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PREFACE TO THE SIXTH EDITION

When I started this book we had no grandchildren; we now have 11 and one on the way. When the first edition was released in 1980 the Dow Jones Industrial Average hovered around 850. It reached an 11,700 high point in early 2000. You know what has happened to the Dow since then. As J. P. Morgan once said: "The market will fluctuate." Nevertheless millions of individuals have kept their money invested in the stock market, and stock investments are a large part of most retirement plans. Knowing how to read a financial report is as important as ever.

Stock values depend heavily on earnings and other information divulged in financial reports by businesses. Over the past few years many accounting fraud scandals have shaken investors' confidence in the reliability of financial report information. The large number of instances of financial reporting fraud—and the failure of the certified public accountant (CPA) auditors to discover these frauds—were a shock to me, and I think to most observers of financial reporting. The consequences of these accounting frauds pale in comparison with the consequences of the 9/11 terrorists attacks, of course. But the fallout from these financial frauds was widespread and caused billions of dollars of losses to investors.

Many asked what went wrong and how to fix things to prevent this sort of breakdown in our financial system from happening again. One result was the passage of the Sarbanes-Oxley Act of 2002. This piece of federal legislation made fundamental changes in how auditing and financial reporting will be done in the future. For one thing, a new Public Company Accounting Oversight Board having broad powers over auditing was established.

The demise of Arthur Andersen, one of the so-called Big Five CPA firms, caused by its conviction for obstruction of justice in the Enron case, was a wake-up call to the other four CPA firms—or was it? Only time will tell. Corporate executives and CPA auditors will have to operate under new rules in the future. Hopefully, these changes in the rules governing financial reporting and auditing will make the stock market a fairer place to invest money. We shall see.

All exhibits in this edition have been refreshed—to make them clearer and more contemporary. The exhibits were prepared from Excel work sheets. To request a copy of the work sheets please contact me at my e-mail address: tracyj@colorado.edu. Now that I'm retired I have more time to read and answer my e-mails.

The basic design of the book remains unchanged. The framework of the book has proved very successful for more than 20 years. I'd be a fool to mess with this success formula. My mother did not raise a fool. Cash flow is underscored throughout the book. This cash flow emphasis is the hallmark of the book. It is the main characteristic that distinguishes this from other books on financial statement analysis. Of course I have made many updates dealing with the major developments since the fifth edition was released in 1999.

Not many books of this ilk make it to the sixth edition. It takes a good working partnership between the author and the publisher. I thank most sincerely the many persons at John Wiley & Sons who have worked with me on the book for more than two decades. The comments and suggestions on my first draft of the book by Joe Ross, then national training director of Merrill Lynch, were extraordinarily helpful. The continuing support of Debra Englander, executive editor at Wiley, is much appreciated.

I dedicate the book to Gordon B. Laing, my original editor. He laid a heavy hand on the book, which only now I see in fullest appreciation. His superb

editing was a blessing that few authors enjoy. His guidance, encouragement, and enthusiasm made all the difference. Much to my sorrow Gordon died in January 2003. He was a true gentleman who taught me much about writing. His criticisms of my manuscript drafts were sharp but always kindly and supportive. Gordon took much pride in the success of the book—as well he should have! Gordon, my dear old friend, I couldn't have done it without you.

JOHN A. TRACY

Boulder, Colorado
January 2004

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STARTING WITH CASH FLOWS

Importance of Cash Flows: Cash Flows Summary for a Business

Business managers, lenders, and investors, quite rightly, focus on *cash flows*. Cash inflows and outflows are the heartbeat of every business. So, we'll start with cash flows. For our example we'll use a company that has been operating many years. This established business makes a profit regularly and, equally important, it keeps in good financial condition. It has a good credit rating; banks are willing to lend money to the company on very competitive terms. If the business needed more money for expansion, new investors would be willing to supply fresh capital to the business. None of this comes easy! It takes good management to make profit, to raise capital, and to stay out of financial trouble.

