Flows*, *Statement of*

*Comprehensive Income*, and *Statement of Stockholders' Equity* — present a summary of activities over a period of time, usually a fiscal quarter or year. The *Income Statement* presents revenues less associated expenses and the resulting net income. The *Statement of Cash Flows* provides information about the sources and uses of cash, and the *Statement of Comprehensive Income* and the *Statement of Stockholders' Equity* show changes in items contained in the equity section of the balance sheet.

## OVERVIEW: The Balance Sheet

The Balance Sheet (or Statement of Financial Position/Condition) is so named because it represents the following equation:

<b>Assets</b> (Resources of the business)	=	<b>Liabilities</b> (Amounts owed to outside creditors)
		+
		<b>Equity</b> (Capital provided by owners)

At any point in time this basic equation holds, although the amounts assigned to the individual elements will fluctuate.

Assets increase or decrease as resources are obtained, disposed of, become more or less valuable, or are used up (expensed) in the course of operations.

Liabilities increase or decrease as obligations to suppliers, lenders, and other creditors are incurred or repaid. In some cases, the amounts of liabilities need to be estimated (referred to as “accruals”) and are subject to adjustment (upward or downward) in later periods. In limited circumstances, recorded liabilities are contingent upon the occurrence of future events, and may not be paid in part or full.

Equity increases or decreases as a result of income or loss from operations of the business. It also increases when the owners contribute capital to the business, and decreases when the capital is withdrawn or dividends are paid.

## OVERVIEW: The Income Statement

The Income Statement (or Statement of Operations) is a summary of revenues and expenses, the latter usually broken down (or summarized) by major categories.

Income from operations is an important measure of the entity’s performance, since it represents the pretax income earned (or loss incurred) from the core operations of the business, before considering certain financial costs, other nonoperating items, and extraordinary gains or losses.

Other income and expense include financial costs (interest expense) and other items that are not directly related to the primary purposes of the business.

	Revenue (or sales)
–	Cost of sales
	<hr/>
=	Gross profit (or gross margin)
–	Selling expenses
–	Administrative expenses
	<hr/>
=	Income from operations
+/-	Other income and expense
–	Income taxes
	<hr/>
=	Income before extraordinary items
+/-	Extraordinary items
	<hr/>
=	Net income
	<hr/> <hr/>

Extraordinary items are defined as those which are unusual and occur infrequently, and include such losses as those from natural disasters and expropriation of foreign properties. While not extraordinary per se, certain other items, including the results of discontinued operations and the cumulative effects of changes in accounting principles, are also presented separately at the bottom of the Income Statement,

where the reader can distinguish them from ongoing results of operations.

Net income or loss is the all-inclusive “bottom line” that reflects all economic activity by the enterprise for the period being reported on (year, quarter, month, etc.), except for transactions with owners.

## OVERVIEW: The Statement of Cash Flows

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The Statement of Cash Flows reports the sources and uses of cash for the period, as separated into three major classifications:

	Cash provided by or used for operations
+/-	Cash provided by or used for investing activities
+/-	Cash provided by or used for financing activities
=	<u>Net increase or decrease in cash</u>

Operations include the cash effects of essentially all items identified in the Income Statement, such as sales, costs of sales, operating expenses, and extraordinary items.

Investing activities include the purchase of property and equipment or the proceeds from their disposition, and also certain transactions involving investments in securities or other nonoperating assets.

Financing activities include debt borrowings and repayments, as well as the contribution and withdrawal of equity capital, and the payment of dividends to owners.

## OVERVIEW: The Statement of Comprehensive Income

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The Statement of Comprehensive Income applies to companies whose balance sheet equity includes certain items such as foreign currency adjustments, pension liability adjustments, and gains and losses on certain types of investments. Companies that do not

have these items on their balance sheets will not need to present this statement. Companies that do have these items on their balance sheets may present this statement separately or combine it with the Statement of Income.

## OVERVIEW: The Statement of Stockholders' Equity

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The Statement of Stockholders' Equity details changes in the interests of the company's owners, including stock issuances, stock repurchases, stock conversions, dividends paid, other comprehensive income or loss, and net income or loss. A company is required to

disclose all changes in equity accounts and in the number of shares outstanding. This can be accomplished through disclosure in the footnotes, or as is often the case, in a separate Statement of Stockholders' Equity.

