

HOW TO MANAGE PROFIT AND CASH FLOW

MINING THE NUMBERS FOR GOLD

John A. Tracy
Tage C. Tracy



WILEY

John Wiley & Sons, Inc.

HOW TO MANAGE PROFIT AND CASH FLOW

MINING THE NUMBERS FOR GOLD

John A. Tracy
Tage C. Tracy



WILEY

John Wiley & Sons, Inc.

Printed on acid-free paper. (∞)

Copyright © 2004 by John A. Tracy and Tage C. Tracy. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400, fax 978-646-8600, or on the web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, 201-748-6011, fax 201-748-6008.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services, or technical support, please contact our Customer Care Department within the United States at 800-762-2974, outside the United States at 317-572-3993 or fax 317-572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

For more information about Wiley products, visit our web site at www.wiley.com.

Library of Congress Cataloging-in-Publication Data:

ISBN 0-471-64995-3

Printed in the United States of America.

10 9 8 7 6 5 4 3 2 1

CONTENTS

PART ONE Birthing a Business

- 1 Making Profit: Getting to a Good Bottom Line 3**
- 2 Wringing Cash Flow from Profit: It Ain't Over Until You See the Money 15**
- 3 Investing in Assets: It Takes Money to Make Money 31**
- 4 Raising Capital: The Ultimate Sale 47**

PART TWO Building a Business

- 5 Getting a Grip on Profit—Instead of Operating by the Seat of Your Pants 71**
- 6 Safeguarding and Improving Profit: The Profit Power of Price Versus Volume 87**

7	Growing Pains: Finding Enough Cash for Growth	103
8	Taxes and More Taxes: If It Can Be Taxed, It Is Taxed	119
9	Preventing Fraud against Business: Controls for Combating Fraud Attacks	137
10	Managing Your Profit Accounting: You Might Massage the Numbers, but Don't Cook the Books	157
PART THREE Selling or Burying a Business		
11	Business Valuation: The Endgame	181
12	Terminating a Business: When the Dog No Longer Hunts	197
	Accounting and Financial Glossary	215
	Index	229

PREFACE

John Tracy has been writing books published by John Wiley & Sons for 30 years. Writing this book with his son, Tage, is a very satisfying way to celebrate his thirtieth anniversary with Wiley. John's wife, Fay, suggested that their son Tage, with his many years of business and financial consulting experience, would be a good coauthor. So the old man called and asked him about doing a book together. As it turned out, Tage was thinking of trying his hand at writing a book. He seems to have inherited his father's writing genes, although he got his basketball genes from other members of the family. (He was on the starting five of his high school team that won the 1981 state championship.)

In brief, our book explains the basic financial aspects of managing a business. We pay most attention to making, protecting, and improving profit, as well as generating cash flow from profit. Realistic and easy-to-follow examples are used throughout. The book is written in a serious yet lighthearted style. A little humor helps the reader to remember many points. The book should prove equally useful to budding entrepreneurs and business managers who have been around the track more than once.

The book is divided into three main parts:

1. Birthing a business.
2. Building a business.
3. Selling or burying a business.

Most books of this sort avoid topics concerning the ending of a business venture. Yet, the owners of a business may decide to sell it, or they may find it necessary to shut the doors and close down a business. So our book covers the complete life cycle of a business.

The tables in the book were prepared using the Microsoft Excel® spreadsheet program. We would be pleased to send to you the workbook file of all the examples. You can contact us at our e-mail addresses: tracyj@colorado.edu or tagec@cox.net. Comments and suggestions are welcomed.

Finally, we would like to thank the people at John Wiley & Sons who were so helpful in doing this book—executive editor Debra Englander, Greg Friedman, Felicia Reid, and Mary Daniello—as well as copy editor Judith Cardanha. The book is immeasurably better for their advice and assistance.

JOHN A. TRACY
TAGE C. TRACY

Boulder, Colorado
Poway, California
July 2004

Part One

BIRTHING A BUSINESS

MAKING PROFIT: GETTING TO A GOOD BOTTOM LINE

“The numbers have gotta work—let’s not sell vision.”

—Walter Terry, Senior Vice
President, Wells Fargo
(quoted in the *Wall Street Journal*)

Entrepreneurs generally are strong on vision but not as strong on numbers. In launching a new business venture, you should make sure your vision does not outrun your numbers. Your overall business plan should include a definite profit plan based on realistic numbers for revenue and expenses. You shouldn't shade your numbers to bolster an overly enthusiastic vision. On the contrary, you should temper your vision to fit the numbers.

The driving force behind most business start-ups is a person with an impelling vision—a man or a woman who sees opportunities others do not and who is willing to take the risk of failure. But when the rubber meets the road, your profit numbers have to work. Every entrepreneur wants to build up sales as quickly as possible. But he or she shouldn't simply assume that profit drags along behind sales, like a ball on a chain. It's not as simple as this.

The Profit Plan in Your Business Plan

When you start up a business, your profit plan should be specific and definite, as specific and definite as your marketing plan. Vague statements in your marketing plan about “moving a lot of product” or “taking advantage of competitors’ weaknesses” won’t cut the mustard. Product categories should be delineated, promotional strategies and pricing tactics should be spelled out, total market demand and the market shares of existing competitors should be quantified as best as possible, how you intend to position your products and your business name should be clearly explained, and the advertising media you intend to use should be identified. These are essential elements of a persuasive marketing plan for every start-up business.

Likewise, your profit plan needs a well-thought-out and convincing profit model: a blueprint that identifies the critical factors that drive profit. You’ve probably heard the business adage “Nothing happens until you sell it.” This is true enough, but once you sell your product, how much profit will you make? Answering this question is the purpose of the profit model. The profit model is the tool that transforms your sales number into a profit (or loss) number. A good profit model takes your sales number and predicts how much your profit or loss outcome will be.

Now, suppose that you have developed a rock-solid marketing plan for your new business venture. Suppose further that you

have taken care of the many other things that have to be done to open the door and switch on the lights: hiring employees, leasing space, and so on. And suppose that you have enough money in the bank to get going and to stay going for awhile. You’re not certain what your sales will be for your first year of business. So you make forecasts for three sales scenarios: (1) pessimistic, (2) most likely, and (3) optimistic. Table 1.1 presents your sales revenue forecasts for each scenario.

You’re hoping for the best of, course, but only time will tell. In any case, you’re ready to take the plunge and move ahead. Just a minute here. Don’t you also need to forecast how much your profit or loss would be for each sales scenario? You’ve come up with numbers for the top line; you also need to forecast numbers for the *bottom line*: the profit or the loss from sales.

TABLE 1.1—SALES FORECASTS FOR START-UP YEAR

Scenario	Sales Revenue
Optimistic	\$1,800,000
Most Likely	1,200,000
Pessimistic	600,000

Two Opposite Cases for Expenses

Between the top line and the bottom line are deductions for expenses, of course. The hard core of mapping a profit model is diagnosing how expenses behave. Some expenses are driven by and vary with the level of sales. When sales are higher, these *variable* expenses are higher; and when sales are lower, these costs are lower. The largest variable expense for businesses that sell products is their cost of products (goods) that are sold. Salespeople's commissions that are based on sales revenue are another common type of variable expense. Packaging and delivery costs are variable expenses.

In contrast, certain expenses of operating a business remain relatively *fixed*—they do not vary with the level of sales over the short run. Once commitments are made, a business cannot scale back fixed expenses—at least not in the short run. Examples of fixed expenses are rent paid under real estate leases, the fixed salaries of employees, property taxes, and insurance premiums.

To contrast the profit effects of each kind of expense, we'll start by looking at two polar opposite scenarios for expenses: (1) the all-variable expenses case, and (2) the all-fixed expenses case. Almost all businesses have both types of expenses, which we will look at later.

All-Variable Expenses Case

For the all-variable expenses case, suppose total expenses are 90% of sales revenue. Therefore, profit is 10% of sales revenue. Your profit model is as simple as could be:

$$\text{Profit} = 10\% \times \text{Sales Revenue}$$

Table 1.2 shows your first-year profit for each forecast sales scenario.

All-Fixed Expenses Case

In the all-fixed expenses case, suppose your total expenses for the year are \$1,080,000. In other words, no matter what your actual sales turn out to be, your expenses are stuck at \$1,080,000. Table 1.3 presents the profit or the loss result for each sales scenario.

TABLE 1.2—IF ALL EXPENSES WERE VARIABLE

Scenario	Sales Revenue		Variable Expenses at 90%	=	Profit at 10%
Optimistic	\$1,800,000	–	\$1,620,000	=	\$180,000
Most Likely	1,200,000	–	1,080,000	=	120,000
Pessimistic	600,000	–	540,000	=	60,000

TABLE 1.3—IF ALL EXPENSES WERE FIXED

Scenario	Sales Revenue		Fixed Expenses	=	Profit (Loss)
Optimistic	\$1,800,000	–	\$1,080,000	=	\$720,000
Most Likely	1,200,000	–	1,080,000	=	120,000
Pessimistic	600,000	–	1,080,000	=	(480,000)

What a difference compared with the all-variable expense case! Or, to be more precise, what a difference for the pessimistic and the optimistic sales scenarios.

Table 1.4 compares profit performances between the two extremes of the expense cases. In the optimistic sales scenario, the large profit is the result of spreading your fixed expenses over the maximum amount of sales. You squeeze every last ounce of sales out of your fixed expenses. In the pessimistic sales scenario, the large loss is the result of too few sales over which to spread too much fixed expenses.

Put another way, in the optimistic sales scenario, you get maximum *leverage* from your fixed expenses. The profit acceleration effect from fixed expenses as sales increase is called *operating leverage*. Operating leverage is a close cousin of *financial leverage*, which refers to using debt in addition to equity (ownership) capital. Interest on debt is a fixed expense for the period

TABLE 1.4—PROFIT COMPARISON FOR ALL-VARIABLE VERSUS ALL-FIXED EXPENSES CASES

Scenario	Sales Revenue	Profit (Loss)		Difference
		All-Variable Expenses Case	All-Fixed Expenses Case	
Optimistic	\$1,800,000	\$180,000	\$720,000	\$540,000
Most Likely	1,200,000	120,000	120,000	0
Pessimistic	600,000	60,000	(480,000)	(540,000)

and, therefore, has the same effects on profit performance as other fixed expenses.

The all-variable expenses case is like investing in a savings account (or other fixed-income investment). You make a steady 10 cents of profit from every dollar of sales. Profit moves in lock step with sales. The all-fixed expenses case is more like investing in stocks that can fluctuate wildly in value: It has a much higher payoff for the optimistic sales outcome, but it carries the risk of a large loss for the pessimistic sales outcome. If you had your choice between the two expenses cases, which would you prefer? Most entrepreneurs would probably favor the all-fixed expenses case. Anyone willing to start up a new business venture is a risk taker and an optimist.

Basic Profit Model

Virtually all businesses have both variable and fixed expenses. So, our profit model should include both variable and fixed expenses. Notice that for the “most likely” sales scenario, profit is the same for both the all-variable expenses case (Table 1.2) and the all-fixed expenses case (Table 1.3). In both cases, sales revenue is \$1,200,000; total expenses are \$1,080,000; and profit is \$120,000. Suppose total variable expenses equal 60% of sales revenue, or \$720,000. Therefore, total fixed expenses are \$360,000: (\$1,080,000 total expenses – \$720,000 variable expenses = \$360,000 fixed expenses). Fixed expenses, being fixed, would be the same for both the lower and the higher sales scenarios. In contrast, variable expenses, being variable, would be 60% of sales revenue for both the lower and the higher sales scenarios.

Please Note: We don’t mean to suggest that the breakdown between variable and fixed expenses for this example is typical across a broad range of businesses. In fact, the mix of variable and fixed expenses is quite different from industry to industry. The example’s 60% ratio of variable expenses to sales revenue is in the ballpark for many businesses, although we would quickly point out that this ratio is generally higher for companies that sell products. (The product costs of many high-turnover retail-

ers, without considering their other variable expenses, are 70% or more of sales revenue.)

The profit model for our business example is now a little more complex. Table 1.5 presents the profit model of the business based on its mix of variable and fixed expenses. The operating leverage effect on profit performance is still rather pronounced, although it is dampened down quite a bit. Compare Table 1.5 with Table 1.3: Notice that profit in the optimistic sales scenario in Table 1.5 is only \$360,000, as compared with the \$720,000 profit in Table 1.3. The counterbalance is that the loss in the pessimistic sales scenario in Table 1.5 is only \$120,000, as compared with the \$480,000 loss in Table 1.3.

TABLE 1.5—BOTH VARIABLE AND FIXED EXPENSES

Scenario	Sales Revenue		Variable Expenses at 60%		Fixed Expenses		Profit (Loss)
Optimistic	\$1,800,000	–	\$1,080,000	–	\$360,000	=	\$360,000
Most Likely	1,200,000	–	720,000	–	360,000	=	120,000
Pessimistic	600,000	–	360,000	–	360,000	=	(120,000)

From the Profit Model to the P&L Report

Shortly following the close of each period (month, quarter, year), business managers receive a profit-and-loss (P&L) report, which summarizes sales revenue and expenses for the period. As you probably know, a company's accountant prepares these profit performance reports, which more formally are called *income statements*, *earnings reports*, or some other title (terminology is not uniform).

In our view, P&L reports to managers should be tailor-made for the decision-making and planning purposes of the managers. However, in most cases, accountants simply copy the format of the income statement that is presented in the external financial reports of the business and use this format for P&L reports to managers, even though the external income statement format is not entirely satisfactory for managers regarding how expenses are reported.

We don't mean to sound critical here, but let's face it: Accountants are not business managers. Accountants are financial scorekeepers, which is an essential function, to be sure. Accountants prepare the income tax returns and the external financial statements of the business. They, quite logically, look to the particular categories of expenses that are required in income tax returns and also consider how expenses are disclosed in external income statements. Expense accounts are set up with these two major demands for information in mind. For example, if the income tax return requires that repairs and maintenance expenses be reported (which it does), then an account for this particular ex-

pense is established. In short, expense accounts are established to be a good source of information for preparing income tax returns and external income statements.

Following the path of least resistance, accountants generally do *not* reclassify or regroup expenses for internal P&L reports to managers. In particular, variable expenses are not segregated from fixed expenses in P&L reports to managers. We should mention that much more detail is included in internal profit performance reports to managers. Managers may see more than a hundred separate expense accounts in their P&L reports, and some of these expense accounts are backed up with even more detailed data. But whether an expense varies with sales or is fixed for the period is not made clear in a typical P&L report. The manager may or may not know how a particular expense behaves relative to sales. The standard P&L report does not make this distinction clear, except for one particular variable expense.

For a business that sells products, its "cost of goods (products) sold" expense is reported on a separate line, both in its external income statements and in its internal P&L reports to managers. Cost of goods sold is usually the largest variable expense of a business that sells products. There's no argument about reporting cost of goods sold as a separate expense. It definitely should be the first expense deduction from sales revenue in both the external and the internal profit reports. Managers seem to understand that cost of goods sold is a variable expense. Most businesses have additional variable expenses that collectively are

a significant percent of their sales revenue. These additional variable expenses should be reported in a pool separate from the fixed expenses of the business.

In this respect, the typical P&L report to managers falls short of what is needed for their decision-making analysis and for planning for changes in the future. Managers should not be in doubt regarding whether an expense is variable or fixed in nature. A manager should not have to interpret whether an expense is variable (driven by the level of sales) or fixed (not dependent on the level of sales for the period). As we've said before, expenses should be sorted between variable and fixed in internal P&L reports to managers. We return to this important issue in Chapter 5, where we discuss further the design of P&L reports for managers and the different kinds of variable expenses.

We'll keep the P&L report as short as possible at this point, to highlight its essential features. All variable expenses are collected into one pool, and all fixed expenses are assembled in a separate pool. (The variable expense pool includes the cost of goods sold expense, of course.) Table 1.6 presents an abbreviated P&L report for our business example. Essentially this P&L report is a vertical version of the company's profit model. (The profit model in Table 1.5 reads horizontally, from left to right.)

The P&L report shown in Table 1.6 introduces one very important line of information—*margin*.

$$\text{Margin} = \text{Sales Revenue} - \text{All Variable Expenses}$$

In our business example the margin ratio is 40% of sales revenue because variable expenses are 60% of sales revenue. We don't include these percents in the brief P&L report (Table 1.6),

TABLE 1.6—P&L REPORT BASED ON PROFIT MODEL

	Sales Forecast Scenario		
	Optimistic	Most Likely	Pessimistic
Sales Revenue	\$1,800,000	\$1,200,000	\$ 600,000
Variable Expenses	<u>(1,080,000)</u>	<u>(720,000)</u>	<u>(360,000)</u>
Margin	\$ 720,000	\$ 480,000	\$ 240,000
Fixed Expenses	<u>(360,000)</u>	<u>(360,000)</u>	<u>(360,000)</u>
Profit (Loss)	\$ 360,000	\$ 120,000	\$(120,000)

but it's a good idea to include these ratios in P&L reports to managers. Margin ratios vary a great deal from industry to industry, as mentioned earlier. A margin ratio less than 20% of sales revenue is rather rare, except for businesses in desperate circumstances.

Margin ratios have to be adequate for a business to survive and to earn a sustainable profit. Whatever type of business you're in—whether you're a retailer, wholesaler, manufacturer, or service business—you have to maintain margins to make enough total margin on sales in order to overcome your fixed expenses and yield a profit. Therefore, the first focus of P&L reports to managers should be on margin—not that fixed expenses are unimportant, of course. Earning an adequate margin is the absolute, essential first step for making profit.

Deciding on the level of fixed expenses for your business, broadly speaking, is the essential second step toward making profit. Your total margin could be adequate. But your fixed expenses may be out of control. Ideally, fixed expenses should

not be any higher than they need to be in order to support the level of sales for the period. It's easy to lose sight of this key point.

In Table 1.6, look at the fixed expenses line again. Notice that "fixed expenses" is the same total amount for all three sales sce-

narios. This means that the business took on fixed expenses high enough to support its optimistic sales forecast. Its fixed expenses are higher than would be needed for the most likely sales scenario and are much higher than would be needed for the pessimistic sales level.

A Closer Look at Fixed Expenses

Fixed expenses are a mixed bag of diverse costs, but they all share one key characteristic: Once you make the commitments to incur these operating costs, it is very difficult to ratchet down any of these expenses over the short run. Fixed expenses are like the old joke about hell: It's easy to get into, but very hard to get out of. It takes a relatively long time to get out from under fixed-expense commitments; these expenses continue whether your actual sales level is good, average, or poor. In short, you're stuck with fixed expenses over the short run. Once you've made these commitments, you can only hope that your actual sales will be high enough to justify your fixed-expense decisions.

For example, suppose you sign a one-year lease for warehouse space. Every month, you have to pay the rent whether you need all the space or not. Suppose you purchase an insurance policy; the insurance premium for the period is the same whether sales are high or low. Many employees are paid fixed salaries that don't depend on the actual sales level. Depreciation expense is recorded each period to spread the cost of buildings, machines, tools, and equipment over their useful lives. You guessed it: Depreciation expense is a fixed amount per period, regardless of your actual sales level for the period. Real estate property taxes are another example of a fixed expense.

The total fixed expenses of a business for a period sometimes is called its "nut." Once the managers of a business commit to a certain amount of fixed expenses for the coming period (hiring fixed-salary employees, renting warehouse space, and so on),

the business has to make enough sales and earn enough total margin to cover its nut for the period and still have some residual margin left over for profit. In the "pessimistic" scenario (see Table 1.6), the business earns \$240,000 margin, which is \$120,000 less than its \$360,000 fixed expenses. So, the business suffers a \$120,000 loss. (By the way, this loss does not mean that the company's cash balance decreased \$120,000 during the year, which Chapter 2 explains.)

Now, let's pose a key question here. For the sake of argument, suppose the pessimistic forecast turns out to be your actual sales for the first year, and assume your variable and fixed expenses are as shown in Table 1.6 for this sales level. So you suffer a \$120,000 loss in your first year. Our question is: Why did you incur this loss? We'd bet that you'd be quick to blame your poor sales for the year. Well, not so fast. We could lay the blame for the loss on your fixed expenses instead. You made decisions that committed the business to a \$360,000 level of fixed expenses for the year. This amount of fixed expenses would have supported \$1,800,000 sales, the maximum sales level forecast. But actual sales turned out to be at the minimum end of your sales forecast. In short, your loss is caused by *excess* fixed expenses.

A manager should translate the level of fixed expenses into a measure of how much *sales capacity* these costs provide for the year. In our business example, the \$360,000 fixed expenses provide support for a maximum \$1,800,000 sales activity, which is

three times actual sales for the first year (at the pessimistic level). If you had known for sure that your first year's sales were going to be only \$600,000, you would have committed to a much lower level of fixed expenses, although it's difficult to say how much lower your fixed expenses could have been.

To illustrate this important point, suppose that you had played it safe and committed to only \$240,000 fixed expenses for the start-up year (smaller warehouse space, fewer fixed-salary employees, and so on). This amount of fixed expenses would have been adequate to support your \$600,000 sales for the year. Sales generated \$240,000 total margin, which would exactly cover your fixed expenses for the year. Your profit/loss for the year would be exactly zero, which is called the *breakeven point*. Given the \$360,000 fixed expenses, your sales had to be \$900,000 just to break even. Your margin would have been \$360,000 (40% margin ratio \times \$900,000 sales revenue), which would have equaled your fixed expenses for the year. In the "most likely" sales scenario, sales revenue is \$1,200,000, which is above the breakeven point, and profit is \$120,000 (see Table 1.6).