Exhibit 1.1 on the next page presents a summary of the company's cash inflows and outflows for its most recent year. Two different groups of cash flows are shown. First are the cash flows of making profit—cash inflows from sales and cash outflows for expenses. Second are the other cash inflows and outflows of the business—raising capital, investing capital, and distributing profit to its owners.

I assume you're fairly familiar with the cash inflows and outflows listed in Exhibit 1.1—so, I'll be brief in describing each cash flow at this early point in the book:

- In the first group of cash flows, the business received money from selling products to its customers. It should be no surprise that this is the largest source of cash inflow, amounting to $51,680,000 during the year. Cash inflow from sales revenue is needed for paying expenses. The company paid $34,435,000 for manufacturing products that are sold to its customers; and, it had sizable cash outflows for operating expenses, interest on its debt (borrowed money), and income tax. The net result of these profit-making cash flows was a positive $3,430,000 for the year—which is an extremely important number that managers, lenders, and investors watch closely.
- In the second group of cash flows, notice first of all that during the year the company invested $3,950,000 in various assets. Where did this almost $4 million come from? The cash flow from its profit-making activities provided $3,430,000—or did it? Notice that the company distributed $750,000 of its profit for the year to its owners (stockholders), leaving only $2,680,000 for investing in its assets. So, the business borrowed more money during the year and its stockholders put a little more money into the business. Even so, the company's cash balance dropped $470,000 during the year—see Exhibit 1.1 again.

EXHIBIT 1.1—SUMMARY OF CASH FLOWS DURING YEAR
Dollar Amounts in Thousands

Profit-Making Cash Flows—Revenue Inflows and Expense Outflows		
From customers for products sold to them, some from sales made last year	$ 51,680	
For buying and making products that were sold, or are still being held for future sale	(34,435)	
For many expenses of operating the business, such as wages and advertising	(11,955)	
For interest on short-term and long-term debt	(520)	
For income tax, some of which was due on last year's taxable income	(1,340)	
Net cash increase during year from profit-making activities		$ 3,430
Other Sources and Uses of Cash		
For building improvements, new machinery, new equipment, purchase of goodwill, and the purchase of other assets that will be used several years	$ (3,950)	
From increasing amount borrowed on interest-bearing notes payable	625	
From issuing new capial stock (ownership) shares in the business	175	
For distributions to stockholders from profit earned during the year	(750)	
Net cash decrease during year from other activities		(3,900)
Decrease in cash during year		$ (470)

What Does the Cash Flows Summary NOT Tell You?

In Exhibit 1.1 we see that cash, the all-important lubricant of business activity, decreased $470,000 during the year. In other words, all cash outflows exceeded all cash inflows by this amount for the year. Without a doubt this cash decrease and the reasons for the decrease are very important information. The cash flows summary tells a very important part of the story of a business. But, cash flows do not tell the whole story. Business managers, investors in business, business lenders, and many others need to know two other essential things about a business that are *not* reported in its cash flows summary.

The two most important types of information that a summary of cash flows does not tell you are:

1. The *profit* earned (or loss suffered) by the business for the period.
2. The *financial condition* of the business at the end of the period.

Now, just a minute. Didn't we just see in Exhibit 1.1 that the net cash increase from sales revenue less expenses was $3,430,000 for the year? You may well ask: "Doesn't this cash increase equal the amount of profit earned for the year?" No, it doesn't. *The net cash flow from profit-making operations during the year does not equal profit for the year.* In fact, it's not unusual for these two numbers to be very different.

Profit is an *accounting-determined* number that requires much more than simply keeping track of cash flows. The differences between using a checkbook to measure profit and using accounting methods to measure profit are explained in the following section. Hardly ever are cash flows during a period the correct amounts for measuring a company's sales revenue and expenses for that period. Summing up, profit cannot be determined from cash flows.