## Other Elements of Financial Reports

In addition to the basic financial statements, most financial statements which have been prepared for delivery to third parties (i.e., those outside the reporting entity) will have a section of Notes to Financial Statements.

The Notes to Financial Statements set forth the major accounting principles used in developing the amounts reported in the statements (where a choice was made from among alternative generally accepted accounting principles or “GAAP”), and also provide additional details about major balances and transactions. Examples of the latter include details about long-term leases, long- and short-term debt (including interest rates and maturities), transactions with related parties, contingent liabilities, and commitments.

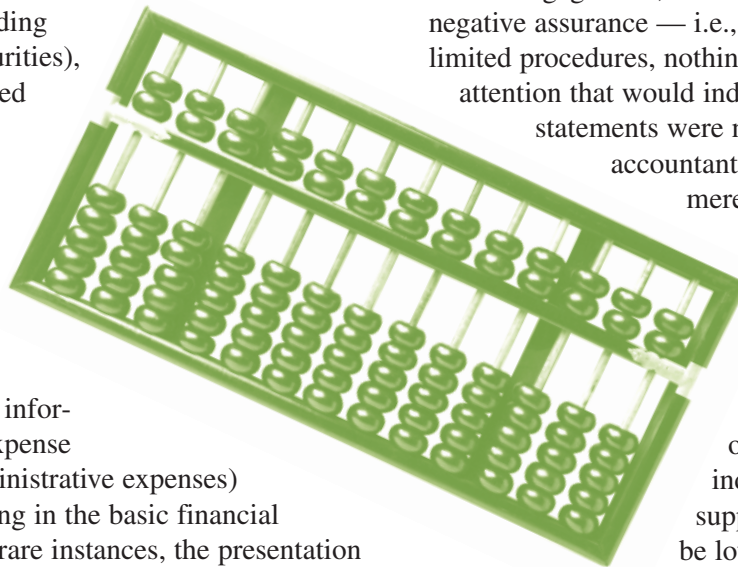
Financial reports may also include supplementary schedules, which provide more detailed information about major expense captions (such as administrative expenses) or other items appearing in the basic financial statements. Except in rare instances, the presentation of supplementary schedules is not required under generally accepted accounting principles, but represents a choice made by the preparer of the financial statements to provide the reader with additional information.

If independent accountants have been associated with the financial statements, their report will be included with the statements. The report will identify what professional service was provided — an audit, a review,

or a compilation — and indicate what conclusions, if any, were reached regarding the financial statements. In the case of an audit, the independent accountant will provide positive assurances that the financial statements materially “present fairly” the financial position, results of operations, and cash flows of the company in accordance with generally accepted accounting principles, if it can be concluded that this is the case. If the statements contain a departure from generally accepted accounting principles, or if the audit was subject to a scope limitation, or if there is doubt about the entity’s ability to continue as a going concern — these matters must also be described in the auditor’s report. In a review engagement, at best the accountant will express negative assurance — i.e., that based on performing limited procedures, nothing came to the accountant’s attention that would indicate that the financial statements were not fairly presented. An

accountant performing a compilation merely assists the company in assembling the financial statements, and offers neither positive nor negative assurances about whether they are presented fairly. The level of assurance offered by the independent accountant on supplementary schedules may be lower than that offered on the basic financial statements. Thus, the basic statements may have been

reviewed, and the accountant may have also reviewed the supplementary information, or alternatively the accountant may only have compiled the supplementary data. If the basic financial statements have been audited, the supplementary information may have also been subjected to audit procedures, or, if not, the accountant’s report will note that the supplementary data have not been audited.