But bear in mind that the \$120,000 profit figure would have been higher if your fixed expenses had been better matched with sales for the year. In other words, a level of fixed expenses somewhat lower than \$360,000 would have been adequate to support \$1,200,000 sales revenue. In our business example, fixed expenses

could have supported an additional \$600,000 of sales (over the \$1,200,000 sales revenue for the most likely scenario). We could argue that you should have kept fixed expenses geared for the most likely level sales scenario instead of going all out and providing for the high end of your sales forecast.

Managers should be equally vigilant and just as hard-nosed about their fixed expenses as they are about their margins. Profit depends on both factors. Managers should take a hard look at their fixed expenses even when sales are good. All too often it takes a steep nosedive in sales to get managers to seriously consider scaling down or cutting back on their fixed expenses. Of course, these are tough decisions, usually involving laying off employees, selling off surplus assets, renting smaller quarters, and so on.

The relative neglect of fixed expenses, compared with the close attention to margins, is due in part to the fact that fixed expenses are not separated from variable expenses in P&L reports to managers. Compounding the problem is the fact that managers do not gauge the sales capacity provided by the level of their fixed expenses. To repeat the key points explained above: Fixed expenses should be clearly identified in P&L reports. And managers should quantify the sales capacity provided by their fixed expenses, which should be compared against actual sales for the period.

Capsule Summary

A business plan is no better than the quality of its profit plan. A profit plan depends on developing a profit model that quantifies how expenses behave relative to sales activity. Some expenses vary with sales activity, and other expenses remain virtually fixed and do not depend on the sales level over the short run. These two types of expenses should be clearly segregated in internal P&L reports to managers.

Sales revenue minus variable expenses equals margin. Enough margin has to be earned to overcome fixed expenses for the period and yield a profit. Making sales and maintaining margins is essential. Equally important, fixed expenses have to be controlled and kept in line with the level of sales. Excess fixed expenses can put a dent in profit as big as that caused by weak sales or inadequate margins.

WRINGING CASH FLOW FROM PROFIT: IT AIN'T OVER UNTIL YOU SEE THE MONEY

“If we’re in the black, where’s the green?”

—Tage Tracy (in a conversation with his father)

From the financial point of view, you're in business to make a profit. This is obvious, isn't it? Or are you in business to make *money*? You see, the two are not the same.

Even though the two expressions *making money* and *making profit* are used interchangeably, they should not be. You should keep in mind that profit is an *accounting* measure. The bottom-line profit number you see in a profit report hardly ever exactly

equals the increase in your cash balance from your profit-making activities during the period. In fact, profit and cash flow can be far apart, especially so for the start-up year of a business—and for any business, on occasion. Hardly ever are profit and cash flow from profit exactly the same for the year. Profit and cash flow are identical only if a business uses the cash basis of accounting to record its revenue and expenses.

Cash-Basis Accounting

Many small businesses do not sell products; they sell *services*. A few examples are dry cleaners, physical fitness clubs, movie theaters, travel agents, professional firms, delivery companies, storage rental companies, and trash removal businesses. Scan the Yellow Pages if you want to see the broad variety of service businesses. A service business does not carry an inventory of products for sale that has to be accounted for, which is a major determinant of the accounting system a business should use.

The Internal Revenue Code gives smaller service businesses with annual revenue under \$5,000,000 the option to use *cash-basis accounting* for determining their annual taxable income, that is, the profit subject to federal income tax. Cash-basis accounting basically is checkbook bookkeeping. You record actual cash collections from sales to customers as revenue, and you record actual cash payments for the expenses of the business. Cash inflow from revenue minus cash outflow for expenses equals the profit (or loss) for the year. Of course, cash outflows for expenses should include only costs of operating the business, and all cash inflow from sales should be recorded.

Cash-basis accounting is an expedient and practical method for determining taxable income. However, cash-basis accounting is not a good method for measuring the actual, or true, profit for any business—whether it is small or large or sells services or products. As a matter of fact, the income tax law puts restrictions on using cash-basis accounting. Most businesses actually use a *modified* cash basis of accounting; the amounts of cash outlays for

certain types of asset purchases must be allocated to expense over several years.

The problems with cash-basis accounting start with recording sales revenue. In many cases, a business has billed customers for services provided to them but has not yet received the customers' payments by the end of the year. Using cash-basis accounting, the amount of earned but uncollected revenue is not recorded as revenue in the year. The revenue account includes only actual cash collections from customers. Put another way, the business has an asset, called *accounts receivable*, that is not recorded on the books by cash-basis accounting. For those service businesses that sell only for cash, checks, or credit cards, this is not a problem. But many service businesses extend credit to their customers, and their year-end uncollected receivables can be sizable.

Cash-basis accounting has serious flaws on the expense side of the ledger as well. When you cut a check, you immediately record the entire amount paid as an expense, with no thought regarding the periods benefited by the outlay. Furthermore, you don't record an expense until you cut a check when using cash-basis accounting, there's no thought of putting expenses in their correct periods, or the periods benefited by the outlays. Expenses are simply recorded when they are paid, and that's that. The result is that some expenses are overrecorded and some expenses are underrecorded in the year they are paid. Therefore, you don't have a true measure of your profit for the year. The income tax law recognizes the wrong timing of expenses by cash-basis accounting. As mentioned earlier,

the amounts paid for assets that benefit more than one year cannot be deducted entirely in the year of payment. The costs of these assets must be allocated over more than one year.

Assume that you buy a computer for your business, or a delivery truck, or office furniture and equipment, or whatever. Such assets provide usefulness for several years. Do you really want to expense the entire cost in the year of purchase? The year of purchase would take a big hit, and the other years would escape any charge for using the assets. Doesn't it make more sense to spread the cost of these assets over the several years of their use? Accountants call this *depreciation*; each year is allocated a share of the cost of the asset.

Equally troubling, cash-basis accounting fails to record the liabilities of a business at the end of the year for unpaid expenses. For instance, a business may have utility and telephone charges that have not been paid. Or, at the end of the year, a business may owe commissions for sales made during the latter part of the year. Assume it has collected on these sales. So, the sales revenue has been recorded. Because the commissions haven't been paid, the expense hasn't been recorded. There's an obvious mismatch of revenue and expense here. Many businesses have sizable amounts of unpaid expenses at the end of the year. Cash-basis accounting does not record the liabilities for these unpaid expenses.

Accrual-Basis Accounting: The Good and the Bad

Cash-basis accounting, as just discussed, has serious shortcomings. Most businesses need a more complete and better accounting system for measuring their annual profit and for recording their assets and liabilities. This more comprehensive record-keeping system is called *accrual-basis accounting*. Basically, the accrual basis goes beyond only recording cash inflows and cash outflows. Accrual-basis accounting records the economic reality of a business (well, within limits).

Sales are recorded when the revenue is earned, regardless of when cash is collected from customers. Expenses are recorded against sales revenue or in the period benefited, regardless of when cash is paid for these costs. The costs of long-lived assets are spread over the several years of their use. And, the costs of products are held in an inventory asset account and are not released to expense until the products are sold to customers. Thereby, the cost of products sold is matched with the revenue from the sale of the products. These are the essential features of accrual-basis accounting.

The “good” of accrual-basis accounting is twofold: (1) You get a much truer and more accurate measure of profit for the year; and (2) the assets and liabilities of the business are recorded, so the financial condition of the business can be determined. When issuing financial statements to outside parties (banks, nonmanagement owners, credit rating agencies, and so on), a business is duty bound to use accrual-basis accounting. If it does not use

accrual-basis accounting, a business should clearly include a warning in its financial report that cash-basis accounting (or some other basis of accounting) is used to prepare its financial report. Accrual-basis accounting is necessary for preparing a correct profit report for the year and for preparing a correct statement of financial condition at the end of the year. These are overpowering reasons for using accrual-basis accounting.

However, the accrual basis comes with a price. Accrual-basis accounting is much more complicated than cash-basis accounting, to say the least. Accrual-basis accounting methods are more technical and not as intuitive as those of the much simpler cash-basis accounting. Another disadvantage of the accrual basis is that, well, it’s not the cash basis. In particular, accrual-basis revenue and expenses amounts for the year are not the cash inflows and outflows for the year. Because of differences between accrual-basis amounts and cash flows, the bottom-line profit for the year (on the accrual basis) does not reveal cash flow for the year. This is a major inconvenience of accrual basis accounting.

Suppose your business earned \$120,000 profit for the year, which we read in your profit-and-loss (P&L) report for the year. We don’t have a clue concerning your cash flow from profit for the year. From the profit report itself, you can’t tell a thing about cash flow. You could stare at it a long time, but it wouldn’t do any good. For instance, sales revenue for the year

tells you nothing about the amount of cash collected from customers during the year. You could hazard a guess that the two amounts are not far apart, but you don't really know. A profit report summarizes revenue and expenses for the year, leading down to bottom-line profit for the year. Now here's a neat idea: Why not prepare a cash flow report to go along with a profit report? It would not replace the profit report, nor in any

way offer a second measure of profit. No, the cash flow report would simply present a cash flow look at the profit activities for the period.

In fact, accountants do prepare a cash flow report. It summarizes cash inflows and outflows for revenue and expenses of the year, leading down to the bottom-line increase or decrease in cash for the year.

Returning to Our Business Start-Up Example

Chapter 1 introduced three scenarios for a start-up business example. The example is used throughout the chapter to illustrate the differences between variable and fixed expenses on profit. Let's use the "most likely" scenario, in which the business earns a profit for its first year (no small accomplishment, to be sure). Table 2.1 presents the P&L report for this scenario. This profit report is the same as shown in Chapter 1 (Table 1.6), well, with one key modification. In Table 2.1 the cost of goods (products) sold expense is separated from the other variable expenses of the business.

TABLE 2.1—P&L REPORT, SHOWING COST OF GOODS SOLD SEPARATE FROM OTHER VARIABLE EXPENSES

Sales Revenue	\$1,200,000
Cost of Goods Sold	(600,000)
Gross Margin	\$ 600,000
Variable Operating Expenses	(120,000)
Margin	\$ 480,000
Fixed Operating Expenses	(360,000)
Profit	\$ 120,000

The cost of products (goods) sold is generally the largest variable expense of businesses that sell products. Accordingly, it is the first expense deducted from sales revenue both in external income statements and in internal P&L reports to managers. Bottom-line profit depends first of all on earning enough *gross margin*: Gross margin equals the sales price of a product minus its cost. (We should warn you that determining the cost of a product is not as straightforward as you might think.)

The spread between sales price and product cost is also called the *markup*. Suppose, for example, you sell a product for \$100 and its cost is \$60; its markup is \$40. The markup is two-thirds, or 67%, of cost: $\$40 \text{ markup} \div \$60 \text{ cost} = 67\%$. Alternatively, the markup can be calculated as 40% on the \$100 sales price. Be careful which base is used to compute the markup percent.

Showing cost of goods sold as a separate first-line expense (see Table 2.1 again) helps in understanding one major reason why cash flow differs from profit. Cost of goods sold expense for the year is not, we repeat, *is not* a cash outflow amount for the year. The cost of goods sold expense for the year is the total amount removed or taken out of the business's inventory asset account in order to record the cost of products sold and delivered to customers.

Cash outflow depends not on the cost of products sold during the year but rather on the cost of products purchased or

manufactured during the year and on when the business pays for these acquisitions. In many cases, a business buys or manufactures considerably more products than it sells during the year. In other words, it increases its inventory. An increase in inventory, to the extent that the inventory accumulation has been paid for, means that cash outflow is larger than the cost of goods sold for the year.

A knee-jerk reaction is to presume that the sales revenue and

expense numbers in a P&L report equal the cash flow amounts for the period. But this can't be true; it would mean that a business is using cash-basis accounting instead of accrual-basis accounting. Almost all businesses of any size must use accrual-basis accounting to measure profit performance and to record financial condition. Business managers cannot find cash flows in their P&L reports. They must look to another financial report to learn the cash flows generated by sales and expenses for the period.

Before Moving On, Let's Be Clear about Nonprofit Cash Flows

A friend once asked one of us at a party, of all places, what the term *cash flow* means. Well, the term could be used in a very broad or global sense, or it could be used in a more narrow sense, such as cash flow from making profit. In the broad sense, cash flow refers to all sources of cash inflows and all uses of cash outflows. Assume in our example that early in the start-up year, your business borrowed \$300,000, which has to be repaid in the future and on which interest is paid, of course. And assume that you and the other owners invested \$300,000 money in the business at the beginning of the year.

You understand that the \$600,000 cash inflow from debt and equity (ownership) sources is not included in the company's \$1,200,000 sales revenue for the start-up year (see Table 2.1). The \$600,000 increases your cash balance. But this is not cash flow from profit-making operations during the year. In summary, your business received \$600,000 cash from sources of capital. And your business also received money during the year from customers for sales to them.

Assume, further, that during the start-up year, your business paid a total of \$500,000 for the purchase of various long-lived operating assets that will be used for several years. This list includes a building, forklift trucks, shelving, office furniture, computers, delivery trucks, and so on. The \$500,000 *capital expenditures*, as these investments are called, are recorded in asset accounts when purchased. The cost of each asset is spread out, or depreciated over, the predicted useful life of the asset. Suppose

that \$50,000 of the assets' total cost is recorded as depreciation expense in your first year. The \$50,000 depreciation expense is included in fixed operating expenses (see Table 2.1). Keep this in mind; it's important for understanding cash flow from profit.

Table 2.2 summarizes the *nonprofit* cash flows of your business for its first year. Cash inflows from debt and equity capital sources were \$100,000 more than cash outflows for capital expenditures. So, you have \$100,000 in the bank at the end of the year—before taking into account the increase or the decrease in cash from your profit-making activities during the year. Table 2.1 reports that you earned \$120,000 profit for the year. However, as harped on earlier, this is not the amount of cash flow from profit.

**TABLE 2.2—SUMMARY OF NONREVENUE AND
NONEXPENSE CASH FLOWS FOR FIRST YEAR**

	Cash Inflow (Cash Outflow)
Borrowings on Interest-Bearing Debt	\$300,000
Capital Invested in the Business by Owners	300,000
Investments by Business in Long-Term Operating Assets	(500,000)
Net Cash Flow	\$100,000

Now, assume that the business's cash balance at the end of your first year is \$90,000. Therefore, your profit-making operations during the year must have had the effect of *decreasing* your cash balance. In other words, cash flow from profit was *negative* for your start-up year. On the one hand, you did very well by earning a profit in your start-up year, and not a bad profit at that. On the other hand, your business suffered a \$10,000 decrease to its cash balance, which is not too bad for a start-up year. You're probably

wondering why you did so well in making profit but so poor in making money.

A word of warning here: The cash flow from profit during the start-up year of a business usually is negative. But, in many cases, the entrepreneur does not plan for this. Even if a business is able to turn a profit in the first year, more than likely its cash flow from profit will be negative, which means that making the profit will be a drain on the cash balance of the business.

Cash Flow from Profit in Start-Up Year

Managers should understand that during a period of time, revenue and expense cash flows differ from accrual-basis accounting figures for revenue and expenses. This is especially important for the start-up year of a business. In its first year, a business has to build up its inventory of products for sale (assuming it sells products, of course). If the business extends credit to customers, it also has to build up its balance of *accounts receivable*, which is the amount of uncollected sales revenue. Both are cash sinkholes. Well, perhaps “sinkholes” is too strong a word. Inventory and accounts receivable are investments in assets, and these assets are needed for making sales. The cash outlay for inventory accumulation and the cash delay in collecting from credit sales are typically the biggest two factors affecting cash flow in the first year of business. There are other factors at play also.

Table 2.3 presents a combined P&L and cash flows report that discloses the cash inflow from sales and the cash outflows for expenses side by side with sales revenue and the expenses for the start-up year of our business example. In Table 2.3, depreciation expense is separated from the other fixed operating expenses of the business because depreciation is a unique expense from the cash flow point of view.

Caution: There’s no standard format for reporting revenue and expense cash flows internally to managers. Indeed, in many businesses, cash flows are not reported to managers—if you can believe it. You don’t see a report like Table 2.3 in external financial reports. The statement of cash flows must be included in the ex-

TABLE 2.3—REVENUE AND EXPENSE CASH FLOWS FOR START-UP YEAR

	P&L Report	Cash Flows	Differences
Sales Revenue	\$1,200,000	\$1,100,000	\$(100,000)
Cost of Goods Sold	(600,000)	(680,000)	(80,000)
Gross Margin	\$ 600,000		
Variable Operating Expenses	(120,000)	(100,000)	20,000
Margin	\$ 480,000		
Fixed Depreciation Expense	(50,000)	0	50,000
Other Fixed Operating Expenses	(310,000)	(330,000)	(20,000)
Profit	\$ 120,000		
Cash Flow (Negative)		\$ (10,000)	

ternal financial reports of a business (to outside owners and creditors). Most businesses use a different format for presenting cash flow from profit, which is called cash flow from *operating activities*. This format (not shown here) is in accordance with generally accepted accounting principles (GAAP) for external financial reporting. However, the information in Table 2.3 is much more useful for explaining cash flow from the profit-making (operating) activities of a business.

The idea of Table 2.3 is to make it easy to compare sales revenue

and each expense in the P&L report with its corresponding cash flow for the year. Cash flows are matched with their accrual accounting basis figures in the P&L report. It is assumed that managers don't have time to delve into all the technical details in the preparation of this report. It is the accountant's job to analyze the accounts and to assemble a concise summary of the cash flows for revenue and expenses of the period.

The following is a brief overview, or executive summary, of why cash flows differ from the revenue and expense figures in the P&L report (see Table 2.3).

Cash Flow Differences from Sales Revenue and Expenses

1. Your year-end balance of accounts receivable is \$100,000. You haven't collected this money; your customers should pay early next year. So, you're \$100,000 short of cash inflow through the end of the year. Your cash inflow from making sales is \$100,000 less than sales revenue for the year.
2. You accumulated inventory of products held for sale. You purchased (or manufactured) more products than you sold during the year. Your out-of-pocket cash outlay during the year for the accumulation of inventory was \$80,000. Your ending inventory is actually more than this amount; but through the end of the year, you hadn't paid for your entire ending inventory. You have some accounts payable for inventory at the end of the year. The \$80,000 is actual cash paid out for the build-up of your inventory.
3. You did not pay 100% of your variable operating expenses recorded for the year. You have \$20,000 of unpaid expenses

at the end of the year, which is recorded as a liability (accounts payable). You'll pay for these expenses early next year; but as of the end of the year, you had not written checks for \$20,000 of your total variable operating expenses for the year.

4. You bought and paid \$500,000 for different *fixed assets*, which provide several years of use (a building, equipment, computers, and so on). The \$500,000 cost is recorded in asset accounts; \$50,000 of the total cost of these long-lived assets is recorded as depreciation expense in your first year. The \$50,000 depreciation expense is not a cash outlay; you already made the cash outlay when you bought the assets. Therefore, the cash effect of recording depreciation expense is zero (see Table 2.3).
5. Your net cash outlay for other fixed operating expenses was \$20,000 more than the amount of these expenses for the year. You had to prepay certain of these costs. For example, you wrote checks for insurance policy premiums, but the coverage of these policies extends into next year. The portion of the premium cost that you have used up through the end of the year is recorded as an expense in the year. The asset account *prepaid expenses* holds back the remainder of the insurance premium cost, which will not be charged to expense until next year.

Adding up your revenue and expense cash flows for the year gives a \$10,000 net *decrease* for the year (see the bottom line in the cash flows column in Table 2.3). Making \$120,000 profit "cost" you a \$10,000 cash decrease through the end of the year. The \$10,000 negative cash flow from profit is mainly the result of extending credit to your customers and building up your

inventory, as just explained. Relative to your annual sales revenue and expenses, your cash flows look reasonable for a start-up year.

You should have forecast the revenue and expense cash flows for your start-up year. The financial plan for the first year should have predicted these cash flows—in particular, that your profit

would not provide positive cash flow during the first year. The negative cash flow means that you needed \$10,000 cash subsidy from other sources. Evidently, you did a good job of planning for this. You raised \$600,000 capital (see Table 2.2), which leaves \$90,000 cash balance as you start your second year of business. Congratulations!

Beyond the Start-Up Year

As just discussed, the start-up year is very hard on cash flow from profit (see Table 2.3 again). In our start-up business example, the first year's profit outcome is positive, but cash flow from profit is negative. This is not unusual for the start-up year of a business, during which it accumulates a stockpile of products (inventory) and extends credit to customers. A new business starts from zero and moves up to normal levels of inventory and accounts receivable. A start-up business is an example of quick acceleration, or rapid growth. Generally speaking, rapid growth hinders cash flow; profit does not convert into cash flow during a high-growth year. Cash doesn't flow in due to the accumulation of accounts receivable, and a good amount of cash outflow is needed to accumulate inventory of products held for sale.

In comparison, when a business has moderate or little growth, its profit and cash flows run much closer together—depending on the size of its annual depreciation expense (and any other noncash expenses it records). There are exceptions to this rule, of course. A moderate-growth, or no-growth business could let its accounts receivable and/or inventory get out of hand, either of which can cause a big dent in cash flow.