Also, a summary of cash flows reveals virtually nothing about the *financial condition* of a business. Financial condition refers to the assets of the business matched against its liabilities at the end of the period. For example: How much cash does the company have in its checking account(s) at the end of the year? We can see that over the course of the year the business decreased its cash balance $470,000. But we can't tell from Exhibit 1.1 the company's ending cash balance. A cash flows summary does not report the amounts of assets and liabilities of the business at the end of the period.

Profit Cannot Be Measured by Cash Flows

The company in this example sells its products on *credit*. In other words, the business offers its customers a short period of time to pay for their purchases. Most of the company's sales are to other businesses, which demand credit. (In contrast, most retailers selling to individuals accept credit cards instead of extending credit to their customers.) In this example the company collected $51,680,000 from its customers during the year. However, some of this money was received from sales made in the *previous* year. And, some sales made on credit in the year just ended were not collected by the end of the year.

At year-end the company had *receivables* from sales made to its customers during the latter part of the year. These receivables will be collected early next year. Because some cash was collected from last year's sales and some cash was not collected from sales made in the year just ended, the total cash collected during the year does not equal the amount of sales revenue for the year.

Cash disbursements (payments) during the year are *not* the correct amounts for measuring expenses. Like sales revenue, the cash flow during the year is not the whole story. The company paid out $34,435,000 for purchasing and manufacturing costs during the year (see Exhibit 1.1). At year-end, however, many products were still on hand in *inventory*. These products had not yet been sold by year-end. Only the cost of products sold and delivered to customers during the year should be deducted as expense from sales revenue to measure profit. Don't you agree?

Furthermore, some of its product acquisition costs had not yet been paid by the end of the year. The company buys on credit the raw materials used in manufacturing its products and takes several weeks to pay its bills. The company has *liabilities* at year-end for recent raw material purchases and for other manufacturing costs as well.

There's more. Its cash payments during the year for operating expenses, as well as for interest and income tax expenses, are not the correct amounts to measure profit for the year. The company has liabilities at the end of the year for *unpaid expenses*. The cash outflow amounts shown in Exhibit 1.1 do not include these additional amounts of unpaid expenses at the end of the year.

In short, cash flows from sales revenue and for expenses are not the correct amounts for measuring profit for a period of time. Cash flows take place too late or too early for correctly measuring profit for a period. Correct timing is needed to record sales revenue and expenses in the right period.

The correct timing of recording sales revenue and expenses is called *accrual-basis accounting*. Accrual-basis accounting recognizes receivables from making sales on credit and recognizes liabilities for unpaid expenses in order to determine the correct profit measure for the period. Accrual-basis accounting also is necessary to determine the financial condition of a business—to record the assets and liabilities of the business.

Cash Flows Do Not Reveal Financial Condition

The cash flows summary for the year (Exhibit 1.1) does not reveal the financial condition of the company. Managers certainly need to know which assets the business owns and the amounts of each asset, including cash, receivables, inventory, and all other assets. Also, they need to know which liabilities the company owes and the amounts of each.

Business managers have the responsibility for keeping the company in a position to pay its liabilities when they come due to keep the business *solvent* (able to pay its liabilities on time). Furthermore, managers have to know whether assets are too large (or too small) relative to the sales volume of the business. Its lenders and investors want to know the same things about a business.

In brief, both the managers inside the business and lenders and investors outside the business need a summary of a company's financial condition (its assets and liabilities). Of course, they need a profit performance report as well, which summarizes the company's sales revenue and expenses and its profit for the year.

A cash flow summary is very useful. In fact, a different version of Exhibit 1.1 is one of the three primary financial statements reported by every business. But in no sense does the cash flows report take the place of the profit performance report and the financial condition report. The next chapter introduces these two financial statements, or "sheets," as some people call them.

A Final Note before Moving On: Over the past century an entire profession has developed based on the preparation and reporting of business financial statements—the accounting profession. In measuring their profit and in reporting their financial affairs, all businesses have to follow established rules and standards, which are called *generally accepted accounting principles* (GAAP). I'll say a lot more about GAAP and the accounting profession in later chapters.

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INTRODUCING THE BALANCE SHEET AND INCOME STATEMENT