# ABC Corporation

## Balance Sheets December 31, 2009 and 2008

Assets	2009	2008
<b>Current Assets</b>		
Cash and cash equivalents.....	\$ 377,000	\$ 314,000
Investments in trading securities .....	137,000	115,000
Accounts receivable, less allowance for doubtful accounts of \$12,500 and \$8,400 in 2009 and 2008, respectively .....	1,178,000	1,175,000
Inventories.....	458,000	424,000
Prepaid expenses.....	142,000	153,000
Total current assets .....	2,292,000	2,181,000
<b>Property and Equipment</b>		
Land .....	1,000,000	1,000,000
Building and improvements .....	1,602,000	1,292,000
Machinery and equipment .....	10,447,000	9,957,000
Total property and equipment.....	13,049,000	12,249,000
Less accumulated depreciation .....	(3,906,000)	(3,660,000)
Net property and equipment .....	9,143,000	8,589,000
<b>Other Assets</b> .....	201,000	234,000
Total assets .....	\$11,636,000	\$11,004,000
<b>Liabilities and Stockholders' Equity</b>		
<b>Current Liabilities</b>		
Notes payable.....	\$ 110,000	\$ 110,000
Current maturities of long-term debt.....	261,000	282,000
Accounts payable .....	809,000	796,000
Income taxes payable.....	200,000	200,000
Accrued expenses.....	544,000	436,000
Total current liabilities .....	1,924,000	1,824,000
<b>Other Liabilities</b>		
Long-term debt, net of current maturities .....	2,302,000	2,466,000
Deferred income taxes .....	2,171,000	1,854,000
Total other liabilities.....	4,473,000	4,320,000
Total liabilities.....	6,397,000	6,144,000
<b>Stockholders' Equity</b>		
9.5% cumulative preferred stock, par value, \$10 per share, 36,000 shares authorized, issued, and outstanding .....	360,000	360,000
Common stock, par value, \$1 per share, 1,000,000 shares authorized, 150,000 and 146,000 shares issued and outstanding in 2009 and 2008, respectively, including shares held in treasury .....	150,000	146,000
Additional paid-in capital.....	1,639,000	1,575,000
Retained earnings .....	3,120,000	2,809,000
Less cost of common stock held in treasury — 4,400 shares ..	(30,000)	(30,000)
Total stockholders' equity.....	5,239,000	4,860,000
Total liabilities and stockholders' equity.....	\$11,636,000	\$11,004,000

# The Balance Sheet in Greater Detail

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**Current Assets** are those assets of a company which are reasonably expected to be realized in cash, sold, or consumed during the normal operating cycle of the business or one year, if less. These assets generally include **cash and cash equivalents** such as money market accounts, certain **investments in debt and marketable equity securities, accounts receivable, inventories,** and certain **prepaid expenses** such as insurance.

**Property and Equipment** are assets of a durable nature and a relatively long life that are used in the regular operations of the business.

**Accumulated Depreciation** is the aggregate of charges to expense or to write off the cost of property and equipment over its estimated useful life. It is the result of a bookkeeping entry and does not represent any current cash outlay.

**Other Assets** may consist of intangibles, such as goodwill, patents or trademarks; assets, such as the cash surrender value of life insurance; and prepaid expenses, including unexpired multi-year insurance premiums.

In certain industries, such as real estate, assets are presented without being classified in the categories shown in this example.

**Current Liabilities** are those obligations that are reasonably expected to be paid using current assets. These liabilities generally include **notes payable, current maturities of long-term debt, accounts payable, income taxes payable, and accrued expenses** such as salaries and interest.

**Long-term Debt** is debt less current maturities and

includes those obligations that are not expected to be paid within one year. Bonds and mortgages are common long-term liabilities.

**Deferred Income Taxes** result from differences between taxable income and accounting income. Common items giving rise to deferred income taxes include depreciation methods that are allowed by tax law but do not match the estimated useful life of the

asset, deferred compensation that is not deductible until paid but gives rise to currently reported expense, and certain prepaid income such as rent received by the business in advance of the date it is due, which is deferred to later periods for accounting purposes, but which is taxed currently.

**Common Stock and Preferred Stock,** if any, represent the ownership interests in a corporation. The preferred stock will have preferential rights as to dividends or in the event of liquidation of the business. Common stock represents the residual ownership interest.

**Additional Paid-in Capital** is the difference between the amount of money obtained by a corporation on the issuance of its own stock and the par value of the stock.

**Retained Earnings** are the portions of all the company's past earnings that were not distributed to the owners.

**Treasury Stock** is stock that was once issued by the company but later was reacquired. Treasury stock receives no dividends and has no vote while held by the company.

**Total Liabilities and Stockholders' Equity** is always equal to **total assets**.

“Deferred Income Taxes result from differences between taxable income and accounting income.”