Table 2.4 shows a P&L and cash flows report for our business example based on the assumption of moderate sales growth for its second year. The example assumes that you kept your accounts receivable and inventory under control. In other

TABLE 2.4—PROFIT AND CASH FLOWS FOR MODERATE-GROWTH EXAMPLE

	P&L Report	Cash Flows	Differences
Sales Revenue	\$1,400,000	\$1,380,000	\$(20,000)
Cost of Goods Sold	(700,000)	(715,000)	(15,000)
Gross Margin	\$ 700,000		
Variable Operating Expenses	(140,000)	(135,000)	5,000
Margin	\$ 560,000		
Fixed Depreciation Expense	(50,000)	0	50,000
Other Fixed Operating Expenses	(370,000)	(385,000)	(15,000)
Profit (Net Earnings)	\$ 140,000		
Cash Flow (Negative)		\$ 145,000	

words, you made sure that these two assets increased only moderately, in proportion to your moderate sales growth. Depreciation expense is the same in the second year, which assumes that you did not purchase any additional fixed assets in the second year.

Notice that cash flow from profit in the second year is a little more than profit (see Table 2.4). In this situation, you have a

pleasant problem facing you, one concerning what to do with your cash flow. Basically, you have four choices: (1) Pay out some of the cash flow as a distribution of profit to owners; (2) let the cash stay where it is to build up your cash balance so that you can take advantage of opportunities in the future; (3) invest in new assets to expand the capacity of the business or to move in new directions; and (4) reduce the debt and/or equity capital base of

your business. Positive cash flow provides a good deal of flexibility for a business.

Good business managers forecast cash flow from profit for the coming year. They don't wait for the cash flow number to be reported to them in the financial reports for the year. They plan ahead so to provide enough lead time for making the critical decisions regarding what to do with the cash flow.

Capsule Summary

Cash flows are not found in a profit report unless the business happens to use cash-basis accounting. Businesses of any size and businesses that sell products don't use cash-basis accounting. They use accrual-basis accounting, which is the gold standard for preparing the financial statements of a business. Unfortunately, cash flows are not transparent in an accrual-basis profit report. There's no way you can divine cash flows from the revenue and expenses in an accrual-basis profit report. Depreciation is not a cash outlay in the period it's recorded as an expense. Otherwise, you're in the dark about cash flows.

The external financial reports of a business include a statement of cash flows. One section in this statement deals with cash flow from profit, or from operating activities, as it is called in the statement. However, from the manager's viewpoint, the presentation of cash flow from profit (operating activities) leaves a lot to be desired. A business manager should instruct his or her accountant to design a report for the cash flows from revenue and for expenses during the period that provides a clear trail down to the net cash increase

or decrease from profit (or loss) for the period. Such a cash flow report for managers is presented and explained in the chapter.

In most cases, rapid sales growth requires equally rapid growth in accounts receivable (unless the business does not give customers credit) and equally rapid growth in inventory (unless the business does not sell products). Steep increases in accounts receivable and inventory suck up cash. Thus, cash flow is much lower than profit for the year. The start-up year is a case in point. A new business starts from scratch and accumulates accounts receivable and inventory. Cash flow can be negative even if a new business earns profit in its first year.

Prepaid and unpaid expenses also affect cash flow from profit. And remember that depreciation is not a cash outlay in the year it's recorded as an expense. In summary, a manager should closely monitor the differences between revenue and expenses in the P&L report and the cash flows of revenue and expenses during the period. The manager needs double vision, as it were, to keep on top of things.

INVESTING IN ASSETS: IT TAKES MONEY TO MAKE MONEY

“Money is like muck, not good except it be spread.”

—Francis Bacon

One of our relatives used to run a business that was quite unusual. The only assets she owned were a cash register and a little cash in the till. She needed virtually no assets. She sold goods only on consignment, and she rented all the space she needed. It's very unusual to run a business with no assets. Almost all businesses need substantial amounts of assets to make sales and to carry on operations.

The total assets of most businesses are a third, a half, or more

of their annual sales revenue. Assets don't come cheap. A business has to raise the capital to invest in its assets. The next chapter examines the sources of business capital that are tapped for the money to invest in assets. This chapter first examines the assets that businesses use in making profit and focuses on the linkages between sales revenue and expenses and their corresponding assets. The size of an asset depends primarily on the size of the revenue or expense that impels the particular asset.

Business Assets: Owned, Leased, Operational, and Nonoperational

You've probably heard the oft-repeated observation that every business is different. This is certainly true regarding the asset profiles of different businesses. Even businesses in the same industry may have different asset profiles, depending, for instance, on whether they own or lease their assets. Assets legally owned by a business are reported in its financial statements, of course. But, as you know, almost any asset can be leased, which includes real estate, machines, tools, trucks and autos, and computers. A leased asset is not reported in the financial statements of a business—*unless* the lease, in substance, is the means to finance (pay for) the acquisition of the asset. This type of lease is called a *capital lease*.

When a lease extends over the largest part of an asset's expected useful life and the business (lessee) has a purchase option for a bargain price at the end of the lease, then the business records the lease as a de facto purchase of the asset. The asset is recorded at a cost figure, and the obligation for future lease payments is recorded as a liability on which interest is charged. The periodic payments under a capital lease are split between interest expense and reductions of the liability balance. The cost of an asset being acquired under a capital lease is recorded to depreciation expense each year over the predicted useful life of the asset.

In contrast, assets being rented under short-term *operating leases* are not recorded as assets and are not reported in a busi-

ness's financial statements. Rents paid under these short-term leases are recorded to expense in the period the asset is used.

So, what kind of assets do you normally see in a business's financial report? Well, the assets of a bank differ from the assets of an airline, which differ from the assets of an electric or gas utility, which differ from the assets of an auto manufacturer, which differ from the assets of an amusement park, which differ from the assets of a retail supermarket, and so on. You probably get the idea. Some businesses are asset heavy, or *capital intensive*. Other businesses are asset light—they make small investments in assets relative to their annual sales revenue.

Coming up with an asset profile for a typical business is complicated by another factor. A business (except a sole proprietorship) is a separate legal entity, that is, a distinct person in the eyes of the law. Types of legal business entities include corporations, limited liability companies, partnerships, and other forms of for-profit organizations that are enabled by law. As a separate legal entity, a business can own almost any asset that an individual person can. (One exception: Only an individual can own a 401k retirement investment account.) Many businesses invest in assets that are not needed or used in making sales. Wal-Mart, for instance, could invest some of its cash in IBM stock shares.

Generally speaking, assets can be divided into two broad categories: (1) *operating assets*, which are those resources actually used

in making sales or generating the mainline revenue of a business; and (2) *nonoperating assets*, which are those resources that a business could do perfectly well without as far as making sales or generating revenue is concerned. A business may hold substantial investments in nonoperating assets; in fact, many do. The range of investments in nonoperating assets is beyond the scope of this book. This chapter focuses on operating assets used in making sales and carrying on the profit-making activities of a business.

We should point out, however, that in their external financial reports many businesses do not make a clear distinction between their operating assets—those assets that are absolutely critical for carrying on the profit-making activities of the business—and their nonoperating assets. In any case, the nonoperating assets of a business should have a legitimate purpose and should provide a good source of income. A business should not carry “excess assets” that don’t yield a satisfactory stream of income.

Asset Profile of a Business

This chapter concentrates on a business that sells products. Furthermore, it is assumed that its customers buy on credit. The purpose of using this type of example is to explain two main business assets: (1) products held for future sale that are purchased or manufactured by the business; and (2) receivables owed to the business from credit sales to its customers. A typical business has other assets as well, of course.

In the financial report of a business that sells products you find the following assets.

Typical Business Assets

- ♦ **Cash:** Includes checking accounts balances in banks and currency and coins held by a business. (A car wash business keeps a lot of quarters in its change machines, for example, and most retailers keep a fair amount of currency on hand.) *Note:* It's permissible to include in the cash account presented in a financial report “near-cash” items, such as temporary investments in short-term marketable securities that can be immediately liquidated into cash.
- ♦ **Accounts Receivable:** The total of receivables from customers for sales made on credit to them. These receivables should be collected early next period.
- ♦ **Inventories:** The total cost of products not yet sold to customers. These products are being held for sale, which should occur in the short-term future.
- ♦ **Property, Plant, and Equipment:** Includes various economic resources, also called *fixed assets*, owned by the business that are used in its operations. These assets are recorded at their purchase costs, and their costs are allocated over their predicted useful lives, which is called *depreciation*. These assets are not held for sale in the normal course of business.
- ♦ **Intangible Assets:** Things that have no physical existence, in contrast to fixed assets that are tangible (having physical substance that you can touch and see). Intangible assets include legally protected rights, such as patents, copyrights, and trademarks. A principal example of an intangible asset is *goodwill*, which generally refers to the competitive advantage that a business enjoys, such as a widely recognized and well-respected brand or business name. Goodwill is recorded only when a business actually pays for it. This purchase happens when one business acquires another business and pays more than what the tangible assets of the business acquired are worth by themselves.
- ♦ **Other Assets:** Assets other than the “hard core” basic types just listed; generally much smaller than the basic assets. For example, a business might loan money to its executives or make advances

to employees for travel expenses; these receivables are recorded as assets. Many businesses have to put down deposits for such reasons as guaranteeing future performance on contracts. The deposits will be refunded to the business at a future date; such deposits are recorded as assets. A business could have a tax refund coming to it, which is recorded as an asset. This category of “other assets” is rather open-ended—you never know what you will find in it.

One word of advice: A business owner/manager should know which things are parked in the “other assets” account. Not necessarily every last little thing, but the manager certainly should know the larger items included in this asset account, which can become a dumping ground for too many odds and ends that can get out of control over time.

Connecting Revenue and Expenses with Their Assets and Liabilities

The following example sidesteps the last type of assets: It is assumed that the business does not have any “other” assets. The example includes only mainstream assets—cash, accounts receivable, inventories, fixed assets, and intangible assets. (Well, another asset called *prepaid expenses* also has to be discussed.) These are the main assets of the great majority of businesses that sell products.

For this new business example, Table 3.1 illustrates the vital connections between revenue and expenses on the one side and the assets and liabilities that are integral to the profit-making

process on the other side. In Table 3.1, cost of goods sold, depreciation, and amortization expenses are shown separately; but all other expenses are grouped together in one amount. The lump sum for other expenses includes operating expenses as well as interest expense and income tax expense. You probably know that interest and income tax are disclosed separately in *internal* P&L reports to managers and in income statements presented in the *external* financial reports of a business. You wouldn't see a profit report like Table 3.1 inside or outside a business.

Table 3.1 highlights the linkages between revenue and expenses

TABLE 3.1—REVENUE AND EXPENSES CONNECTED WITH THEIR ASSETS AND LIABILITIES

Revenue and Expenses for Year		Assets	Year-End Balances
Sales Revenue	\$52,000,000	Accounts Receivable	\$ 5,000,000
Cost of Goods Sold Expense	33,800,000	Inventory	8,450,000
Depreciation Expense	(785,000)	Fixed Assets (at original cost)	16,500,000
Amortization Expense	(325,000)	Intangible Assets (at original cost)	7,850,000
Other Expenses	(14,448,000)	Prepaid Expenses	960,000
Profit, or Net Earnings	\$ 2,642,000	Liabilities	
		Payables for Inventory	\$ 2,600,000
		Unpaid Expenses	2,400,000

and their corresponding assets and liabilities. The assets and liabilities in Table 3.1 do not comprise all the assets and liabilities of the business. In other words, Table 3.1 is *not* a *statement of financial condition* for the business—commonly called a *balance sheet*—which discloses all its assets and all its liabilities, as well as the sources of

its owners' equity. In Table 3.1, only those assets and liabilities directly connected with revenue and expenses are shown. You probably noticed that the asset “cash” is not included Table 3.1. This omission is explained shortly. The year-end balance sheet of the business is presented later in the chapter.

Following the Lines of Connection

The main message of Table 3.1 is that sales revenue and certain expenses of a business drive particular assets and liabilities of the business and that particular assets drive certain expenses.

Connections between Revenue and Expenses and Their Assets and Liabilities

- ♦ The business makes sales on credit; thus it has an asset called *accounts receivable*. These receivables are recorded at sales prices charged to customers.
- ♦ The business sells products, so it carries a sizable *inventory* (stockpile) of products awaiting sale. Inventory is recorded at cost (not at the sales value of the products). There are different accounting methods for determining cost.
- ♦ At year-end, the business has not paid for its entire inventory because it buys most items on credit. It has bills for products on hand in its year-end inventory; these bills will be paid next period.
- ♦ The business has purchased several different *fixed assets* (property, plant, and equipment); the costs of these assets are allocated to depreciation expense over their predicted useful lives.
- ♦ The business has invested in *intangible assets* (goodwill); the costs of these assets are allocated to amortization expense over their predicted useful lives.
- ♦ Certain expenses (such as insurance premiums) have to be prepaid. The portions of these prepayments that will benefit future periods are held in the asset account called *prepaid expenses*; these amounts will not be released to expense until next period.
- ♦ Certain expenses have not yet been paid at the year-end. The liabilities for these expenses are recorded, so that the full amounts of the expenses are recorded in the correct period. In Table 3.1, these liabilities are collapsed into one amount called *unpaid expenses*. In financial statements, these liabilities are reported as accounts payable, accrued expenses payable, and income tax payable (see Table 3.3 later in the chapter for example). You find many variations of these basic account titles in financial reports.

The ratios of the assets' balances at the year-end compared with their revenue or expense amounts for the year are of the utmost importance.

Weeks of Sales in Accounts Receivable: Accounts Receivable Turnover Ratio

Compare the year-end balance of accounts receivable against sales revenue for the year. The business made \$52,000,000 in sales during the year, which is an average of \$1,000,000 per week. The year-end balance of accounts receivable is \$5,000,000, which equals five weeks of annual sales. The flip way of looking at this is as follows: Divide annual sales revenue by accounts receivable to get the *accounts receivable turnover ratio*: $\$52,000,000 \text{ annual sales} \div \$5,000,000 \text{ accounts receivable} = 10.4 \text{ times}$.

Whether expressed as weeks of sales in accounts receivable or as the accounts receivable turnover ratio, this important measure should be consistent with the credit terms offered to customers. Suppose the business gives four weeks credit to its customers, on average. Some of its customers pay late, and the business tolerates these late payers. Thus, five weeks of uncollected sales (accounts receivable) at year-end is not out of line. If, on the other hand, the business had seven or more weeks sales in accounts receivable, at year-end this would be cause for alarm.

Weeks of Sales in Inventory: Inventory Turnover Ratio

The company's cost of goods sold expense for the year is \$33,800,000 (see Table 3.1), which is an average of \$650,000 per week. Dividing the company's \$8,450,000 cost of year-end inventory by the weekly average reveals that its year-end inventory equals 13 weeks of annual sales. Put another way, the company's *inventory turnover ratio* is 4 (i.e., $52 \text{ weeks} \div 13 \text{ weeks inventory} = 4$, which is also referred to as 4 "turns" per year). A business manager should control inventory, which means keeping it at a proper level relative to sales.

Inventory turnover ratios vary quite a bit from industry to in-

dustry. Wal-Mart or Costco would not be satisfied with an inventory turnover of four times per year. They move their products in and out the door more frequently. A full-price retail furniture store, in contrast, may be satisfied to hold products for as long as six months on average before sale, which is an inventory turnover of only two times per year. How long products are in the pipeline varies a great deal from industry to industry.

The line from the "inventory asset" to the "payables for inventory" liability signals that a good part of the company's inventory has not been paid at the end of the year. The ending balance of this liability is about 30% of the cost of its inventory. Because inventory equals 13 weeks of its annual cost of goods sold, this liability equals about 4 weeks of annual cost of sales: $30\% \times 13 \text{ weeks of inventory} = \text{about } 4 \text{ weeks}$. If the business buys inventory on credit terms of about 4 weeks, this ratio seems right.

Long-Lived Assets Ratios

The costs of fixed assets, or of the long-lived tangible operating assets, of a business are allocated to annual depreciation expense over their predicted useful lives. Each year is allocated a fraction of the cost, which is recorded as *depreciation* expense. The most intuitive allocation method is to charge each year an equal fraction of a fixed asset's total cost, which is called *straight-line depreciation*. For example, one-tenth of total cost would be recorded as depreciation expense each year for a 10-year fixed asset. Alternatively, accounting rules permit higher depreciation amounts to be recorded in the early years and smaller amounts in the later years of a fixed asset's lifespan. This "front-end loading" of depreciation expense is called *accelerated depreciation*. Likewise, the costs of intangible assets, such as goodwill or patents, are allocated over their predicted useful lives (usually by the straight-line method). Each period is charged with a fraction

of the cost, which is recorded as *amortization* expense. Table 3.1 shows the lines of connection from these two operating assets to their two expenses.

As just explained, the inventory turnover ratio takes the annual cost of goods expense and divides it by the cost of ending inventory. In like manner an asset turnover ratio *can* be calculated for the company's fixed assets and for its intangible assets. The \$785,000 depreciation expense for the year could be divided by the \$16,500,000 original cost of its fixed assets. This calculation shows that depreciation expense for the year is about 5% of original cost, which indicates a 20-year average depreciation life for its fixed assets. In the same manner, the average amortization life of its intangible assets is 25 years (give or take a little). What these two ratios reveal is that it takes 20 years on average for the business to recover the costs invested in its fixed assets and 25 years on average to recover the costs invested in its intangible assets.

Prepaid and Unpaid Expenses Ratios

Most businesses have no choice but to prepay certain expenses, as explained earlier. In Table 3.1, see the line of connection from “other expenses” to the “prepaid expenses” asset account. Gener-

ally speaking, an “eyeball” review of the prepaid expenses balance relative to total expenses is enough for the manager. In this example, the asset's year-end balance is about 7% of the other expenses for the year. The manager can judge whether this is about right or perhaps too high for the business; 7% seems like it might be too high. The manager should compare this year's ratio with that of past years to reach a conclusion.

Most businesses have not paid 100% of all their expenses by the year-end. In fact, unpaid expenses at year-end can add up to a much higher amount than you might suspect. A typical business buys many things on credit. In the example, unpaid expenses at year-end equal about 17% of the other expenses for the year. Put another way, unpaid expenses are about nine weeks of other expenses for the year. The manager should ask: Is this ratio consistent with the general credit terms extended to the business by its vendors? This liability also includes certain accruals for expenses that have been incurred but not paid, such as sales commissions earned by the sales staff that will not be paid until next period. The nine weeks of unpaid expenses may be consistent with previous years. The manager will have to make a conclusion whether the business is waiting too long before paying its bills. Perhaps the business is short of cash, or perhaps it just waits as long as possible to pay its bills.

Cash Sources and Uses

In Table 3.1, *cash* is the asset missing in action. Now you may be thinking: Don't revenue and expenses flow through cash? Of course they do—although as Chapter 2 explained, these cash flows for the period differ from the accrual-basis accounting revenue and expenses figures for the period. Cash is the universal asset. Virtually *all* activities of a business flow through cash—not just its revenue and expenses. Cash is the master clearing account for almost all the transactions of a business. Table 3.2 summarizes the diverse sources and uses of cash through a business.

TABLE 3.2—SOURCES AND USES OF CASH

Classification	Cash Sources	Cash Uses
Operating Activities	Revenue from sales and other income.	Expenses.
Financing Activities	Borrowing from debt sources.	Distributing profit to owners.
	Raising capital from equity sources.	Paying down debt. Returning capital to owners.
Investing Activities	Selling operating assets.	Purchasing operating assets.
	Liquidating investments.	Making other investments.

The accounting profession has adopted a threefold classification (as shown in Table 3.2) of cash flows for external financial reporting:

1. Cash flow from *operating* activities.
2. Cash flow from *financing* activities.
3. Cash flow from *investing* activities.

Accordingly, the statement of cash flows presented in the external financial reports of a business follows this threefold classification scheme. *Operating activities* is the term that refers to the profit-making activities of a business—its revenue and expenses. Any extraordinary, nonrecurring gains and losses that a business records during the period also are included in cash flow from operating activities. Certainly cash is the pivotal asset in the profit-making activities of a business. However, as Table 3.2 shows, more than just profit-making activities cause cash flows. There are also financing activities and investing activities. To get the proper perspective, cash has to be put in the context of the overall financial condition of a business, which is reported in its balance sheet.

Balance Sheet for Business Example

The purpose of a balance sheet is to provide a summary of all the assets and liabilities of a business. The assets of a business should be more than its liabilities, of course. (A business in bankruptcy may have more liabilities than assets.) The excess of assets over liabilities equals the *owners' equity* of a business. This point is expressed in the following version of the *accounting equation*:

$$\text{Assets} - \text{Liabilities} = \text{Owners' Equity}$$

Owner's equity arises from two sources: (1) capital invested in the business by the owners, and (2) profit made by the business that is retained and not distributed to the owners. This second source of owners' equity is generally called *retained earnings*. Most businesses do not distribute their entire annual earnings to their owners. Therefore, businesses accumulate a substantial amount of retained earnings over the years. Indeed, for a mature business, retained earnings can be many times the amount of capital invested by owners.

More properly, a balance sheet is called a *statement of financial condition*; and, in fact, this title is used in the financial reports of most businesses. Nevertheless, the informal term balance sheet is very widely used. The term derives from the two-sided nature of this financial statement, which is summarized in the *accounting equation*:

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

(As just mentioned, liabilities can be subtracted from assets to determine owners' equity, which is another version of the accounting equation.)