## ABC Corporation

### Statements of Income and Retained Earnings Years Ended December 31, 2009 and 2008

	<u>2009</u>	<u>2008</u>
Sales .....	\$7,934,000	\$5,891,000
Cost of goods sold.....	<u>6,816,000</u>	<u>5,155,000</u>
<b>Gross profit</b> .....	1,118,000	736,000
Selling, general and administrative expenses.....	<u>100,000</u>	<u>100,000</u>
<b>Income from operations</b> .....	<u>1,018,000</u>	<u>636,000</u>
Other income and expense		
Interest expense.....	(242,000)	(215,000)
Dividend income .....	9,000	1,000
Interest income.....	50,000	44,000
Other items, net .....	<u>5,000</u>	<u>—</u>
Other (expense), net.....	<u>(178,000)</u>	<u>(170,000)</u>
<b>Income before income taxes and extraordinary item</b> .....	840,000	466,000
Income taxes .....	<u>325,000</u>	<u>194,000</u>
<b>Income before extraordinary item</b> .....	515,000	272,000
Extraordinary item, less applicable income tax benefit of \$32,000 .....	<u>(50,000)</u>	<u>—</u>
<b>Net income</b> .....	465,000	272,000
Retained earnings — beginning of year .....	2,809,000	2,670,000
Dividends paid.....	<u>(154,000)</u>	<u>(133,000)</u>
<b>Retained earnings — end of year</b> .....	<u><u>\$3,120,000</u></u>	<u><u>\$2,809,000</u></u>

## The Income Statement in Greater Detail

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**Sales** result when a company provides customers those products or services that it is in business to sell.

**Cost of Goods Sold** represents the cost of producing goods for sale. For example, cost of goods sold in a manufacturing company is comprised of direct labor, direct materials, and overhead.

**Gross Profit** is a measure of the profit contribution from the sales of products and/or services, before considering administrative overhead.

**Selling, General and Administrative Expenses** are costs associated with the sale and delivery of products and the general costs associated with the operation and management of a business, other than those charged to cost of goods sold.

**Income from Operations** is another measure of profitability, equal to gross profit less selling, general and administrative costs.

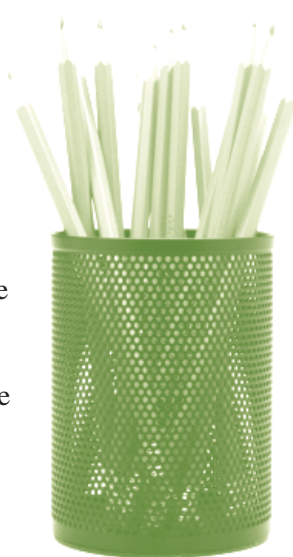
**Other Income and Expense** arise from transactions not related directly to the primary operations of the business. Items frequently reported in this nonoperating category are dividend income, interest income, and certain gains or losses.

**Interest Expense** refers to interest paid periodically during the term of a loan by a borrower to the lender for the use of money. Interest expense must be separately stated, usually as a subcategory of other income and expense.

**Income Taxes** is an estimate of the amount of income tax that will eventually be paid, or has been paid, on the reported earnings.

**Extraordinary Items** are income or losses of an unusual and infrequent nature.

**Net Income** is the “bottom line” measure of the earnings performance of the company for the period reported on, after considering all elements of income and expense.



# ABC Corporation

## Statements of Cash Flows Years Ended December 31, 2009 and 2008

	2009	2008
<b>Cash Provided by (Used for) Operating Activities</b>		
Net income .....	\$ 465,000	\$ 272,000
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization .....	479,000	300,000
Deferred income taxes .....	317,000	69,000
Gain on sale of property and equipment .....	(28,000)	(59,000)
Changes in operating assets and liabilities		
Accounts receivable .....	(3,000)	(64,000)
Inventories .....	(34,000)	129,000
Prepaid expenses .....	11,000	32,000
Accounts payable .....	13,000	22,000
Accrued expenses .....	108,000	(110,000)
Net cash provided by operating activities .....	1,328,000	591,000
<b>Cash Provided by (Used for) Investing Activities</b>		
Purchase of property and equipment .....	(1,010,000)	(1,430,000)
Proceeds from disposal of property and equipment .....	38,000	7,000
Purchase of investments .....	(22,000)	—
Net cash used for investing activities .....	(994,000)	(1,423,000)
<b>Cash Provided by (Used for) Financing Activities</b>		
Additional long-term debt .....	137,000	863,000
Retirement of long-term debt .....	(322,000)	(560,000)
Issuance of common stock .....	68,000	466,000
Purchase of treasury stock .....	—	(18,000)
Dividends paid .....	(154,000)	(133,000)
Net cash provided by (used for) financing activities .....	(271,000)	618,000
Increase (decrease) in cash and cash equivalents .....	63,000	(214,000)
Cash and cash equivalents, beginning of year .....	314,000	528,000
Cash and cash equivalents, end of year .....	\$ 377,000	\$ 314,000