A balance sheet is not prepared in a slipshod, arbitrary fashion. The balance sheet is one of the primary financial statements in the *external* financial reports of a business. External financial reports circulate outside the confines of a business; they are issued to its lenders and outside shareowners, as well as to other interested parties. In preparing financial statements for its external financial reports, the chief financial and accounting officers of the business are (or should be!) very aware that the statements should conform with *generally accepted accounting principles* (GAAP). These are the ground rules for the public reporting of financial statements. It would be extremely difficult to justify departures from these financial accounting and reporting standards. Indeed, such departures, if material, constitute prima facie evidence of financial fraud.

Financial accounting reporting standards have been developed over many years. The principal purposes of developing GAAP are to ensure *adequate disclosure* to the outside stakeholders of a business and to achieve *reasonable uniformity* in profit accounting methods and in the valuation of assets and liabilities across all businesses. Table 3.3 presents the balance sheet for the business example introduced earlier in the chapter, in accordance with GAAP, of course.

The balance sheet format in Table 3.3 follows standard

TABLE 3.3—BALANCE SHEET AT END AND START OF YEAR

	End of Year	Start of Year
Current Assets		
Cash	\$ 3,265,000	\$ 3,735,000
Accounts Receivable	5,000,000	4,680,000
Inventory	8,450,000	7,515,000
Prepaid Expenses	960,000	685,000
Total Current Assets	<u>\$17,675,000</u>	<u>\$16,615,000</u>
Long-Term Operating Assets		
Property, Plant, and Equipment	\$16,500,000	\$13,450,000
Accumulated Depreciation	(4,250,000)	(3,465,000)
Cost Less Depreciation	<u>\$12,250,000</u>	<u>\$ 9,985,000</u>
Goodwill	\$ 7,850,000	\$ 6,950,000
Accumulated Amortization	(2,275,000)	(1,950,000)
Cost Less Amortization	<u>\$ 5,575,000</u>	<u>\$ 5,000,000</u>
Total Assets	<u><u>\$35,500,000</u></u>	<u><u>\$31,600,000</u></u>
Current Liabilities		
Accounts Payable	\$ 3,320,000	\$ 2,675,000
Accrued Expenses	1,515,000	1,035,000
Income Tax Payable	165,000	82,000
Short-Term Notes Payable	3,125,000	3,000,000
Total Current Liabilities	<u>\$ 8,125,000</u>	<u>\$ 6,792,000</u>
Long-Term Notes Payable	<u>\$ 4,250,000</u>	<u>\$ 3,750,000</u>
Stockholders' Equity		
Capital Stock—800,400 shares at end and 770,400 shares at start of year	\$ 8,125,000	\$ 7,950,000
Retained Earnings	15,000,000	13,108,000
Total Owners' Equity	<u>\$23,125,000</u>	<u>\$21,058,000</u>
Total Liabilities and Stockholders' Equity	<u><u>\$35,500,000</u></u>	<u><u>\$31,600,000</u></u>

practice. *Current*, or short-term, high-turnover assets are listed first. Longer-term, low-turnover assets are listed second. (In certain specialized industries, such as public utilities, assets are presented in just the reverse order.) The accumulated amounts of depreciation and amortization are deducted from the original costs of these assets, instead of disclosing only the net balances of the assets. Current (short-term) liabilities are listed first, followed by the long-term liabilities. Then the stockholders' (owners') equity sources are presented for the business, which is organized legally as a corporation.

The first three current liabilities reported in the balance sheet (see Table 3.3) are generated by the profit-making activities of the business. These operating liabilities are discussed earlier in the chapter. The total of these three liabilities is \$5,000,000. Compared with the company's \$35,500,000 year-end assets, there is still \$30,500,000 remaining to be accounted for. Where did the \$30,500,000 come from? What are the sources of capital that provided this money for the company's assets?

The business's sources of capital are shown in the shaded area of the balance sheet (Table 3.3). In summary, the business borrowed a total of \$7,375,000 on short-term and long-term interest-bearing debt. And, it has \$23,125,000 total owners' equity at the end of the year. Chapter 4 examines the debt and equity sources that provide capital to businesses for their assets.

Capsule Summary

Businesses that sell products need certain key assets to make sales and to carry on their operations. They need an adequate *working cash balance*. Extending credit to their customers means that they have *accounts receivable*. A product-oriented business carries a stockpile of products awaiting sale, which is called *inventory*. In addition, a business needs a diverse array of long-term tangible assets to carry on its operations, which has the generic name of *property, plant, and equipment*. These *fixed assets*, as they are also called, include land and buildings, vehicles, office equipment, machines and tools. These assets can be leased instead of being bought outright. Long-term-purchase-type leases are recorded

and reported as assets. Short-term leases, on the other hand, are not reported as assets in a company's financial report.

The revenue and expenses levels of a business drive the levels of the operating assets that a business needs. Managers need to understand these vital connections in order to plan for and to exercise control over the assets used in the profit-making activities of their business. In other words, the revenue and profit goals of a business determine in large part the asset needs of the business. The asset requirements of a business, in turn, determine the amount of capital that the business must secure from its debt and equity sources. Capital is not a free good, which the next chapter explains.

RAISING CAPITAL: THE ULTIMATE SALE

“Show me the money!”
—Cameron Crowe, from the screenplay
for *Jerry Maguire* (1996)

Years ago, the technology industry was launched and driven into the mainstream of the United States economy by such industry giants as Hewlett-Packard, Yahoo!, Microsoft, and Intel. As difficult as it may seem, these companies were all at one time or another small start-up enterprises struggling like most other businesses with managing their business interests and developing economically sustainable models. The ultimate successes of the companies are (needless to say) well-known and have been documented countless times. At the root of their successes was the ability to secure, at the most opportune time, all of the essential ingredients needed to build a business: leadership, vision, talent, planning, determination, the all-important proper amount and type of capital to support the business concept, and a little luck. Big or small, public or private, foreign or domestic, one month new or 20 years old, it really doesn't matter. Securing and managing capital resources represents the lifeline of any company looking to operate in today's challenging economic climate.

Before exploring the process of how capital is secured/raised, it is worthwhile to define what *capital* is. Although there are countless technical and/or theoretical definitions available (to

peruse at your leisure), when implementing a new business concept, there really is only one statement that captures the real essence of capital—“*It takes money to make money.*” Launching any new business concept, from the aspiring entrepreneur designing a new software product from his or her home office to an executive of a multinational corporation looking to expand foreign distribution channels for new product introductions, requires capital (also known as money, greenbacks, etc.) as a basis to execute the business plan. It's no secret that one of the most common reasons businesses fail is a lack of or inappropriately structured capital resources.

This chapter explores the process of raising capital, the different types of capital available, the sources and risks associated with each type of capital, and the tools needed to successfully secure the almighty dollar and to take an idea from a conceptual stage to a viable business entity. It is important to keep in mind that capital should not be perceived as just the amount of “cash on hand” but rather as the amount of financial resources available to support the execution of a business plan. This point will be clearly illustrated as our discussion on raising/securing capital is expanded.

Tools Needed to Raise Capital

Before all of you aspiring entrepreneurs and corporate ladder climbers can raise capital, it is extremely important that you understand what tools you require. The starting point for raising/securing capital resides in one simple document—the *Business Plan*. This document represents management’s foundation and justification for birthing, growing, operating, and/or selling a business based on the economic environment present. Without it, management is left to operate a business in the dark, attempting to guess or intuit the best course of action to pursue. Or, in other words, companies all too often proceed with strategies of “We’ve always done it like that” or “This is how the industry has operated for the past umpteen years,” rather than really evaluating and investigating the economic markets in which they operate.

Business plans come in a variety of shapes, sizes, forms, and structures and often take on the characteristics and traits of the business founder(s). Some sections of the business plan may be developed in depth, whereas other sections may be presented in a quasi-summary format as the needed data, information, knowledge, and so on, is not readily available (for presentation). For example, a founder of a fledgling software company may be able to provide a complete analysis on the software product developed, the underlying code used, and even the product’s packaging. However, when asked about the real-market demand for the product, distribution channels available, competition present, and/or the best method to price the product, the founder may

struggle with providing solid, third-party-corroborated information. Herein lies the first lesson of developing a business plan. The business plan should be built from the outside looking in so any reasonable party can clearly, concisely, and efficiently understand the business concept.

As previously noted, business plans come in a multitude of formats and structures and can include a variety of information, data, graphs, charts, reports, financial projections, and so on.

Four Main Elements of a Good Business Plan

1. Executive Summary: The executive summary represents a brief overview of the business concept in terms of the market opportunity present, the operational logistics required to bring a product and/or service to market, the management team that is going to make it happen, and the eventual potential economic return available, including the amount of capital needed to execute the plan. This section of the business plan is really nothing more than a summary of the entire business concept presented in a neat and tidy overview of usually not more than five pages (and hopefully shorter). Although the meat of the business plan resides in the remainder of the document, this section is the most critical in terms of attracting capital and financing source interest. Basically, the capital/financing sources must be able to conceptualize, understand, and justify the business concept from the information presented in the executive summary. It must excite

the readers, peak their interest, and move them with a sense of urgency to pursue the business opportunity at hand.

2. Market for the Products or Services: This section of the business plan is often the most important, in that it substantiates the need for a product and/or service that is not being fulfilled within the current economic environment. Yes, it's hard to believe that the authors of this book, being accountants, would place marketing above finance and accounting issues; but the fact of the matter is that without a viable market present, the only thing left to account for are losses (and we all know how much capital/financing sources love them). Beyond providing information and support on the market size, characteristics, and trends, a clear understanding of the business's competitive niche, target market, and specific marketing strategies must also be presented. Quantifying the size of the market in coordination with qualifying the market need supports the basis of the business concept but represents only half the battle (and often the easier of the two halves). Identifying the specific niche and target market and developing an effective marketing strategy to capitalize on the opportunity present is often more challenging and critical to the future success of the business. In addition, a summary of the marketplace competition is usually provided to identify and properly manage these associated risks.

3. Company Operating Overview: This segment of the business plan addresses a number of operational issues, including personnel requirements, technological needs, locations (e.g., office, production/manufacturing, warehouse/distribution), company infrastructure requirements, international considerations, professional/expert counsel resources, and the like. Clearly, the market segment of the business plan drives various business operating elements in terms of the resources needed to implement

and execute the plan. For example, if a company is planning on expanding into new foreign markets where the local government still "influences" the distribution channels, then the operating segment needs to address how the product will be distributed and which international partners will be essential to the process. In addition, business plans quite often dedicate a large portion of this segment to providing an overview of the management team in terms of both their past credentials and their responsibilities with the new business concept moving forward. The market may be ripe and capital plentiful; but without a qualified management team, the business concept will more often than not sink.

4. Financial Segment: In a sense, this section brings all of the elements of the business plan together from an accounting and/or financing perspective. Financial forecasts or pro formas are prepared to project the anticipated economic performance of the business concept based on the information and data presented in the business plan. The market segment tends to drive the revenue portion of the forecasts, as the information accumulated and presented here substantiates items such as potential unit sales growth (in relation to the size of the market), pricing, and revenue sources by product and service. The expense element of the forecasts is often driven by the operating segment of the business plan, as the business cost structure in terms of personnel, assets, company infrastructure, and so on, is addressed here. When all of the elements of the business plan are put together in this section, not only is the forecast profit-and-loss or income statement produced, but, just as important, the projected balance sheet and cash flow statement are generated as well. And you guessed it, with all of this information now in hand, the capital required to execute the business plan should be readily quantifiable.

As important as the business plan is, two critical issues warrant further discussion in relation to raising capital. The first issue resides in the management team (which was touched on earlier) responsible for executing the business plan. The people behind the opportunity are, in effect, the business plan; that is, financing and capital sources are lured in by business plans and can easily turn over any concept to a slew of professionals for further due diligence, reviews, evaluations, critique, and so on. If a concern is present over the technological basis within a biomedical company, then medical- or technology-based professionals can be brought in to complete additional due diligence and to either approve or can the idea. However, the management team standing behind the business plan and its execution is really where the capital and financing sources invest. The integrity, qualifications, experience, determination, passion, and commitment displayed by the management team are of utmost importance. If there are any concerns with them, the capital and financing sources have their out.

The second issue resides in the notion of selling the concept. In today's economic environment, new ideas and business plans

are produced by the tens of thousands each and every year (and those are the ones that actually make it to somewhat of a formal presentation stage). Capital and financing sources are presented with these plans daily and are constantly challenged to focus on the best and brightest ideas. As such, selling or marketing the business concept (to capital and financial sources) becomes the most difficult task in launching the business concept. It's one thing to get people interested in the business plan and a good story. It's an entirely different thing to actually get money committed to the concept. The lead party responsible for securing the needed capital or financing will find that 110% of his or her time will be consumed with this process. And as essential as it is for the party responsible for securing capital or financing to display passion, determination, confidence, reliability, commitment, knowledge, experience, more important is the ability to handle rejection, because it is far easier (and there are far more reasons) for capital sources to say no than yes. Selling the concept, in effect, becomes the greatest sales challenge most business executives will ever face.

Types of Capital

For the sake of simplicity, we'll define *capital* as the amount of financial resources needed to implement and to execute a business plan. Financial resources come in countless forms and structures but basically boil down to two main types: **debt** and **equity**.

1. *Debt* represents a liability to the business because it is generally governed by set repayment terms as provided by the party extending credit. For example, a bank lends \$2 million to a company to purchase additional production equipment to support the expansion of a manufacturing facility. The bank will establish the terms and conditions of the debt agreement, including the interest rate (6%), repayment term (60 months), periodic payment, and the collateral required. The company must adhere to these terms and conditions or run the risk of default. Using the aforementioned scenario, the company would be required to support a debt service payment of \$38,666 per month to repay the debt per the terms and conditions established.

2. *Equity* represents an investment in the business. It does not have set repayment terms, but it does have a right to future earnings and may be provided dividends or distributions if profits and cash flows are available. For example, a software technology company requires approximately \$2 million in capital to develop and launch a new Internet-based software solution. A niche venture capitalist group invests the required capital under the terms and conditions present in the equity offering, which includes

percentage of ownership in the future company, rights to future earnings, representation on the board of directors, preferred versus common equity status, conversion rights, and antidilution provisions. Under this scenario, the company is not required to remit any payments to the capital source per a set repayment agreement, but it has given up a partial right to ownership (which can be even more costly).

So there you have it, simple isn't it, debt or equity, your two types of capital. But let's explore both of these capital types in more depth to expand on how many variations, alternatives, subtypes, and classifications are present within each one. If it were as easy as debt versus equity, there wouldn't be much of a need for bankers, accountants, investment bankers, venture capitalists, and the like (which, of course, to most business owners would be a welcome change).

Debt

Debt is best evaluated by understanding its two most important characteristics: **maturity** and **security**. *Maturity* refers to the length of time the debt instrument has until repayment. In the case of trade accounts payable, vendors will often extend payment terms of "net 30" to their customers, which require repayment within 30 days of receipt of the product or service. Any debt instrument requiring repayment within one year or less

would be classified as current or short-term on the balance sheet. Logic would then dictate that long-term debt would be any obligation present with a repayment due of one year or greater. For example, mortgages provided by banks for real estate purchases are often structured over a 30-year period. Hence, any of the debt repayment due past the first year would be considered long-term in nature.

Security refers to the type of asset the debt is supported by or secured with. Using the previous example of a bank lending \$2 million to support the expansion of a manufacturing facility, the bank would take a “secured position” in the assets acquired for the \$2 million loan; that is, the bank would issue a public notice (generally through the issuance of a Uniform Commercial Code, or UCC, document) that it has lent money to the manufacturing company and that it has a first right to the equipment financed in the case of a future default. This provides the bank with additional comfort that if the company cannot cover its debt service obligations, it (the bank) actually has a tangible asset that it can attach to and liquidate if needed to cover the outstanding obligation. Other forms of security also include intangible assets (e.g., a patent or rights to intellectual property), inventory, trade accounts receivable, real estate, and future cash flow streams (e.g., a future annuity payment stream that guarantees X dollars to be paid each year). It would be logical to assume that most companies that provide credit to businesses would prefer to be in a secured status to reduce the inherent risks present. However, this is logistically almost impossible due to the nature of how most businesses operate on a day-to-day basis. Hence, secured creditors tend to be associated with credit extension agreements that are both relatively large (from a dollars committed standpoint) and cover longer periods of time.

On the opposite end of secured lenders are the unsecured creditors. This type of creditor tends to be the vendors that pro-

vide basic goods and services to a company for general operating requirements. Examples of these vendors are professional service firms, utility and telecommunication companies, material suppliers, and general office services. Unsecured creditors obviously take on more risk, in that a specific company asset is not pledged as collateral to support the repayment of the obligation. This risk is mitigated by the fact that unsecured creditors tend to extend credit with shorter repayment terms (e.g., the invoice is due on net 20-day terms) and in lower dollar amounts. In addition, if unsecured creditors are concerned about getting paid, then other strategies may be used, including requiring a deposit or a prepayment to be made.

Beyond the maturity and the security elements of debt are a number of additional attributes, including the use of personal guarantees (i.e., a party outside of the company guarantees the repayment of a debt, similar to how a cosigner works), priority creditors (i.e., certain creditors to a business always achieve a priority status due to the type of obligation present, such as payroll taxes withheld for the Internal Revenue Service), subordination agreements (i.e., a creditor specifically takes a secondary position to a secured lender), default provisions (i.e., in the event of a loan default, statement of the remedies of the parties involved), and lending agreement covenants (i.e., the company must perform at a certain level to avoid triggering a default). Rather than expand on these debt attributes in this segment, a more complete discussion is provided in Chapter 12, which overviews terminating a business and the importance of how debt is structured when a liquidation of business assets occurs.

Equity

Equity is best evaluated by understanding its two most important characteristics: **preference** and **management influence**.

Preference refers to the fact that certain types of equity have preferences to earnings and, if needed, company assets over other forms of equity. For example, a series “A” preferred stock may be issued to investors who have an interest in making an equity investment but want to protect or prioritize their investments in relation to the common shareholders or another series of preferred stock. A series “B” preferred stock may hold a lower preference to the series “A” preferred stock in terms of asset liquidations but may have a slightly higher dividend yield attached or offered with a warrant that allows it to purchase common shares at a later date at a favorable price. Actually, the features built into preferred stock are almost endless and can create a large number of different types of preferred stock (i.e., “A” through “Z”).

For common equity, preferences can also exist. Common stock type “A” may have full voting rights and dividends (after the preferred shareholders receive their dividend), whereas a common stock type “B” may have rights to dividends but cannot vote. To list all of the potential preferences and/or features built into equity instruments (the ability to convert, antidilution provisions, cumulative versus noncumulative dividends, voting rights, acceleration clauses, liquidation criteria, etc., etc.) is well beyond the scope of this book. However, the key point to remember is that equity investors will attempt to secure as many preferences and features that protect their interests as possible. While this may be good for them, it may not be in the best interests of the company and may restrict its ability to operate further down the road.

The concept of *management influence* is centered in the fact that when equity capital is raised, the provider of the capital is considered an owner or a shareholder of the company. By its very nature, this entitles the shareholder to have a say in the company’s operations (unless otherwise restricted) with the ability to vote for the board of directors and on other critical matters (e.g., approving the company’s external auditor or allocating equity to be distributed to company management). This management influence can be extended significantly when preferences are factored into the equation.

It is very common for early-stage equity investors to secure the right to influence the board of directors more actively. For example, if a company has determined that five board members are needed, the early-stage investors may carve out the right to elect two of these board members, and the other investors can elect the remaining three. This provides the early-stage equity investors with additional management control of the business during its critical formation years. If you remember one thing when raising equity capital, it should be this: Be prepared to co-manage the business with your new best friends, as your dictatorship will give way to a democracy (hopefully).

So, the real question that needs to be answered is simple: What form of capital, debt, or equity is best suited for a company? Well, this really depends on the company’s stage in terms of its operating history, industry profile, profitability levels, asset structure, future growth prospects, and general capital requirements and considered in relation to where the sources of capital lie.

Sources of Capital

In the 1996 movie *Jerry Maguire*, Cuba Gooding Jr., playing a fictitious professional football player named Rod Tidwell, uttered the now somewhat infamous line, “Show me the money!” These four words sum up the capital-raising process as best as any, in that until you have the money in hand, a business concept is really nothing more than the paper on which the business plan is written. And as my dad has always told me, that and \$1 should get you a cup of coffee at the local fast-food restaurant (or \$5 so you can be covered at Starbucks). So with this in mind, let’s look to the potential sources of capital available to launch your new business, open a new product/service niche within a corporate conglomerate, or acquire a pesky competitor. The sources listed are not meant to be all-inclusive but rather provide an overview of the variety of avenues available to raise capital and the pluses and minuses associated with each one.

♦ ***Family, Friends, and Close Business Associates (FF&CBA):*** These people have been one of the primary capital sources to launch new business concepts since the beginning of time and will most likely continue to fill this role in the future. These sources range from the business founders tapping their own creditworthiness or resources (i.e., savings, home equity, credit cards) to having Mom and Dad or a trusted business associate step up with the needed seed money to launch the company. Generally, this type of capital tends to be for lower dollar amounts,

geared toward equity as opposed to debt (given the uncertain nature of the business and the higher risks present in terms of generating cash flow), and provided to closely held and/or family-operated businesses. However, debt can be effectively utilized with more mature businesses generating solid profitability with some type of security present (such as real estate).

The good news is that raising capital from FF&CBAs can often be completed quickly without a significant amount of “legal paperwork” and/or similar investor creditability issues being present. The bad news is twofold: (1) The amount of capital available from these sources is often restricted. It is one thing to pull together a couple of hundred thousand dollars; but when a business concept needs a million or two, well, not too many FF&CBAs have this type of liquidity available (unless your last name is Dupont or Getty). (2) Having unsophisticated FF&CBAs provide capital to a business carries with it unforeseen risks and emotional elements that can explode.

Reporting back to a seasoned investor that a business concept didn’t work and that their investment is worthless may not be the most pleasant task in the world, but at least the investor was aware of the risks. Telling your aunt and uncle that you’ve just blown through their nest egg and the business has failed . . . well, let’s just say that your name may be equated to a four-letter word when spoken in subsequent family gatherings. The external costs of losing a family member’s investment can be 10 times the actual internal amount of capital invested.

♦ **Private Capital:** In the business world, a large number of private capital sources are available and include such sources as venture capitalists (VCs), investment bankers, angels or white knights, and similar types of private investment groups. Private capital sources come in a variety of shapes, sizes, and forms; but all tend to gravitate toward a common set of criteria: (1) The dollar size of the capital commitment is generally much larger. These groups are comprised of highly trained and sophisticated professionals responsible for managing large pools of capital and, as such, apply the concept of “economy of scale” frequently. (2) These groups tend to be more risk-based capital sources and look for higher returns from equity-driven transactions. These groups are comfortable with making equity investments in relatively early-stage businesses without proven profitability (but with significant potential) or with structuring risk-based debt facilities to support a “higher risk” business opportunity (e.g., the debt is secured by nothing more than goodwill). Just remember, higher investment returns will be expected for taking on the added risk. (3) These groups are not looking to invest in a company with a revenue potential of \$10 million after five years (similar to a solid regionally based construction subcontracting company). With the types of capital these groups have available, the business opportunity must be relatively grand to peak their interest. Although the next Microsoft is not needed, a solid opportunity to produce in excess of \$100 million in annual revenue (over a reasonable time) generating solid profits, all combined with an efficient exit strategy, is.

The good news with private capital is that larger capital amounts are available, the groups are generally very sophisticated and can provide invaluable management support, and the capital is often equity-based so that aspiring businesses in need of large capital infusions (e.g., a biotechnology company) have a resource. The bad news is that these groups tend to ask for (and re-

ceive) a higher ownership stake in the business and thus can exert a significant amount of management control and influence. In addition, these groups retain highly trained professionals who are very demanding when they are undertaking their investment review/evaluation process. If your case is not ready to be presented, then don’t do it, as private capital sources will not even give you the time of day without a business concept or plan that can stand a punishing evaluation.

♦ **Banks, Leasing Companies, and Other Lenders:** Debt capital sources (including banks, leasing companies, government-backed programs [e.g., the federal government’s SBA program], hard money lenders, and factoring companies) have evolved over the past hundred years into one of the most sophisticated capital source groups around. For almost any debt-based need, some type of lender is readily available in the market. Once again, these groups, similar to private sources, tend to look for a common set of characteristics when extending capital in the form of debt (but just different): (1) Security of some sort must be present (e.g., an asset or a personal guarantee). Lenders like a secondary form of repayment in case the borrower cannot cover the debt service requirement. (2) Debt providers tend to look for more stable business environments where a company has been in business for an extended period of time and has a proven track record. This is not to say that businesses must generate a profit to secure debt financing but it certainly helps. (3) Debt capital sources are more conservative in nature. Their goal is to ensure that the debt can be repaid while generating an adequate return. Maintaining solid financial returns and strong ratios is more important than watching the company double in size, placing too much pressure on its leverage ratios.

From a positive perspective, debt capital sources cover a broad spectrum of financing requirements ranging from as little as

\$50,000 (a niche factoring or a leasing company providing capital to small businesses) to billions of dollars (the world's largest banks providing financing for a multibillion-dollar public company buyout). In addition, management control is not relinquished because debt providers generally do not have a say in an ongoing business. On the flip side, security in some form is usually required, which places business (and potentially personal) assets at risk. Also, the debt must be repaid per the terms and conditions established, regardless of whether the company's performance allows for the repayment. Unlike equity investments, which tend to only generate a distribution of earnings or dividends as the company's performance dictates, debt repayment terms must be adhered to or the company can suffer the wrath of its creditors demanding repayment.

♦ **Public Capital—Wall Street:** Almost every business owner, professional, and manager is aware of the public markets available to trade stocks and bonds, including the New York Stock Exchange, the Nasdaq, and similar venues. Both equity (e.g., the common stock of Microsoft) and debt (e.g., United States Treasury bills) instruments are actively traded in these open markets. While the allure of the public markets is very appealing to business owners and often is viewed as the endgame (i.e., "I took my company public, and now I am worth X millions of dollars"), the reality of operating in a public market can be very different. As such, public capital sources have developed a unique set of qualifications in terms of making it the most appropriate capital source to pursue.

- ♦ Think big! Public markets are better suited for companies thinking in hundreds of millions or billions than those thinking in mere millions.
- ♦ Think public! Basically, all of your company's information, financial records, activities, and so on will be available for

public viewing. You must be prepared not only to disclose the information but also to make sure the disclosure is prepared in the proper format.

- ♦ Understand risk! Consider whether the returns and rewards for being public are adequate in relation to the risks you and your business assume.

Public capital markets' positive attributes include having access to extremely large capital levels, which can tap the widest range of sources available (stretching the globe). There really isn't any deal too big for public markets, as the United States' \$7 trillion of outstanding debt clearly displays. The liquidity that public markets offer (i.e., investments can be efficiently bought, sold, and traded), the ability to establish fair market values almost instantaneously, and access to both debt and equity sources also represent positive attributes. But as we all know, there is no utopia from a capital sources standpoint, so there must be a downside to public capital as well. One negative element is the cost. Staying in compliance with all of the public reporting requirements can be extremely expensive. Another negative is the added management exposure. Even when fraud is not present, investors in public debt and equity instruments can turn into a company's worst nightmare when things aren't going as planned. Also negative is the additional burden placed on the management team, which can be extensive and can distract the company from actually running its business. And finally is the misconception about liquidity. Just because your company is publicly traded does not mean that liquidity is present. Smaller companies' (i.e., with less than \$100 million of market capitalization) stocks are often not actively traded on the open market, which can make selling or buying a large block of stock more difficult (not to mention the scrutiny insiders received when undertaking these transactions). Although plenty of small companies are publicly

traded, public markets are generally best suited for the big boys of corporate America.

So there you have it—FF&CBAs; private capital sources; banks, leasing companies, and other lenders; and public markets. All are viable and accessible capital sources with specific characteristics and traits present providing each source with competitive strengths and weaknesses. However, the sources-of-capital discussion would not be complete if we didn't look a little deeper into three more-creative capital sources that can often be overlooked.

1. *The ability of a company to generate positive internal cash flow and to reinvest this asset internally as needed.* Countless examples of this strategy are present, including a medical company (such as Merck) using positive cash flow from one line of pharmaceutical products to support research and development on a new drug; to a gold mining company (such as Newmont) using its cash flow from a proven gold ore reserve to explore and develop a promising new gold ore reserve; to a temporary staffing company allocating its positive cash flow from a strong staffing technology group in one region to develop a new market in another region. Positive internal cash flow is a real source of capital to finance business operations that is both readily available and, logistically, much easier to secure. However, it should be kept in mind that positive internal cash flow must be managed and invested appropriately within the best interests of the company and its shareholders.

2. *The ability of a company to utilize creative forms of unsecured financing from vendors, partners, customers, and so on, to provide a real source of capital.* In relation to this, the following examples of “creative” forms of unsecured financing have been provided:

- ◆ Requiring customers to prepay 20% of their order as a requirement to start the production and future delivery process. In addition, terms such as “20% down, 30% upon half completion, and the remainder due upon delivery” can also be utilized.
- ◆ Asking key product suppliers to grant extended terms from 30 days to 90 days during certain seasonal periods (e.g., to support higher sales during the holiday season), which are then brought back to a 30-day term when the cash flow from the increased sales catches up.
- ◆ Working with a downstream customer to obtain funding to develop a new product or technology that can greatly improve the customer's future performance. For example, a hardware technology company may need to ensure that software is available for use with their new products. Hence, a capital infusion into the software supplier to develop the technology for which they receive a royalty from future sales may be warranted.

3. *The securing of gifts.* Governments, universities, and non-profit organizations have resources available in the form of grants, loan-interest-rate loans (with limited downside risk), incentive credits, and so on, which are intended to be used for special interests or purposes. The idea is to provide this capital to an organization that will use it in the best interest of the general public. Biotechnology companies often secure research grants for work being completed on disease detection, prevention, and possible cure. Educational organizations may receive grants to help retrain a displaced group of workers or a poorly educated workforce. Under either scenario, the same concept is present in terms of committing the capital for a common good.

The aforementioned additional sources of capital were presented to highlight how many potential sources of capital are actually available and, to a certain degree, how creative companies become when securing capital. And just like the other sources of capital, these three additional sources all come with positive and negative attributes attached. The point is, capital sources come in a variety of sizes, shapes, and forms, which need to be clearly understood prior to approaching and pursuing the appropriate source.

Above all else, don't overlook a potential source of capital. All too often an entrepreneur will not look in places that, in fact, can be good sources of capital. Of course, you should always consider the cost of capital. As you've undoubtedly heard before "there's no such thing as a free lunch." Whoever puts up capital demands to be compensated for the risks of investing in your business. Their demands may be high. You'll have to decide on this relative to what other sources of capital are available to you.

A Business Legal Structure's Influence on Capital

Before bringing all of the elements discussed thus far on raising capital together, a quick review of the different types of legal structures available to operate a business is warranted. Not only are significant tax, cost, and liability issues present when choosing the type of legal business entity to form; but the impact that the business legal entity will have on securing capital must be considered. Certain business forms will limit the type and the amount of capital that can be secured, especially from an equity perspective.

Table 4.1 provides a quick overview of the major types of business entities and the pros and cons associated with each one.

Four key issues really drive the formation of a legal business entity.

1. *How complex and expensive will it be to form the business?* If you want cheap, easy, and simple, try a sole proprietorship or partnership because LLCs and corporations are more complex to form, manage, and operate.
2. *What type of liability protection is desired?* For most, the thought of being able to shield personal assets (to the extent provided by law) from business activities is very desirable. Hence, the corporate or LLC structures are better equipped to address this issue.
3. *What type of tax planning and objectives are being pursued?* If losses at the business level are expected and can be utilized

at the personal level, then an LLC, partnership, sole proprietorship, or potentially a subchapter S corporation should be considered.

4. *What type and amount of capital will be needed to support the business?* Having large amounts of capital available from multiple sources would drive the business entity toward the LLC status or, most likely, the regular C corporation structure.

A couple of additional items should be noted when considering the type of legal entity that should be formed. There is nothing that precludes a business from first forming using a simple structure such as a partnership and then changing its legal structure down the road to a regular C corporation. This occurs all of the time, based on how businesses evolve and markets change. Generally, it is easier logistically to move from simple business forms to more complex structures than vice versa. Also, it should be noted that debt capital will be available to basically any legal business type as long as the criteria used by lenders is met. Although the “corporate” status may lend more creditability to the process of obtaining debt, lenders still look to the same fundamentals regardless of the business type (i.e., “Will I get my money back with a reasonable return?”).

In closing this brief discussion on the different types of business legal structures, every general manager, owner, executive,

TABLE 4.1—TYPES OF BUSINESS ENTITIES

Business Type	Pros	Cons
Sole Proprietorship and Partnership	<p>Inexpensive, easy, and quick formation possible.</p> <p>Structure is simple to understand and to implement.</p> <p>Certain tax advantages present to owners due to flow-through status.</p>	<p>Legal structure does not provide for liability shield for business claims against personal assets.</p> <p>Equity capital sources will be limited to FF&CBAs (at best).</p>
Limited Liability Company (LLC)	<p>New business form that combines liability benefits of a corporation with flow-through tax benefits.</p> <p>More flexible than a subchapter S corporation in that other legal entities may invest equity in the LLC.</p>	<p>Relatively new business type that is more complex and expensive to establish.</p> <p>Not ideally suited to attract large private equity investments looking for liquidity through public offering.</p>
Subchapter S Corporation	<p>Liability shield present due to corporate structure.</p> <p>Tax benefits available to owners due to flow-through status.</p>	<p>Ownership limited to maximum of 75 individuals. Other legal entities cannot invest in company.</p> <p>Tax restrictions apply to more than 2% owners, which limit some potential tax benefits.</p> <p>Corporate compliance and reporting issues more complex and expensive.</p>
Regular C Corporation	<p>Liability shield present due to corporate structure.</p> <p>Equity capital sources may come from individuals and/or businesses with no restriction on number of types of investors present.</p>	<p>No flow-through tax benefits present as all transactions are taxed at corporate level.</p> <p>Double taxation problems exist with corporate earnings and dividends.</p> <p>Corporate compliance and reporting issues more complex and expensive.</p>

officer, board member, managing partner, and/or other senior-level manager needs to keep the liability issue in perspective. Don't expect the legal structure of the business entity to protect you from personal claims, especially when the willful intent to defraud is present. The current political, social, and business environment is hell-bent on aggressively pursuing white-collar criminals as a result of the high-profile business failures from 2000 through 2003.

The legal system has always been willing to "pierce the corporate veil." In other words, prosecutors and plaintiffs have been able to break through the corporate shield in order to get at those individuals responsible for wrongdoing. The limited liability feature of the corporate form of business organization has a legitimate purpose, of course. However, this feature of the legal entity was never envisioned to protect crooks and fraud perpetrators.

Understanding and Managing Capital's Risks: Bringing It All Together

Raising or securing capital is without question one of the most difficult and time-consuming tasks the executive management team of a company will undertake. Preparing, packaging, marketing, negotiating, and closing the “deal” can easily consume 50% to 100% of an executive’s time, depending on the stage of the company. For a start-up operation, chief executive officers (CEOs) and other senior executives often find themselves closing on one round of financing, resting for a day or two, and then starting the process all over again, looking for the next financing source. For a chief financial officer (CFO) of a publicly traded company, the majority of her or his time may be consumed in preparing information for the capital sources and markets and then managing the capital sources expectations, inquiries, and/or other needs. To a certain degree, managing the capital sources, after the capital is secured, can be even more challenging and difficult than raising the capital itself.

Managing this element of capital risks is more intangible in nature, as it is geared toward relationships and communication efforts as opposed to hard financial and accounting data. Now, let’s turn our attention toward the more tangible elements of managing capital risks from an accounting and financial perspective. Table 4.2 illustrates these capital risks for an Equity scenario and a Debt scenario.

As is evident from the information provided, all elements of this business are exactly the same except for the way the business was capitalized. Under the equity scenario, a total of \$2,000,000

TABLE 4.2—CAPITAL STRUCTURE COMPARISON

XYZ Wholesale, Inc.		
Summary Balance Sheet	Equity Scenario FYE 12/31/00	Debt Scenario FYE 12/31/00
Current Assets		
Cash and Equivalents	\$ 439,569	\$ 94,929
Trade Receivables, Net	1,272,083	1,272,083
Inventory	1,383,391	1,383,391
Total Current Assets	<u>\$3,095,043</u>	<u>\$2,750,403</u>
Fixed and Other Assets		
Property, Plant, and Equipment, Net	\$1,250,000	\$1,250,000
Other Assets	75,000	75,000
Total Fixed and Other Assets	<u>\$1,325,000</u>	<u>\$1,325,000</u>
Total Assets	<u>\$4,420,043</u>	<u>\$4,075,403</u>
Current Liabilities		
Trade Payables	\$1,037,543	\$1,037,543
Accrued Liabilities	51,877	51,877
Line of Credit Borrowings	0	0
Current Portion of Long-Term Liabilities	0	300,000
Total Current Liabilities	<u>\$1,089,420</u>	<u>\$1,389,420</u>
Long-Term Liabilities		
Notes Payable, Less Current Portion	\$ 0	\$ 900,000
Other Long-Term Liabilities	125,000	125,000
Total Long-Term Liabilities	<u>\$ 125,000</u>	<u>\$1,025,000</u>
Total Liabilities	<u>\$1,214,420</u>	<u>\$2,414,420</u>

(Continued)

TABLE 4.2—(Continued)

XYZ Wholesale, Inc.		
Summary Balance Sheet	Equity Scenario FYE 12/31/00	Debt Scenario FYE 12/31/00
Equity		
Common and Preferred Equity, \$1 per Share	\$2,000,000	\$ 500,000
Retained Earnings	750,000	750,000
Current Earnings	455,623	410,983
Total Equity	\$3,205,623	\$1,600,983
Total Liabilities and Equity	\$4,420,043	\$4,075,403
Summary Income Statement	Equity Scenario FYE 12/31/00	Debt Scenario FYE 12/31/00
Revenue	\$15,265,000	\$15,265,000
Costs of Goods Sold	11,067,125	11,067,125
Gross Profit	\$ 4,197,875	\$ 4,197,875
Gross Margin	27.50%	27.50%
Selling, General, and Administrative Expenses	\$ 3,251,000	\$ 3,251,000
Interest Expense	0	72,000
Other (Income) Expenses	212,000	212,000
Net Profit before Tax	\$ 734,875	\$ 662,875
Income Tax Expense (Benefit)	279,253	251,893
Net Profit (Loss)	\$ 455,623	\$ 410,983
Quick Financial Analysis	Equity Scenario FYE 12/31/00	Debt Scenario FYE 12/31/00
Debt-to-Equity Ratio	0.38	1.45
Debt Service Coverage Ratio	N/A	1.10
Return on Equity	14.21%	24.74%
Return on Assets	10.31%	10.08%
Earnings per Share	\$0.23	\$0.82

of capital was raised, all in the form of equity. Under the debt scenario, a total of \$500,000 of equity was raised and \$1,500,000 of debt was secured (of which \$300,000 was repaid during the year). The Income Statements are exactly the same except for the fact that the debt scenario has interest expense present. The Quick Financial Analysis highlights the key differences and indicates that by using debt the company was able to generate better returns for the equity owners as follows:

- ♦ **Returns:** The debt scenario produces a return on equity of 24.74% compared to a return on equity of 14.21% with the equity scenario while the return on assets is almost identical for both scenarios.
- ♦ **Earnings:** The debt scenario generates earnings per share of almost four times that of the equity scenario (\$.82 per share compared to \$.23 per share).

The only real downside lies in the fact that the debt scenario has a much higher debt-to-equity ratio present of 1.45 compared to .38 for the equity scenario in addition to having a debt service coverage ratio of approximately 1.1 (i.e., total earnings of \$410,983 divided by the company's total annual debt service including loan principal payment of \$300,000 and interest payments of \$72,000). While using debt was beneficial in terms of enhancing returns, it placed the company in a higher risk status due to the amount of debt leverage used. This will be clearly illustrated when the next year's operating results are realized as presented in Table 4.3.

The company has gone from having a robust year with strong margins and profitability to having to deal with a recession driving sales and margins lower. While its selling, general, and administrative expenses were reduced as a result of the difficult

TABLE 4.3—CAPITAL STRUCTURE COMPARISON

XYZ Wholesale, Inc.					
Summary Balance Sheet	Equity Scenario FYE 12/31/02	Debt Scenario FYE 12/31/02	Summary Income Statement	Equity Scenario FYE 12/31/02	Debt Scenario FYE 12/31/02
Current Assets			Revenue	\$12,975,250	\$12,975,250
Cash and Equivalents	\$ 941,214	\$ 263,094	Costs of Goods Sold	<u>9,731,438</u>	<u>9,731,438</u>
Trade Receivables, Net	1,081,271	1,081,271	Gross Profit	<u>\$ 3,243,813</u>	<u>\$ 3,243,813</u>
Inventory	<u>1,216,430</u>	<u>1,216,430</u>	Gross Margin	<u>25.00%</u>	<u>25.00%</u>
Total Current Assets	<u>\$3,238,915</u>	<u>\$2,560,795</u>	Selling , General, and Administrative Expenses	\$ 2,990,920	\$ 2,990,920
Fixed and Other Assets			Interest Expense	0	54,000
Property, Plant, and Equipment, Net	\$1,000,000	\$1,000,000	Other (Income) Expenses	<u>212,000</u>	<u>212,000</u>
Other Assets	<u>75,000</u>	<u>75,000</u>	Net Profit before Tax	\$ 40,893	\$ (13,108)
Total Fixed and Other Assets	<u>\$1,075,000</u>	<u>\$1,075,000</u>	Income Tax Expense (Benefit)	<u>15,539</u>	<u>(4,981)</u>
Total Assets	<u>\$4,313,915</u>	<u>\$3,635,795</u>	Net Profit (Loss)	<u>\$ 25,353</u>	<u>\$ (8,127)</u>
Current Liabilities			Quick Financial Analysis	Equity Scenario FYE 12/31/02	Debt Scenario FYE 12/31/02
Trade Payables	\$ 912,322	\$ 912,322	Debt-to-Equity Ratio	0.34	1.20
Accrued Liabilities	\$ 45,616	45,616	Debt Service Coverage Ratio	N/A	-0.02
Line of Credit Borrowings	0	0	Return on Equity	0.78%	-0.49%
Current Portion of Long-Term Liabilities	<u>0</u>	<u>300,000</u>	Return on Assets	0.59%	-0.22%
Total Current Liabilities	<u>\$ 957,938</u>	<u>\$1,257,938</u>	Earnings per Share	\$0.01	-\$0.02
Long-Term Liabilities					
Notes Payable, Less Current Portion	\$ 0	\$ 600,000			
Other Long-Term Liabilities	<u>125,000</u>	<u>125,000</u>			
Total Long-Term Liabilities	<u>\$ 125,000</u>	<u>\$ 725,000</u>			
Total Liabilities	<u>\$1,082,938</u>	<u>\$1,982,938</u>			
Equity					
Common and Preferred Equity, \$1 per Share	\$2,000,000	\$ 500,000			
Retained Earnings	1,205,624	1,160,984			
Current Earnings	<u>25,353</u>	<u>(8,127)</u>			
Total Equity	<u>\$3,230,977</u>	<u>\$1,652,857</u>			
Total Liabilities and Equity	<u>\$4,313,915</u>	<u>\$3,635,795</u>			

times, it was not enough to enable the company to generate a profit, using the debt-financed scenario. However, under the equity-financed scenario, the company is able to generate a small profit and to produce positive returns on assets and equity while the debt-financed company incurs a loss and negative returns. Making matters even worse is that the debt-financed company may now be in violation of certain debt covenants and in default of the loan agreement. For example, the loan agreement may read that the company needs to maintain a debt coverage service ratio of at least 1.0 and/or to produce profitable results on an annual basis (both common covenants for lending sources).