## The Statement of Cash Flows in Greater Detail

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**Operating Activities** include all transactions and other events that are the result of delivering or producing goods for sale and providing services.

Cash inflows from operating activities include cash receipts from the sale of goods or services and from interest and dividend income. Cash outflows for operating activities include cash payments for the purchase of inventory, wages and benefits to employees, to government taxing bodies, as interest to lending institutions, and to various other suppliers.

**Investing Activities** include lending money and collecting on those loans, acquiring and selling investment securities, and acquiring and selling productive assets such as land and equipment.

Cash inflows from investing activities include principal repayments from borrowers, proceeds from sales of loans and receipts from sales of assets such as investment securities or property and equipment. Cash outflows for investing activities include loans made, loans purchased, and payments to acquire assets such as investment securities or property and equipment.

**Financing Activities** include obtaining resources from owners, providing owners with a return on (of) their

investment, obtaining resources from lenders, and repaying amounts borrowed. Interest on borrowings, however, is an operating activity.

Cash inflows from financing activities include proceeds from the issuance of the company's stock and from long- and short-term borrowings. Cash outflows for financing activities include payment of dividends, cash paid to reacquire the company's stock, and repayment of amounts borrowed.

“Cash outflows for investing activities include loans made, loans purchased . . . .”

The form of the cash flow statement illustrated on page 10 is the so-called “indirect method” favored by most companies. However, an alternative format, the “direct method” is also acceptable. Under that approach, the Cash Provided by (Used for) Operating Activities section will list each major source or use of cash which corresponds to major captions in the income statement. For example, corresponding to sales will be the cash flow statement caption “Cash Collected from Customers”; corresponding to cost of sales will be “Cash Paid to Suppliers”; etc. If the direct method

is used, the cash flow statement (or a supplementary schedule) will present the reconciliation between net income and cash from operations — which will closely resemble the cash from operations section of the statement illustrated on page 10.

## The Statement of Comprehensive Income

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Certain companies present the Statement of Comprehensive Income. This statement is only presented when the equity section of the company's balance sheet contains adjustments relating to pensions, foreign currencies, or certain types of investments. The changes in these items from period to period, instead of being reflected on the income statement as part of net income, are reflected directly on the balance sheet. The Statement of Comprehensive Income simply reconciles the change in these items for the periods presented.

There are a variety of ways that this information can be presented. It can be simply added to the bottom of the income statement (which would be retitled the Statement of Income and Comprehensive Income), shown as a separate statement, or shown in a statement reconciling all changes in the equity section of the balance sheet which would be titled the Statement of Stockholders' Equity.

## The Statement of Stockholders' Equity

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When both a balance sheet and income statement are presented, disclosure of all changes in equity accounts and in the number of shares outstanding during at least the most recent annual fiscal period presented is required. There are a number of ways this information can be presented. Disclosure of these changes may be made in a separate statement, called the Statement of Stockholders' Equity, or may be made in the basic financial statements or notes thereto. Companies frequently choose to provide a Statement of Stockholders' Equity with their other financial statements.

The purpose of the Statement of Stockholders' Equity is to report the events that caused individual stockholders'

equity accounts to change during the accounting period. Accordingly, the Statement of Stockholders' Equity is dated like the income statement. It covers a period of time. The Statement of Stockholders' Equity summarizes the changes in the various components of the stockholders' equity section of the balance sheet. In many cases the specific events that caused the change in one or more stockholders' equity accounts are of interest to the financial statement user. The Statement of Stockholders' Equity includes stock issuances, stock repurchases, stock conversions, dividends paid, and other comprehensive income or loss components which may be important and useful information to many readers of the financial statements.

## Notes to Financial Statements and Supplementary Schedules

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Although the basic financial statements — discussed in the preceding sections — do present the company's financial position, results of operations, and cash flows, there are other important disclosures, both mandatory and voluntary, that cannot be incorporated on the face of the statements. For this reason, most complete sets of financial statements will include a section of notes after the basic statements. (These are sometimes still called "footnotes," a term that is a holdover from a simpler era when these disclosures were actually presented at the bottom of the financial statements.)

Certain notes are always found in GAAP financial statements. For example, the "summary of significant accounting policies," usually the first note, identifies which among equally acceptable GAAP the company has elected to use (e.g., straight line versus accelerated depreciation; LIFO versus FIFO inventory costing, etc.). Other notes will only be presented when conditions warrant (e.g., details of debt maturities, capital lease obligations, related party transactions, major customers, etc.). Finally, some disclosures will appear because management believes they give useful insight into the company's economic prospects (e.g., details of long-term contracts with customers, summary of key ratios, financial highlights).

Notes are considered to be an integral part of the basic financial statements. Thus, standards for accuracy and clarity apply equally to the notes, and the independent accountant must apply the same level of service (audit, review, or compilation) to the notes as to the basic financial statements themselves. If well-written and organized, notes should help the user to better understand the financial statements and the reporting entity's financial and operating prospects. However, because of the substantial amount of detail they often contain, the notes do require a careful study by the reader.

Many financial statements also contain a section of supplementary information. Usually this information is in the nature of additional detail (e.g., the elements comprising "selling expenses"), although sometimes it is a recasting of the basic financial statements on an alternative basis of accounting (such as FIFO inventory costing when the basic statements were prepared using the LIFO basis). Supplementary information may have received the same level of attention from the independent accountant as the basic statements and notes, or it might have a lesser degree of assurance associated with it. In either case, the accountants' report letter(s) will indicate the responsibility they assume, if any.

# Using the Financial Statements To Analyze the Performance of the Business

The information contained in the basic financial statements and notes can and should be used to provide insight into the financial strength and earnings capacity of the business. This extends beyond such single statement captions as “net income,” and necessitates that *relationships* between amounts be examined. While an almost unlimited number of such ratios and comparisons are possible, a relatively small group of these are traditionally the object of most readers’ attention.

The nature of the analysis depends on the perspective of the reader. For example, the short-term note holder would be primarily concerned with the company’s ability to pay its current obligations. The holder of

long-term debt might look to both historical and projected earnings and cash flows. The stockholders, current and future, would share a viewpoint similar to that of the long-term debtholder, with perhaps more concern for earnings (vis-a-vis cash flows) and growth trends than the creditors might exhibit.

The management of a company is concerned with all of the above factors and, in addition, needs financial information that is useful for decision-making purposes.

A selection of the financial ratios that are most often computed to analyze a business is shown on the following pages.

## Ratios To Measure Return on Investments

### 1. Return on equity

Ratio	Example*
$\frac{\text{Net income (Income Statement)}}{\text{Average stockholders' equity (Balance Sheet)}}$	$\frac{465,000}{(5,239,000 + 4,860,000) \div 2} = 9.2\%$

Measures the annual percentage yield on the investment made by the owners.

### 2. Return on assets

Ratio	Example*
$\frac{\text{Net income (Income Statement)}}{\text{Average total assets (Balance Sheet)}}$	$\frac{465,000}{(11,636,000 + 11,004,000) \div 2} = 4.1\%$

Measures the annual percentage yield on the gross investment in the business financed collectively by the owners and creditors. The relationship between the returns on assets and on equity is indicative of the effect of the business’s financial leverage — if the leverage is positive, the return on equity will be greater than the return on assets. Businesses that perform in this manner make effective use of debt financing to increase returns to their stockholders.

\*Figures in examples are from the sample financial statements presented earlier.

# Ratios To Measure Safety and Liquidity

## 1. Net working capital

	<b>Example*</b>
Current assets (Balance Sheet)	\$2,292,000
– <u>Current liabilities (Balance Sheet)</u>	<u>–1,924,000</u>
	<u>\$ 368,000</u>

A measure of the shorter-term, more liquid assets available to meet short-term obligations and serve as a cushion against unforeseen needs for resources.