Because the company may have violated both covenants, it may be in technical default on the loan, a situation that will require a fair amount of management attention moving forward. And just to add a little more insult to injury, the real damage may not be realized until 2002 and beyond. While the equity-financed scenario provides the company with a strong balance sheet and ample financial resources to expand after the recession ends, the debt-financed scenario places the company in the difficult spot of having to restructure its balance sheet to satisfy its creditors. Thus, it may miss significant growth opportunities in 2002 and beyond, costing the company both sales and profits.

In summary, debt and equity financing strategies cut both ways. While debt financing strategies can enhance returns, they also increase the company's operating risks by leveraging its as-

sets. In good times, when profits and cash flows are ample and everyone's making a buck, debt financing strategies look great. When the tide turns and profits dry up and cash flows become restricted, debt financing can look like the evil stepchild that nobody wants around but who must be fed (usually at the expense of some good kids). Remember, debt financing sources are focused on providing loans that generate sound returns and are repaid in a reasonable time frame. You won't get much sympathy from a bank if you ask it to suspend debt payments so you can keep a business unit open on the hopes of an eventual rebound.

Conversely, equity capital offers a chance to strengthen the balance sheet and to help manage the company's operating risks through good times and bad. Maintaining a strong balance sheet can really provide a competitive weapon when expanding a business into new markets or exploring a unique business opportunity. However, having too much equity without being able to generate adequate returns can dampen investor enthusiasm and produce a rather restless group of shareholders and board members. Remember, equity financing sources do not invest capital to watch it generate below-average returns. Equity capital, although representing a lower perceived risk to the company, is by its nature a higher-risk capital source (to the providers) and must produce a satisfactory investment return. If not, the equity capital will find an opportunity that does provide the necessary return.

Raising Capital—Revisited

Raising capital really does represent the ultimate sale in terms of convincing a capital source to actually believe in your business and to then fork over the money. Terms such as “nerve racking,” “frustrating,” “euphoric,” and “riding a roller coaster” will become commonplace, in addition to hair loss, stress, and joy. The following **key points** regarding raising capital capture the essence of the fund-raising process as quickly as possible:

- ♦ **Be Prepared:** Like the Boy Scouts of America say, always be prepared. Capital sources expect and demand that the highest-quality information, plans, and underlying support be made available when evaluating an investment opportunity.
- ♦ **Be Persistent:** Capital sources are just looking for reasons to say no. The attributes of persistence and determination cannot be emphasized enough when pursuing and securing capital.
- ♦ **Qualify the Capital Sources:** Don’t waste your time or theirs—make every effort to qualify your capital sources to ensure that the most appropriate avenue is pursued in relation to the operating status of your business. And by all means make sure the capital source is capable and accredited to support the request.
- ♦ **Communicate:** Communication efforts are critical to successfully securing and managing capital. It is extremely important to keep the capital sources up-to-date with all relevant information, good or bad.
- ♦ **Document and Disclose:** Do not underestimate the importance of properly documenting all capital-raising activities, from the initial communications to the final agreements. In addition, full and complete disclosures are a must in today’s litigious environment.
- ♦ **Exit Strategies:** Remember that all capital sources will want their money back with a solid return at some point. Offer clear and reasonable exit strategies to provide the capital sources with comfort that a light will be present at the end of the tunnel (hoping that it’s not a freight train barreling down in the other direction).
- ♦ **Risk/Reward Relationship:** To a capital source, equity investments carry more risk than debt investments do; and, as such, the return realized on the investment must be higher. To a business, debt can expose the company to greater risks but also higher returns. The trick is to find the right balance.

The heart of raising capital lies in a business’s ability to generate a profit and positive cash flow. If this sounds familiar it should—cash flow represents the ultimate lifeline of any business operation. Understanding how a business generates and consumes cash represents the single most important item in determining if a company will be economically viable (and gain the interest of capital sources) or die a natural death (and be discarded to the mass grave of dead business plans).

Capsule Summary

A business needs to invest in a variety of assets to carry on its profit-making operations (see Chapter 3). Therefore, a business must raise the capital (mainly money) needed for investing in its assets. This is no easy task, to say the least. A business must persuade others to put their capital in the business, which invariably involves some risk to the capital provider. First and foremost, a business needs a sound business plan to convince sources of capital that it will be a good steward of the capital and will earn operating profit sufficient to pay for the use of their capital. The essential elements of a sound business plan, from the perspective of raising capital, are discussed in the chapter.

Two basic kinds of capital are available to a business: (1) capital supplied under debt contracts and (2) capital invested under equity (ownership) arrangements. The essential features of both types of capital sources are explored in the chapter. Please keep in mind that a business generates liabilities in carrying on its day-to-day operations. Buying things on credit is the main genesis of a business's operating liabilities. The non-interest-bearing operating liabilities of a business are very different from its interest-bearing debt liabilities (such as notes payable). Therefore, operating liabilities are disclosed separately from debt obligations in a business's balance sheet (statement of financial condition).

The chapter identifies where a business goes for debt and equity capital—ranging from family, friends, and close business associates; to private and public institutions that stand ready to provide debt and equity capital; to the issuance of debt and equity securities in the public markets for bonds and stocks. The chapter also looks at certain creative forms of financing, such as requiring deposits from customers when they order products and getting longer credit terms from vendors.

The chapter analyzes business legal entity structures from the perspective of raising capital. The type of legal entity chosen by a business has definite advantages and disadvantages when it comes to raising capital. The chapter also discusses the time and effort a business's executives must spend in managing its sources of capital. This important point is often underestimated. Executives spend a significant amount of time and energy in raising and renewing the business's capital sources. Without adequate capital, a business could shrivel and die. Its senior managers have to get involved and stay involved in the capital side of a business.

Return on capital ratios and other capital performance measures are explained briefly in the chapter. Last, the risks and the rewards of alternative capital sources are examined. Different capital structures are compared that illustrate these important points.

Part Two

BUILDING A BUSINESS

GETTING A GRIP ON PROFIT— INSTEAD OF OPERATING BY THE SEAT OF YOUR PANTS

*“When you work with numbers,
a grid of some sort proves to be extremely useful.”*

—Dan Bricklin, cocreator of VisiCalc, the first PC spreadsheet

Managers get paid to make profit happen. So how do you make profit? And how do you know the amount of your profit or loss? The second of these questions is easier to answer. One of the main functions of accounting is to record the revenues and expenses (as well as any gains and losses) of a business in order to prepare a report of its profit or loss for a period of time.

Management decisions set in motion the profit-making activities of a business. The profit report is the primary source of feedback to managers on the results of their decisions. To managers, the profit report says: You've made decisions, and here are the

outcomes of your decisions. A profit report is historical—backward looking. It presents the collective results of what has already happened. Management decisions are forward looking and are made to affect the course of future events, of course.

In making profit decisions, managers should focus on the relatively few fundamental factors that drive profit—what one could call the “levers of profit.” Business managers need a sure-handed grip on these profit levers. This chapter explains profit-analysis techniques that help business managers to gain a better understanding of profit behavior and to make better profit decisions.

Reporting Profit Inside and Outside a Business

Inside a business, a profit report is commonly called the *P&L* (profit-and-loss) *report*. Outside a business, in the external financial reports to its shareowners, a profit report is generally called an *income statement* or *earnings statement*. The purpose of this financial statement is to present a summary of the profit-making activities of a business for a period of time. You probably know that the term *bottom line* refers to the amount of profit or loss for the period, which is the final line of the report.

Table 5.1 shows the basic format of an annual profit report, which steps down from the top line (sales revenue) to the bottom line (profit). A profit report usually includes the previous period's figures so they can be compared with those of the period just ended. In Table 5.1, the bottom line is labeled *net earnings*. *Net income* is also commonly used for the final profit number. Businesses that sell products disclose cost of goods (products) sold expense immediately under sales revenue in order to show *gross margin* (also called *gross profit*)—see Table 5.1. Interest and income tax expenses are reported separately. Table 5.1 shows a common way of reporting these two unique expenses.

You might have noticed that only one line for all operating expenses is given in Table 5.1. Actually, more lines of operating expenses are reported. A relatively large number of operating expenses are presented in *internal* P&L reports, which may include 20, 50, 100, or more operating expenses.

In contrast, relatively few operating expenses are disclosed in *external* income statements. The standards governing external fi-

TABLE 5.1—BASIC FORMAT OF ANNUAL PROFIT REPORT

	Fiscal Year 2005	Fiscal Year 2004
Sales Revenue	\$28,750,000	\$26,587,500
Cost of Goods Sold	<u>18,550,000</u>	<u>17,687,750</u>
Gross Margin	\$10,200,000	\$ 8,899,750
Operating Expenses	<u>7,200,000</u>	<u>6,383,625</u>
Operating Earnings	\$ 3,000,000	\$ 2,516,125
Interest Expense	<u>525,000</u>	<u>508,750</u>
Earnings before Income Tax	\$ 2,475,000	\$ 2,007,375
Income Tax Expense	<u>825,000</u>	<u>669,125</u>
Net Earnings	<u>\$ 1,650,000</u>	<u>\$ 1,338,250</u>

ancial reporting by businesses do not dictate the types or the number of operating expenses that should be disclosed in income statements. This is left to the discretion of each business, and practices vary from company to company. Taking a sample of external income statements would reveal that most businesses disclose about five operating expenses, give or take one or two.

In actual practice, businesses classify and record operating expenses according to an *object of expenditure* basis. Accordingly,

operating costs are recorded in expense accounts, such as salaries and wages, rent, utilities, maintenance and repairs, insurance, advertising, travel, depreciation, legal, office supplies, entertainment, and transportation. Even a modest-size business keeps a hundred or more operating expense accounts. This detailed level of information is necessary for effective management control. However, a large number of expense accounts can be an obstacle to getting a clear view of the “big picture” that managers need for profit analysis.

Chapter 1 explained that for analyzing profit behavior, a business’s *variable* expenses should be separated from its *fixed* expenses. Generally speaking, an expense account title gives a pretty good

clue as to whether the expense is fixed or variable. Cost of goods sold expense is a variable expense that depends on the number of units of product sold. Sales commissions are variable expenses. Real estate property taxes are fixed annual expenses. Fire and liability insurance premiums are another example of fixed annual expenses.

Managers could request that operating expense accounts, which have been recorded on the object of expenditure basis, be reclassified as variable or fixed. Distinguishing between variable and fixed operating expenses is not quite as simple as it might appear and takes time, of course. Only the manager can decide if it’s worth the effort. Generally it’s well worth the effort to separate between variable and fixed operating expenses.

Focusing on Operating Earnings

The following discussion focuses mainly on *earnings before interest and [income] tax* (EBIT). This profit measure is called *operating earnings* or *operating profit*. Interest expense depends on the amount of debt a business uses and, of course, on the interest rates it pays for using this capital. Some businesses are very conservative and use little or virtually no interest-bearing debt. Other businesses are loaded to the gills with debt. The higher the proportion of debt that is used to finance a business, the more the business gains or loses from *financial leverage*, which is discussed in Chapter 6 (page 90).

And then there's income tax expense. Income tax is a unique type of expense, to say the least. When they hear the term *income tax*, most people immediately think of the complexity of the federal income tax law, which can't be denied. For profit analysis, the important aspect of income tax is that it's a *contingent* expense that depends, first, on whether a business earns taxable income and, second, on how much the taxable income is (and, third, where the income is earned and, fourth, what kind of income it

is, and so on). As you undoubtedly know, under the U.S. income tax law, interest expense is deductible from revenue to determine taxable income. In very general terms, taxable income equals operating earnings minus interest expense. (Income tax professionals would cringe at this comment.)

Interest expense and income tax expense are business-wide, or entity-as-a-whole, expenses. Having said this, we should mention that it is common for a business to be organized as two or more separate legal entities, and each one can have its own debt and income tax situation. The main point is that interest and income tax have to be considered at the appropriate entity level.

Management decisions, in contrast, deal with more narrow profit slices of the business. These decisions are made at the microlevel. Managers focus on one separate source of profit at a time, such as a particular product, a product line, or a sales territory. The unit of analysis is not the whole business, but rather a particular segment of the business. The general term for a separate source of profit is *profit center*.

Profit Centers

From a one-person sole proprietorship to a mammoth business like General Motors or IBM, one of the first rules of management accounting is to identify each mainline source of profit and to accumulate the sales revenue and all the expenses for these separate profit hubs, or centers. Can you imagine an auto dealership, for example, not separating revenue and costs between its new car sales and its service department? One auto dealer we audited some years ago made more profit from originating car loans for its customers than it did from selling new and used cars.

Even a relatively small business may have many different sources of profit. In contrast, even a relatively large business may have just a few mainline sources of profit. There are no easy-to-

apply general rules for classifying sales revenue and costs for the purpose of segregating sources of profit, that is, for defining the profit centers of a business. Every business has to figure this out on its own. But it has to be done. Clearly, business managers should know where their profit comes from.

Although a business may have a fairly large number of profit centers, one basic profit framework has broad applicability. It focuses on the main variables that drive profit. This basic formula is valid for most profit sources, whether the profit center is a product line, a sales territory, a channel of distribution, or a type of customer. Also, the profit framework can be modified and applied to service businesses.

Framework for Profit Analysis

Please look at Table 5.1 again. Of course the business did not make just one sale during the year just ended in the amount of \$28,750,000. The company made thousands of sales during the year. It sells a number of different products and services. Its managers had to set the sales prices and control the costs for all these different products and services. The collective result is that the business made EBIT \$3,000,000 for the year.

A logical first question is whether the format of the profit report (Table 5.1) could serve as a good framework for profit analysis. If so, a profit report could be prepared for each profit center. Suppose that the business whose summary-level, company-wide profit report is shown in Table 5.1 sells one main product through a network of distributors. This product accounts for more than one-third of its total annual sales revenue. As you would expect, the product is the largest profit center of the business.

In addition to sales revenue and cost of goods sold expense for the product, assume that the company's accounting system records the operating expenses for each of its separate profit centers. (*Please note:* The accounting system of a business might not be set up to track operating expenses by sales sources.) The profit report for this product, which is one slice of the total business, is presented in Table 5.2 (ending at operating earnings).

TABLE 5.2—PROFIT REPORT FOR PROFIT CENTER

	Fiscal Year 2005	Fiscal Year 2004	Change
Sales Revenue	\$10,000,000	\$9,555,000	4.7%
Cost of Goods Sold	<u>6,000,000</u>	<u>5,996,250</u>	0.1
Gross Margin	\$ 4,000,000	\$3,558,750	12.4
Operating Expenses	<u>2,500,000</u>	<u>2,274,400</u>	9.9
Operating Earnings	\$ 1,500,000	\$1,284,350	16.8

In Table 5.2, the percent of change for each line is included. As you see, sales revenue increased 4.7% and operating earnings increased 16.8% compared with the previous year. This level of profit analysis falls short of the more thorough analysis needed for decision making.

The bare-bones profit report framework shown in Table 5.2 is lacking in three basic areas: (1) It doesn't report *sales volume*—the number of units of product sold. (2) It doesn't distinguish between *variable and fixed* operating expenses. (3) *Unit values* are not included. The profit report presented in Table 5.3 corrects these deficiencies, and then some.

TABLE 5.3—MANAGEMENT PROFIT REPORT

Sales Volume	100,000 Units		97,500 Units	
	Fiscal Year 2005		Fiscal Year 2004	
	Per Unit	Totals	Per Unit	Totals
Sales Revenue	\$100.00	\$10,000,000	\$98.00	\$9,555,000
Cost of Goods Sold	<u>60.00</u>	<u>6,000,000</u>	<u>61.50</u>	<u>5,996,250</u>
Gross Margin	\$ 40.00	\$ 4,000,000	\$36.50	\$3,558,750
Revenue-Driven Expenses	8.50%	850,000	8.00%	764,400
Volume-Driven Expenses	<u>\$ 6.50</u>	<u>650,000</u>	<u>\$ 6.00</u>	<u>585,000</u>
Margin	\$ 25.00	\$ 2,500,000	\$22.66	\$2,209,350
Direct Fixed Expenses		750,000		700,000
Allocated Fixed Expenses		<u>250,000</u>		<u>225,000</u>
Operating Earnings		\$ 1,500,000		\$1,284,350

Much of the information in the Table 5.3 management profit report is confidential and obviously should not circulate outside the business. Your competitors would love to get their hands on this information. In fact, your competitors might attempt to get this information through industrial espionage and intelligence gathering methods.

Spreadsheet Basis of Profit Report

Table 5.3 is the printout of our spreadsheet. We use the Microsoft Excel spreadsheet program. In fact, all tables in the book are printouts from Excel spreadsheets. (You can get the Excel workbook file for all the examples by contacting us at the e-mail addresses given in the Preface.)

Today, spreadsheets are so widely used and understood that we hardly need to mention the advantages of this analysis tool. However, we should remind you of the “garbage-in, garbage-out” principle. The output of a spreadsheet is no better than the correct coding and accuracy of its inputs. Accordingly, let’s be clear on the definitions of the variables in the Table 5.3 profit report.

Sales volume, the first line in Table 5.3, is the total number of units sold during the period, net of any returns by customers. Sales volume should include only units that brought in revenue to the business. Generally speaking, businesses do a good job in keeping track of the sales volumes of their products (and services). These are closely monitored figures, such as in the automobile industry.

Some businesses sell a huge variety of products. No single product or no single product line brings in more than a small fraction of their total sales revenue. For instance, a well-known general hardware store in Boulder, Colorado, carries over 100,000 products. A business may keep count of customer traffic or the number of individual sales made over the year, but it may not track the quantities sold for every product.

Sales revenue is the net amount of money received by the business from the sales of the products during the period. Notice the word *net* here. This business, like most, offers its customers many incentives to buy its products and to pay quickly for their purchases. The sales revenue amount in Table 5.3 is not simply the list prices of the products sold times the number of units sold. Rather, the sales revenue amount is the total after deductions for rebates, allowances, prompt-payment discounts, and any other thing that reduces the amount of revenue received by the business.

Cost of goods sold is the product cost of the units sold during the period. This expense should be net of discounts, rebates, and allowances received by the business from its vendors and suppliers. Manufacturers add together their costs of raw materials, labor, and production overhead to determine product cost. (Accounting for the cost of manufactured products is called *cost accounting*.) For other businesses, product cost basically is purchase cost. A business must choose the sequence in which product cost is charged out to cost of goods sold expense. One choice is the *first-in, first-out (FIFO)* method. The opposite method is the *last-in, first-out (LIFO)* sequence.

One common problem is where to put the cost of *inventory shrinkage*. It may be included in cost of goods sold expense, or it may be included in the volume-driven operating expenses. A manager definitely should know what has been placed in the cost

of goods sold expense, in addition to the product cost of units sold during the period.

Table 5.3 separates operating expenses into four classes—two types of variable expenses and two types of fixed expenses. *Revenue-driven expenses* are those that depend primarily on the *dollar amount* of sales revenue. This group of variable operating expenses includes salespeople’s commissions that are based on the amount of sales, as well as credit card fees paid by retailers, franchise fees based on sales revenue, and any other cost that depends directly on the amount of sales revenue. Notice in Table 5.3 that these operating expenses are presented as a *percent* of sales price in the per unit column.

Volume-driven expenses are driven by and depend primarily on the number of units sold, or the total quantity of products sold during the period (as opposed to the dollar value of the sales). It includes delivery and transportation costs paid by the business, packaging costs, and any costs that depend on the size and weight of the products sold. Most businesses have both types of variable operating expenses. However, one or the other may be so minor that it would not be useful to report lines for each type to managers for their analysis of profit. Only the dominant type of variable operating expense would be presented, and it would absorb the other type.

Managers may view fixed operating expenses as an albatross around the neck of the business. In fact, these costs provide the infrastructure and support for making sales. The main disadvan-

tage, of course, is that these operating costs do not decline if sales during the period fall short of expectations. A business commits to many fixed operating costs for the coming period. For all practical purposes, these costs cannot be decreased over the short run. Examples of fixed costs are wages of employees on fixed salaries for the period (from managers to maintenance workers), real estate taxes, depreciation on the buildings and equipment used in making sales, and utility bills.

Certain fixed costs can be matched with a particular profit center. For example, a business may advertise a specific product, and the fixed cost of the advertisement can be matched against that product. A major product line may have its own employees on fixed salaries or its own delivery trucks on which depreciation is recorded. A business may purchase specific liability insurance covering a particular product it sells. Table 5.3 reports these costs as *direct fixed expenses*.

In some cases, it’s not possible to directly attach company-wide fixed operating expenses to particular products, product lines, or other organization units. General administrative expenses (such as the chief executive officer’s annual salary and corporate legal expenses) are incurred on an entity-as-a-whole basis and cannot be connected directly with any particular profit center. Therefore, a business may allocate these fixed costs among its different profit centers. These fixed costs handed down from headquarters are shown as *allocated fixed expenses* in Table 5.3.

Margin—The Catalyst of Profit

Table 5.3 introduces one new line of information—*margin*. Margin is operating profit before operating fixed expenses are deducted. It's not to be confused with *gross margin*, which is profit after the cost of goods sold expense is subtracted from sales revenue, but before any other expenses are deducted. With the information in Table 5.3, the manager can pinpoint the reasons for the unit margin increase—from \$22.66 in 2004 to \$25.00 in fiscal year 2005. There were two favorable changes: (1) The unit sales price increased, and (2) the unit product cost decreased. The gain in the gross margin per unit was offset by unfavorable changes in both variable operating expenses.

In this example, unit margin increased from \$22.66 in 2004 to \$25.00 in fiscal year 2005—and the business sold 2,500 more units in 2005. Therefore, total margin jumped \$290,650, to \$2,500,000 for 2005. The total amount of fixed operating expenses increased \$75,000 over 2004, which offsets part of the margin gain. Operating earnings increased a very healthy \$215,650 during 2005, which is a 16.8% gain. Most managers would be quite satisfied with this performance.

By the way, the same analysis can be used to explain the vari-

ances between actual and budgeted amounts for the period just ended. Actual results would be in the 2005 columns, as shown in Table 5.3. Budgeted amounts for 2005 would be put in the comparison columns on the 2004 side, instead of 2004 results.

The manager's attention should be riveted on unit margin, and the manager should definitely understand the reasons for changes in unit margin. Even a relatively small change in unit margin can have a big impact on operating earnings. For instance, what if unit margin had remained the same at \$22.66 during fiscal year 2005? The business sold 2,500 more units than the previous year, which would have increased its total margin \$56,650: $\$22.66 \times 2,500$ additional units = \$56,650 total margin increase.

As you see in Table 5.3, the company's total fixed operating expenses (direct plus allocated) increased \$75,000 over the previous period. Therefore, if unit margin had remained the same as in 2004, the company's operating earnings would have decreased. Fortunately, unit margin increased \$2.34 (i.e., $\$25.00 - \$22.66 = +\$2.34$), and this increase more than overcame the increase in fixed expenses and provided a nice boost in operating earnings.

How the Business Made Profit

The management analysis profit report shown in Table 5.3 provides the information we need to answer the question posed at the start of the chapter: How do you make profit? So, how did the business earn \$1,500,000 operating profit from this profit center for fiscal year 2005? Actually, there are three answers to the question. Please refer to Table 5.3 in reading each answer.

Answer #1: The business earned a profit margin of \$25 per unit, and it sold 100,000 units of the product: $\$25 \text{ unit margin} \times 100,000 \text{ units sales volume} = \$2,500,000 \text{ total margin}$. The product had \$1,000,000 total fixed expenses for the year. Thus, total operating earnings was \$1,500,000 for the year.

Answer #2: The company had to sell 40,000 units of the product to reach its *breakeven point*: $\$1,000,000 \text{ total fixed expenses} \div \$25 \text{ unit margin} = 40,000 \text{ units breakeven point}$. The business sold 60,000 units in excess of the breakeven point. Each unit sold in excess of the breakeven point brought in \$25 “pure” profit because the first 40,000 units sold covered fixed expenses. The 60,000 units in excess of breakeven at \$25 unit margin provided \$1,500,000 operating earnings.

Answer #3: The business spread its \$1,000,000 total fixed expenses over 100,000 units sold during the year, which was an average of \$10 per unit. This fixed cost per unit is *not* presented in Table 5.3. Fixed costs are monolithic in nature; they are bulk-size costs that are not sensitive to changes in sales volume over the short run. Accordingly, the Table 5.3 profit report does not show fixed costs per unit. However, this third answer for how the business made its profit needs the average fixed costs per unit. The business made \$25 unit margin per unit sold, which is \$15 more than the \$10 fixed costs per unit: $\$15 \times 100,000 \text{ units sold} = \$1,500,000 \text{ operating earnings}$.

Each answer is valid. In a certain situation, one of the three ways for explaining how to make profit is more useful. If you were thinking of making a large increase in fixed operating expenses, for example, you should pay attention to the effect on your breakeven point, so answer #2 is most useful in this situation. If you were thinking of changing sales prices, answer #1, which focuses on unit margin, is most relevant. Likewise, if you’re dealing with changes in product cost or variable operating expenses that affect unit margin, answer #1 is the most helpful because it focuses on the “spread,” or margin, between sales price and variable expenses.

The Profit Report Framework Is Fine, But . . .

The profit report framework shown in Table 5.3 is a terrific tool for understanding and analyzing profit performance. It's an excellent platform for planning how to improve profit next year (see Chapter 6). The framework can be applied to any business that sells products. With a few modifications, it can also be used by service businesses that don't sell products. But, frankly, it's not the most popular kid on the block; many managers don't use this tool. Despite its utility, business managers may have problems in using this profit report framework.

A major obstacle is that the managers of a business may not be able to get information about variable and fixed operating costs out of their accounting system. Supplying this information is one more demand on the system. A business's accounting system must accumulate a large amount of information needed for preparing its financial statements and its income tax and many other tax returns. Variable and fixed information is not needed for these purposes. Also, a company's accounting system has to provide a wide range of information for its day-to-day operations, including the vital functions of payroll, purchasing, billing and collections, cash disbursements, and property records. Variable and fixed expense information is not needed for these functions either.

The managers of a business could insist that the accounting department compile variable and fixed operating expense information. The computer accounting programs used by most busi-

nesses today make much more feasible sorting between variable and fixed expenses. But, clearly this is not done in many businesses. All is not lost, however. Based on his or her experience and close contacts with the profit factors of the business, a manager can make educated estimates for the variable and fixed operating expenses for a particular product or product line or other profit center. You don't really have to use actual accounting data; you can substitute experience-based estimates for the variables.

Managers may have another reason for not using a profit report framework such as the one shown in Table 5.3. They may think that the framework is too cumbersome and would be too time-consuming, especially if they have a large number of different profit sources to manage. Well, this may be true. The one thing a manager never has enough of is time. To make it more time efficient, the framework shown in Table 5.3 can be telescoped into a more compact profit model.

Instead of using the full-blown profit report framework presented in Table 5.3, a manager could use a "mini" profit model. Table 5.4 presents a profit model for the product (for fiscal year 2005). This profit model is a repeat of answer #1 given earlier for explaining how the business made \$1,500,000 profit from this product.

Basically the profit model is a shorthand method for thinking about and analyzing profit. For instance, suppose you are thinking of cutting sales price by \$5 next year in order to boost sales

TABLE 5.4—PROFIT MODEL FOR PRODUCT

Unit Sales Volume	100,000
Unit Margin	<u>× \$25.00</u>
Total Margin	\$2,500,000
Fixed Expenses	<u>-1,000,000</u>
Operating Earnings	\$1,500,000

volume 10%. Would this be a smart move? Dropping sales price \$5 would reduce unit margin \$5, assuming product cost and other variable expenses hold constant. So next year you would earn only \$2,200,000 total margin on the product: \$20 unit margin × 110,000 units sold = \$2,200,000 total margin. Bad idea!

Capsule Summary

Managers make decisions toward achieving the profit goals of the business. Managers need feedback on the results of their decisions, of course. The periodic profit reports prepared by the business's accounting department provide the primary feedback to managers. This chapter first introduces and explains the format and the content of a typical profit report. It is noted that internal profit reports to managers contain more information about the operating expenses of the business than do external profit reports to outside shareowners.

The thesis of the chapter is that the framework of conventional profit reports to managers who are in charge of profit centers is not good enough. They need a more informa-

tive profit report for analyzing profit behavior. The chapter presents a framework for management profit reports that focuses on the main factors that drive profit—margin, sales volume, and fixed costs. This spreadsheet-based framework is very useful for analyzing change in profit from one period to the next and variances of actual from budget. Furthermore, it's an excellent platform for planning out the details for improving profit.

The chapter closes with a discussion of a compact profit model that would fit on the back of an envelope. It's a very handy tool for doing quick calculations for the impact on profit caused by changes in unit margin and sales volume.

SAFEGUARDING AND IMPROVING PROFIT: THE PROFIT POWER OF PRICE VERSUS VOLUME

“After victory, tighten the straps on your helmet.”
—Interpretation of an ancient Samurai dictum

Making a profit is hard enough. Doing it again the following year, and, what's more, improving profit is the task facing managers. Nothing can be taken for granted. Every profit factor is subject to change. Managers must keep alert for changes that hurt profit performance. A relatively minor slippage in just one factor can have a devastating impact on the bottom line. Conversely, even a modest improvement in just one factor can cause a significant boost in profit. Getting to a good bottom line is typically a game of inches, not yards.

As the chapter title indicates, there are two themes to this chapter. (1) A good offense requires a good defense. The first job of managers is to safeguard the level of profit they have worked so hard to achieve. Profit can easily slip through their fingers unless they control the key factors that determine profit performance. (2) There is an optimistic side of the same coin: Profit can be improved by making positive changes in the factors that drive profit.

The Business Example

This chapter focuses on a business that is making a satisfactory profit but wants to do better—and certainly does not want to go in reverse. The business is a privately owned corporation; about 20 individuals own its stock shares. There is no trading in the stock shares. Over the years, shares have changed hands occasionally when a stockholder died, when shares were gifted to a son or a daughter, and when shares were transferred to an ex-spouse in a divorce settlement. The business was started several years ago and has had a steady though not spectacular rise in sales. The business has garnered a good reputation with its customers for high-quality products and services.

Key Policies of the Business

The stockholders elect the corporation's board of directors, of course. The chief executive officer, following very clear directions from the board, does *not* plan to grow the business by acquiring other businesses or by entering new markets or opening new locations. Growing the business in those ways would require substantial amounts of additional capital, beyond the annual cash flow provided from profit. The business depends on cash flow from profit for two critical purposes: (1) to replace and modernize its property, plant, and equipment; and (2) to pay cash dividends to stockholders.

The stockholders have made it abundantly clear that they want a healthy cash dividend return on their investment every

year. As just mentioned, they are not interested in growing the business through aggressive acquisitions of other businesses or by entering new markets or locations. They think the business should stick to its knitting and continue to do what it knows best. Some might view this strategy as almost “un-American.” You often hear the mantra that growth is the main thing a business should do to get ahead in the world. But the owners of many privately owned businesses see the risks and disadvantages of embarking on an aggressive growth strategy. They don't want to go down that road. Furthermore, they may not be able to raise the capital needed to follow a growth strategy.

Financial Profile of the Business

Table 6.1 presents the financial profile of this business. Its most recent three financial statements—balance sheet, income statement, and statement of cash flows—are reduced to as few lines as possible. This financial silhouette of the business avoids the abundance of details reported in its financial statements. The figures from the company's financial statements are rounded off to the nearest hundred thousand in Table 6.1. One purpose of preparing the profile is to keep the three financial sides of the business in view of one another. You must judge a business's earnings relative to the sources and the amounts of capital employed to make that profit. And you

TABLE 6.1—FINANCIAL PROFILE OF BUSINESS

Condensed from Company's Year-End Balance Sheet	
Operating Assets (cash, receivables, inventory, and fixed assets)	\$17,000,000
Operating Liabilities (accounts payable and unpaid expenses)	<u>(4,000,000)</u>
Capital Raised by Business	<u>\$13,000,000</u>
Short- and Long-Term Debt	\$ 5,000,000
Owners' Equity (paid-in capital plus retained earnings)	\$ 8,000,000
Condensed from Company's Annual Income Statement	
Sales Revenue	\$26,000,000
Cost of Goods Sold	(16,000,000)
Operating Expenses	<u>(7,900,000)</u>
Operating Earnings (EBIT)	\$ 2,100,000
Interest on Debt	\$ 300,000
Corporate Income Tax	<u>600,000</u>
Net Income for Owners	<u>1,200,000</u>
Condensed from Company's Annual Statement of Cash Flows	
Cash Flow from Net Income	\$ 1,900,000
Fixed Asset Outlays	(1,000,000)
Dividends to Stockholders	<u>(800,000)</u>
Cash Balance Increase	\$ 100,000
Starting Balance	<u>3,400,000</u>
Ending Balance	<u>\$ 3,500,000</u>

should look through to the cash flow generated by that profit and what was done with the cash.

As a stockholder, you should take particular notice of the following points:

- ♦ The company's \$300,000 interest expense is compared with its \$5,000,000 debt, which is a 6.0% interest rate. These days, this interest rate is reasonable.
- ♦ The company's \$1,200,000 bottom-line profit (net income) is compared with its \$8,000,000 stockholders' equity, which reveals that it earned 15.0% annual return on the book (recorded) value of stockholders' equity.
- ♦ The short-term and long-term debt sources supplied $\frac{5}{13}$ of the total capital used by the business, or \$5,000,000 of its total \$13,000,000 capital. However, the debtholders "share" is not $\frac{5}{13}$ of the company's \$2,100,000 operating earnings for the year, which would be \$808,000 (rounded to the nearest thousand). They are paid \$300,000 interest on their capital, and no more. The \$508,000 excess over interest enhances the pretax net income for shareowners, which is referred to as a *financial leverage* gain. (If the company had failed to earn at least \$300,000 operating earnings, it still would have had to pay \$300,000 interest.)
- ♦ The business distributed \$800,000 cash dividends during the year, which is a two-thirds dividend payout ratio from its \$1,200,000 net income.
- ♦ The \$800,000 annual dividend amount equals 10.0% return on the \$8,000,000 book value of owners' equity.

- ♦ Deducting the \$1,000,000 outlays for capital expenditures, the business had \$900,000 remaining cash flow from profit. It used \$100,000 of this cash flow to build up its cash balance instead of paying it all out for cash dividends.
- ♦ The company's \$3,500,000 cash balance is rather sizable compared with its \$26,000,000 annual sales revenue, or more than 13%. Many businesses get by on a much smaller working cash ratio. Whether the business is making the best use of its cash is an open question—although holding a relatively large cash balance certainly is conservative.

Table 6.1 is a top-level overview, or an executive-summary financial picture of the business, which almost fits on the back of an envelope. In order to make an adequate after-tax and after-interest profit (net income), a business has to make adequate operating earnings from its sales. Cost of goods sold and operating expenses cannot consume all its sales revenue, of course. In the example, the business squeezed \$2,100,000 operating earnings out of its sales revenue, which was the wellspring for paying interest on its debt, paying income tax, and providing net income for its stockholders.

One Thing's for Certain: Profit Will Be Different Next Year

Let's look ahead to next year. Will the company's profit be the same? You know it won't. For sure, profit will be higher or lower than the year just ended. Or, you can look back and say for certain that profit for the year just ended was higher or lower than the previous year. Profit is never the same amount from year to year. The factors that drive profit are always in a state of flux; few factors remain constant very long. Now, we find this intriguing, don't you? Why does profit change? Shouldn't business managers have a good analytical grip on why profit increases or decreases?

One reason that the amount of the annual profit recorded for a business can change year to year is the "noise" in the accounting information system. For example, many businesses deliberately massage their accounting numbers in order to nudge recorded profit for the year up or down so that recorded profit meets certain targets or goals for the year. This is different than "cooking the books," which refers to accounting fraud (such as

recording sales revenue when in fact sales have not been made, or not recording expenses and losses that have in fact occurred). Also, an accounting method used by a business—such as an accelerated depreciation method—automatically decreases the expense amount year to year. Then, there's a wide range of odds and ends that cause changes in year-to-year profit. And, one-time events cause spikes in profit.

It's hard to calibrate how much of the profit difference from one year to the next is due to noise and how much is due to changes in the primary factors that drive profit. We would hazard a guess that the noise element can easily cause a 10% or higher year-to-year profit fluctuation for a typical business. If management accounting manipulation is done with a heavy hand, the recorded profit for the year can be affected by more than 10%. In any case, we'll have to put aside the noise factor and move on to changes in the primary factors that drive profit.

You Know How Your Expenses Behave, Don't You?

Unfortunately many business managers would have to answer this question with a resounding “No!” Chapter 5 laid the foundation for how operating expenses should be reported in internal profit-and-loss (P&L) reports. In brief, variable expenses should be separated from fixed expenses. Table 6.2 presents the redesigned P&L report for the business, which classifies operating expenses according to how they behave relative to sales volume and sales revenue.

In Table 6.2, three basic types of variable expenses are shown, which are deducted from sales revenue to get down to the all-important measure of *margin*:

1. *Cost of goods sold expense* is, on the surface, relatively straightforward and simple, being the cost of products sold by the business whose sales revenue is reported on the first line of the P&L report. However, a business must make a choice between different accounting methods for recording this expense. The FIFO (first-in, first-out) method results in a lower expense for the period than the alternative LIFO (last-in, first-out) method when product costs are drifting upward. The loss from write-downs recorded during the period for *inventory shrinkage* (due to customer shoplifting, employee theft and fraud, vendor fraud, mistakes, etc.) may be included in this expense. Furthermore, the expense may include a write-down under the lower of cost or market accounting rule. In short, the cost of goods sold expense may not be as clean as it looks. Roughly speaking, these

TABLE 6.2—P&L REPORT SHOWING HOW EXPENSES BEHAVE

Sales Revenue	\$26,000,000
Cost of Goods Sold	(16,000,000)
Volume-Driven Expenses	(1,400,000)
Revenue-Driven Expenses	<u>(2,600,000)</u>
Margin	\$ 6,000,000
Fixed Expenses (20% slack estimate)	<u>(3,900,000)</u>
Operating Earnings (EBIT)	\$ 2,100,000
Interest on Debt	(300,000)
Corporate Income Tax	<u>(600,000)</u>
Net Income for Owners	<u>\$ 1,200,000</u>

additional costs move in concert with the cost of products sold during the period, assuming the business uses consistent accounting methods and practices period to period. Of course, any unusual inventory write-down during the period should be reported separately to managers.

2. *Volume-driven expenses* are those costs that, in addition to cost of goods sold, are driven primarily by the number of units of product sold. The main examples are packaging, handling, and transportation costs. These costs may be immaterial for some

businesses and not worth putting in a separate class. In such a case, these costs may be tacked on to cost of goods sold expense, which is also a volume-driven expense. But, in this example, the volume-driven expenses add up to \$1,400,000 and are put into a separate class.

3. Revenue-driven expenses are those costs driven primarily by the dollar amount of sales made by the business. These expenses include sales commissions based on the dollar amount of

sales, credit card fees based on the dollar amount of sales, property rentals that depend on the total dollar amount of sales, franchise fees that are calculated on the total dollar amount of sales, and bad debts (uncollectible receivables from sales on credit) that have to be written off. It's possible that these expenses are negligible and, for some businesses, not worth the effort to distinguish from volume-driven expenses. But, be careful: Many businesses have significant revenue-driven expenses.

Fixed Expenses, or Why Margin Doesn't Equal Operating Profit

Fixed expenses are those costs that for most practical purposes are inflexible and are locked in for the year. These costs of operating a business do not vary with sales volume or the dollar amount of sales during the year. One important component of fixed costs is the *depreciation* recorded for the year. Of the \$3,900,000 shown in Table 6.2 for this example, the business recorded \$800,000 depreciation on its fixed assets (building, machines, equipment, computers, trucks, autos, etc.) for the year. Recording depreciation expense does not decrease cash; rather, the book values of fixed assets are written down to recognize the use of the resources. The assets have moved one year closer to their eventual replacement.

In contrast, the company's other fixed costs were cash outlays during the year, although the cash payout usually is a little more or less than the amount recorded as expense in the period (see Chapter 2). Examples of fixed costs include real estate taxes, most insurance premiums, employees paid fixed salaries, repair and maintenance expenses, back office expenses (accounting, recordkeeping, and filing many different reports), and legal expenses.

One Key Point: Generally speaking, fixed expenses provide the *capacity* to make sales and to carry on the operations of the business. The business should make an estimate of the percent of its capacity now being used for its sales and operating activities. In this example, the business estimates that it used 80% of its capacity during the year. Therefore, notice in Table 6.2 that 20% slack

is reported for its fixed costs, which is the untapped or idle capacity of the business.

Deducting fixed expenses from margin gives *operating earnings (profit)*, which is the amount of earnings (profit) before interest and income tax (EBIT) expenses. As you see in Tables 6.1 and 6.2, operating earnings is “divided” three ways—some to the debt holders of the business, some to the government, and some for the stockholders.