## 2. Current ratio

<b>Ratio</b>	<b>Example*</b>
$\frac{\text{Current assets (Balance Sheet)}}{\text{Current liabilities (Balance Sheet)}}$	$\frac{\$2,292,000}{\$1,924,000} = 1.19:1$

Another measure of the ability to pay current liabilities as they mature. A ratio of 1:1 or greater corresponds to positive net working capital.

## 3. Liabilities to equity ratio\*\*

<b>Ratio</b>	<b>Example*</b>
$\frac{\text{Total liabilities (Balance Sheet)}}{\text{Stockholders' equity (Balance Sheet)}}$	$\frac{\$6,397,000}{\$5,239,000} = 1.22:1$

Indicates the mix of funding provided by owners (common and preferred stockholders) and creditors. The greater the number, the “more leveraged” is the company.

## 4. Times interest earned

<b>Ratio</b>	<b>Example*</b>
$\frac{\text{Income before interest and taxes (Income Statement)}}{\text{Interest expense (Income Statement)}}$	$\frac{\$840,000 + 242,000}{\$242,000} = 4.5 \text{ times}$

Measures the ability of a company to cover the payment of interest to creditors.

## 5. Debt service ratio

<b>Ratio</b>	<b>Example*</b>
$\frac{\text{Income before interest and taxes (Income Statement)}}{\text{Interest expense plus amounts of scheduled debt repayments (Income Statement and Statement of Cash Flows)}}$	$\frac{\$840,000 + 242,000}{\$242,000 + 322,000} = 1.9 \text{ times}$

Measures the company’s ability to pay both the interest and the current principal installments on its outstanding debt and suggests the degree of safety for creditors concerning currently due debt service obligations.

\*Figures in examples are from the sample financial statements presented earlier.

\*\*Many analysts refer to this ratio as the “debt to equity ratio” even though, technically, the term “debt” normally refers to loans made to the company and excludes other liabilities.

# Ratios To Measure Operating Efficiency

## 1. Average collection period

Ratio	Example*
$\frac{\text{Average accounts receivable (Balance Sheet)}}{\text{Average daily sales (Income Statement)}}$	$\frac{(1,178,000 + 1,175,000) \div 2}{7,934,000 \div 365} = \frac{1,176,500}{21,737} = 54.1 \text{ days}$

Measures the average number of days' sales that are uncollected in accounts receivable, providing an idea of how successful the firm is in collecting amounts due from its customers.

## 2. Receivables turnover

Ratio	Example*
$\frac{\text{Total sales (Income Statement)}}{\text{Average accounts receivable (Balance Sheet)}}$	$\frac{7,934,000}{(1,178,000 + 1,175,000) \div 2} = 6.7 \text{ times}$

An alternative, but equivalent, measure of the efficiency of the company's receivable collection efforts. If the company also makes sales for cash, "total credit sales" should be substituted for "total sales."

## 3. Number of days' sales in inventory

Ratio	Example*
$\frac{\text{Average inventory (Balance Sheet)}}{\text{Average daily cost of sales (Income Statement)}}$	$\frac{(458,000 + 424,000) \div 2}{6,816,000 \div 365} = \frac{441,000}{18,674} = 23.6 \text{ days}$

An indicator of the amount of inventory maintained relative to the average number of days' shipments that would be filled. This measure can be used to assess the efficiency of the company's distribution system.

## 4. Inventory turnover

Ratio	Example*
$\frac{\text{Cost of goods sold (Income Statement)}}{\text{Average inventory (Balance Sheet)}}$	$\frac{6,816,000}{(458,000 + 424,000) \div 2} = 15.5 \text{ times}$

An alternative measure of how quickly inventory is sold and how efficiently it is managed.

\*Figures in examples are from the sample financial statements presented earlier.



## SUMMARY

Financial analysis involves many different approaches; the ratio analysis presented on the preceding pages is only one of several means of gaining an understanding about a company from its financial data. Other approaches, such as the careful study of the financial statement notes, examination of the company's accounting policies, and an analysis of operations by division or product-line should also be considered. We can assist in developing other procedures that will be useful on a day-to-day operating basis.

We want your financial statements to be used and useful. If you would like further information, please call.