Most businesses use interest-bearing debt for part of their total capital requirements. In the example, the business has borrowed \$5,000,000 from short-term and long-term debt sources. Interest expense is the first “take out” from EBIT. As you know, interest is a fixed, contractual payment for the use of debt capital; It's a fixed expense for the period given a certain level of debt. It is deductible for determining taxable income, just as all operating expenses are deductible. (Let's not go into nitpicking details here, such as the deductibility limits on entertainment expenses and so on.) So, roughly speaking, the business's taxable income is its \$2,100,000 operating profit minus its \$300,000 interest, which comes out to \$1,800,000.

In the example, the business is organized legally as a regular, or “C,” corporation. So it pays federal income tax based on its taxable income for the year. (Chapter 8 explains pass-through, or non-tax-paying business entities.) As you see in Table 6.2 the business's income tax expense for the year was \$600,000. Therefore, its after-tax net income for stockholders is \$1,200,000.

From this after-tax net income, the business distributed \$800,000 cash dividends to its stockholders, which by the way is taxable in their hands. The federal government gets two bites out of the apple: the first at the corporate level (\$600,000) and the second at the individual stockholders' level. Suppose all the stockholders

paid the 15% dividend tax rate. In the aggregate, the stockholders would pay 15% of their \$800,000 total cash dividends, or \$120,000. Please keep in mind that this second layer of individual income taxes on cash dividends is not reported or referred to in the business's financial report.

The Widely Different Results from Changes in Profit Factors

The quote at the start of the chapter is meant to call attention to the wise dictum that managers should avoid hubris in having made a profit and should never let their guard down. Making profit most likely will attract the attention of present and would-be competitors. True, privately owned businesses don't send their financial reports to their competitors. But competitors keep a close eye on one another, and they generally have a fairly good appraisal of how others are doing in the profit department. In any case, your profit performance is vulnerable to many negative changes that can pull the rug out from under your profit success formula. Of course, if you can make positive changes in these factors, you can improve profit. But not all changes in these factors are created equal regarding their impact on profit performance.

For planning and decision-making purposes, we strongly believe that business managers need a profit-analysis tool at their fingertips—one that is handy, easy to use, and as useful as the old slide rule that engineers used to carry everywhere (and some probably still do). We can't offer you a profit "slide rule," but we can offer the brief model that you see in Table 6.2. You can put this in your computer spreadsheet in no time flat. Or you could write it out on a scratch pad quickly. Basically, Table 6.2 is the *profit formula* for the business. The trick is to change one (or more) of the factors and calculate the profit impact of the change.

One very helpful technique is what we call the "10% solu-

tion." Change a factor by 10% and see what happens to profit. This gives you amazing insight into how the profit formula works and why some changes are much more important than others. So suppose the business had sold a 10% lower or a 10% higher quantity of products than it did (without any change in its sales mix, or the proportion of each product in total sales). Sales revenue, cost of goods sold, volume-driven expenses, and revenue-driven expenses would have been 10% lower or higher. Table 6.3 shows the results of these 10% sales volume changes. Notice that Table 6.3 stops at the operating earnings (EBIT) line of profit.

TABLE 6.3—10% CHANGES IN SALES VOLUME

	Changes		Actual Volume
	Lower Volume	Higher Volume	
Sales Revenue	\$(2,600,000)	\$2,600,000	\$26,000,000
Cost of Goods Sold	(1,600,000)	1,600,000	16,000,000
Volume-Driven Expenses	(140,000)	140,000	1,400,000
Revenue-Driven Expenses	<u>(260,000)</u>	<u>260,000</u>	<u>2,600,000</u>
Margin	\$ (600,000)	\$ 600,000	\$ 6,000,000
Fixed Expenses (20% slack estimate)	<u>0</u>	<u>0</u>	<u>(3,900,000)</u>
Operating Earnings (EBIT)	\$ (600,000)	\$ 600,000	\$ 2,100,000

When sales volume changes by 10%, margin moves 10% the same direction. The business has, it estimates, about 20% slack, or unused capacity (see Table 6.3). So fixed expenses should not increase with a 10% jump in sales volume. And due to their sticky nature, fixed expenses would have been about the same if sales volume had been 10% less.

The unchanging nature of fixed expenses (over the short run) causes the percent change in operating earnings (margin less fixed expenses) to be considerably larger than the percent in change in margin. Margin would be 10% lower or higher, but operating earnings would be 29% lower or higher: $\$600,000 \text{ change} \div \$2,100,000 \text{ operating earnings} = 29\%$. This much larger percent fluctuation in operating earnings because of fixed expenses is referred to as an *operating leverage* effect.

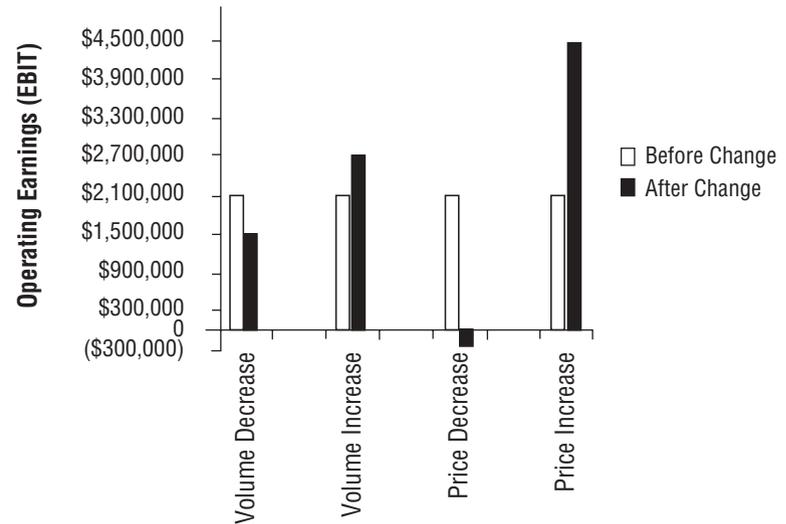
Suppose that the business had sold all its products at 10% lower or higher sales prices. Sales volume is the same in this scenario. Table 6.4 shows the profit changes at the lower and higher sales prices. Again, fixed expenses are held the same.

TABLE 6.4—10% CHANGES IN SALES PRICES

	Changes		Actual Prices
	Lower Prices	Higher Prices	
Sales Revenue	\$(2,600,000)	\$2,600,000	\$26,000,000
Cost of Goods Sold	0	0	16,000,000
Volume-Driven Expenses	0	0	1,400,000
Revenue-Driven Expenses	(260,000)	260,000	2,600,000
Margin	\$(2,340,000)	\$2,340,000	\$ 6,000,000
Fixed Expenses (20% slack estimate)	0	0	(3,900,000)
Operating Earnings (EBIT)	\$(2,340,000)	\$2,340,000	\$ 2,100,000

The lower sales prices would have more than wiped out all its operating earnings and put the business in the red for the year. Clearly, the business could not afford a 10% price cut across the board on all its products. Even if it were a charitable organization, it could not sell at prices that cause a loss. The key point, as you probably already noticed, is that the \$2,340,000 drop in sales revenue (which is net of the offsetting decrease in revenue-driven expenses) is more than its operating earnings.

FIGURE 6.1—COMPARISON OF EFFECTS ON OPERATING EARNINGS (EBIT) CAUSED BY 10% CHANGES IN SALES VOLUME VERSUS SALES PRICES



At 10% lower sales prices, all the company's net income would have been wiped out—the business would have reported a loss and could not have paid any cash dividends to stockholders.

Looking on the positive side, a 10% higher level of sales prices would have more than doubled operating earnings. Of course, selling all products at 10% higher sales prices would have been a

challenge, to say the least. In any case, the effect on profit caused by sales price changes, compared with sales volume changes, is a much greater swing. Figure 6.1 shows the two scenarios side by side. The moral of the story so far is that a sales price change of a certain percent has a much larger impact than a sales volume change of the same percent.

Sensitivity of Margin to Sales Price Changes

The following example illustrates why sales price changes cause a “boom or bust” effect on profit. Suppose that the business sells a particular product for \$2,600. This product is selected because its sales price equals exactly 0.0001 (one ten-thousandth) of the company’s \$26,000,000 total sales revenue (see Table 6.2). Suppose further that the variable expenses of this product are the perfect average of the expenses of all the products the business sells. Following down the variable expenses in Table 6.2, this product’s variable costs per unit are: \$1,600, cost of goods sold; \$140, volume-driven expenses; and \$260, revenue-driven expenses. Subtracting these variable expenses from sales price yields \$600, margin per unit for the product. (You can easily visualize this by knocking off the last four zeros from the amounts in Table 6.2.)

Now, suppose the product’s sales price had been 10% different. The only variable expense that would have been different is the revenue-driven expense, which in the example equals 10% of

sales price. The other two variable expenses would have been the same. If the sales price had been \$260 (10% of \$2,600) lower or higher, then the revenue-driven expense would have been \$26 lower or higher. The margin per unit for the product, therefore, would have been \$234 lower or higher.

The key point here is that a \$234 difference in unit margin caused by the 10% shift in sales price would have depressed or raised margin by a much larger percent:

$$\text{\$234 Change in Unit Margin} \div \text{\$600 Unit Margin} = 39\%$$

There’s almost a four-times impact on unit margin! In the example, a 10% change in sales price causes a 39% change in unit margin. In short, profit is much more sensitive to changes in sales prices than to changes in sales volume. By the way, a \$234 change in variable costs of the product per unit with no change in the sales price would have the same impact on unit margin, of course.

Raising the Profit Bar for Next Year

Suppose the goal of the business next year is to increase its bottom-line profit 10%. It needs to boost net income \$120,000 (or 10% of the \$1,200,000 net income for the year just ended). The business keeps only two-thirds of its taxable income (profit after interest) because its income tax equals one-third of its taxable income. So it needs to increase its profit after interest by \$180,000. (One-third, or \$60,000, of the increase goes to the government; and the company keeps \$120,000.) To keep things simple, assume that interest expense will be the same next year and that fixed operating expenses will also be the same. In fact, let's assume that the per-unit costs of all products sold next year will be the same, that the volume-driven per-unit costs will be the same, and that the percent of revenue-driven expenses to sales revenue will be the same.

From the profit model shown in Table 6.2, we can quickly determine how much sales volume would have to increase or how much sales prices would have to change to achieve its profit goal (or a combination of changes in both sales volume and prices

could be used). For instance, if the entire load were put on sales volume (assuming sales prices can't be raised next year), the business would have to boost sales volume 3%. A 3% higher sales volume would increase margin by \$180,000 (\$6,000,000 margin for the year just ended \times 3% higher sales volume = \$180,000 increase). Income tax would take one-third of this, leaving a \$120,000 increase in net income.

Suppose the business is not able to increase sales volume and will have to increase sales prices to jack up net income next year. The company would have to nudge up sales revenue \$200,000. Revenue-driven expenses would increase \$20,000, in proportion with the sales revenue increase. Therefore, margin would increase \$180,000; income tax would increase \$60,000 (or one-third); and net income would increase \$120,000. Notice that average sale prices would have to be increased less than 1% (0.77 of 1%, to be precise), or \$200,000 additional sales revenue on a base of \$26,000,000.

Capsule Summary

A typical business example is used to explore how profit behaves. Its financial statements are reduced to a financial profile of the business, which is very useful to take the measure of its overall financial performance. One thing for certain is that the annual profit of any business is never the same from year to year. Even if all the factors that drive profit keep constant from one year to the next (and we know that they don't, of course), there is a certain amount of "noise" in a business's accounting information system. Managers control some of this noise by massaging their accounting numbers (not that you would do anything like that, of course).

This chapter focuses on changes in the primary factors that drive profit and on the effects of changes in these factors. For this purpose, variable expenses have to be separated from fixed expenses. This separation allows the calculation of margin, which equals sales revenue minus all variable expenses. Margin is an extraordinarily important profit-performance benchmark. A business has to earn enough total margin to cover its fixed costs for the year. The excess of margin over fixed costs equals operating earnings, which is divided three ways—to interest on debt, to in-

come tax (unless the business is a pass-through tax entity), and to residual net income for the shareowners of the business.

Changes in sales volume and sales prices—the big two factors that drive profit—are analyzed and compared in effect. Margin moves in proportion (more or less) with changes in sales volume. But a business's fixed costs cause its operating earnings and net income to fluctuate much more than the change in its margin. This wider swing in operating profit and net income is called the operating leverage effect on profit.

Equal percent changes in sales prices, compared with changes in sales volume, cause a much heavier impact on margin, operating earnings, and net income. If a business decreased its sales prices, say, by 10% or even 5%, all its profit could be wiped out. Even a small increase in sales prices could push up net income by half or more. Put another way, to achieve a 10% growth in net income, a business could increase its sales volume or its sales prices. The example in the chapter demonstrates that it would have to increase sales volume 3%. Increasing its sales prices by less than 1% would yield the same result.

GROWING PAINS: FINDING ENOUGH CASH FOR GROWTH

*“No profit grows where is no pleasure ta’en;
In brief, sir, study what you most affect.”*

—William Shakespeare, *The Taming of the Shrew*

Consider three basic sales revenue trend lines for a business: decline, steady state, and growth. (Space doesn't permit discussing cyclical businesses, which have sales trend lines that look like a roller-coaster ride.) Each trend presents a very different kettle of fish regarding cash flow and capital needs. This chapter concentrates mainly on the growth scenario. The major concern is that cash flow from operating activities may not—and, in fact, usually does not—provide all the money needed for growth.

Chapter 2 explains that the amounts of revenue and expenses that are recorded on the accrual basis of accounting to measure a business's profit for the period are different than the amounts of cash flows from revenue and for expenses during the same period. Thus, the bottom-line profit (net income) of a business differs from the cash flow from its profit-making (operating activities) for the period. The following section offers a brief review of cash flow from operating activities, paying particular attention to the cash-flow effect of depreciation expense.

Reviewing Cash Flow from Operating Activities

Accountants divide the cash flows of a business into three types: (1) cash flows from profit-making operations (revenue and expenses, as well as gains and losses that affect the bottom line), which are called *operating activities*; (2) cash flows from investments in long-term and nonoperating assets and from liquidations of these investments, which are called *investing activities*; and, (3) cash flows from raising capital from debt and equity sources, returning capital to these sources, and paying cash dividends to owners, which are called *financing activities*. A business prepares a financial statement called the “statement of cash flows” that summarizes these three types of cash flows for the period. This chapter focuses on the first type—cash flows from operating activities.

Chapter 2 explained that cash-basis accounting is woefully inadequate, except for small businesses that do not extend credit to customers, carry no inventory of products for sale, do not buy things on credit, and do not own long-term operating assets, such as machinery, equipment, and buildings. Virtually all businesses of any size and sophistication use double-entry, accrual-basis accounting. Many different assets and liabilities are recorded in order to keep track of the financial affairs of the business, to recognize economic reality, and to measure the profit or loss for a period. Accrual-basis accounting complicates the cash flow trail, however.

Hopefully, Chapter 2 untangled the cash flow trail and, in particular, marked a clear path to *cash flow from operating activities*.

This refers to the net increase (or decrease) in cash resulting from the profit-making operations (sales and expenses) of a business over a period of time. *Profit* is the net result of the sales and expense operations of a business, so we often use the term *cash flow from profit*. In our view, “profit” has more bite and gut feeling than “operating activities.” The term *operating activities* does not immediately conjure up the vision of sales and expenses, but the term *profit* does. Keep in mind that the officially sanctioned term *cash flow from operating activities* is used in financial statements. Assuming you don’t mind, we’ll use both terms, if for no other reason than for some variety.

Testing Your Understanding of Cash Flow

We’re confident that since you have read Chapter 2, you have a good grasp on cash flow from profit. Allow us to put a little test to you here, just to be sure. Refer to Table 7.1, which presents the balance sheet of a business at the end of its most recent fiscal year. The changes in each account during the year are presented. You’ll notice that only three accounts changed during the year. No other asset or liability increased or decreased during the year. This is not typical, of course, but it serves the purpose of highlighting the essential aspects of cash flow from operating activities.

The business did not pay any dividends to its stockholders during the year, and there were no disposals or acquisitions of

TABLE 7.1—ENDING BALANCE SHEET, WITH CHANGES FROM START OF YEAR

	Ending Balances	Increase (Decrease) during Year
Cash	\$ 785,000	\$ 350,000
Accounts Receivable	580,000	0
Inventory	725,000	0
Prepaid Expenses	48,000	0
Fixed Assets, Net of Accumulated Depreciation	\$1,450,000	\$(150,000)
Total Assets	<u>\$3,588,000</u>	
Accounts Payable	\$ 325,000	\$ 0
Accrued Expenses Payable	385,000	0
Income Tax Payable	3,000	0
Short-Term Notes Payable	500,000	0
Long-Term Notes Payable	750,000	0
Stockholders' Paid in Capital	425,000	0
Retained Earnings	\$1,200,000	\$ 200,000
Total Liabilities and Owners' Equity	<u>\$3,588,000</u>	

fixed assets during the year. From this information and the information in Table 7.1, we address two main questions in the following discussion:

Question #1: What is the amount of cash flow from operating activities for the year?

Question #2: What are the components of this cash flow?

The Two Components of Cash Flow from Operating Activities

A good place to start looking at cash flow from operating activities is the net income earned by the business for the year. In other words, what was its bottom-line profit? Net income is recorded as an increase in the owners' equity account, called *retained earnings*. The business did not distribute any dividends during the year, which would have caused a decrease in retained earnings; so the \$200,000 increase in retained earnings is the amount of net income for the year.

Fixed assets (property, plant, and equipment) are the long-term assets used by a business to carry on its profit-making operations. The business did not acquire or dispose of any fixed assets during the year. Yet the balance of this asset decreased \$150,000 during the year (see Table 7.1). Fixed assets wear out and become obsolete over time. Therefore, the costs of fixed assets are allocated to expense over their useful lives. Each year, a certain fraction of the total cost of a fixed asset is recorded as a decrease in the asset's book value, and this amount is recorded as depreciation expense in the period.

Depreciation expense is not a cash outlay in the year it is recorded. The business already paid for the fixed assets being de-

preciated in the year they were acquired (which may be 5, 10, or 20 years ago). In short, recording depreciation decreases net income but does not decrease cash. As you know, net income equals sales revenue minus *all* expenses, including depreciation. Because depreciation is not a cash outlay, the amount of this expense is added to net income to measure cash flow from operating activities.

The \$150,000 depreciation plus the \$200,000 net income

equals \$350,000. Cash flow from operating activities was \$350,000 for the year. As you can see in Table 7.1, cash increased by \$350,000. Net income provided \$200,000 of this cash increase, and depreciation provided \$150,000. These are the two components of the cash flow from operating activities. The company had no other sources of cash, such as an increase in its short- or long-term debt or an increase in its “stockholders’ paid in capital” account.

Cash Cow Nature of a Declining Business

It is difficult to predict how long a declining business can stay in business if its sales continue in a free fall year after year. It may or may not be able to eek out a profit from its steadily falling sales. Almost surely its profit trend line will be as steep as its sales trend line. If it is not able to cut expenses fast enough to stay ahead of its declining sales, it will slip into the loss column. However, from the cash flow point of view, things are not all bad.

Depreciation is a positive cash flow factor, even for a declining business. Furthermore, its accounts receivable and inventory should decline with its declining sales revenue. Its cash flow from operating activities would be positive, unless it suffers a sizeable loss that causes a large drain of cash to pay for the loss (payments for expenses exceed cash receipts from sales). And

there's another factor that helps the cash flow of a declining business. A declining business does not need to replace many of its long-lived operating assets, perhaps none at all. In other words, its capital expenditures (investments in new fixed assets) should be minimal or zero. In fact, a declining business may sell off some of its fixed assets to downsize its capacity. This asset attrition generates cash (just as it would if you sold off personal assets you no longer needed).

In summary, a declining business often has more cash flow than it needs. A declining business can become a cash cow. A declining business has to decide what to do with its surplus cash. Taking cash out of the business is no simple matter. (Chapter 12 discusses shutting down a business.)

Steady-State Businesses and Their Capital Expenditures

In stark contrast with a declining business, a steady-state business must replace its fixed assets to continue operating and to improve efficiency. Trucks, machines, tools, and equipment wear out or become obsolete and inefficient. Investments in new fixed assets, which are the long-term operating resources of the business, are called *capital expenditures*. A good deal of thought and planning should go into making capital expenditures decisions, not the least of which is how to pay for them.

First Place to Look for Cash

A business looks first to its cash flow from operating activities to finance (provide cash for) capital expenditures. Assuming it is operating profitably, a steady-state business should generate a fairly decent cash flow from operating activities. The amounts of its accounts receivable and inventory should remain fairly level year to year—although, inflation can drive up these two assets despite the fact that sales volume remains flat. These inflation-driven uplifts in receivables and inventory depress cash flow from profit (operating activities), but they usually don't cause too big a drag on cash. Moreover, the business's accounts payable and accrued expenses should float up because of inflation, and these increases offset the increases in the assets.

Roughly speaking, the amount of cash flow from profit for a steady-state business equals its net income plus depreciation. This is not a perfect measure of cash flow for every steady-state

business, to be sure; but it's not too far off the mark for most. In any one year for any one business, several things can happen to cause an up or down spike in cash flow from profit. But as a general rule, "net income plus depreciation" is close enough. It's good enough for government work, as they say.

Depreciation: The Unusual Expense That Increases Cash instead of Decreasing Cash

"Depreciation is a source of cash." This comment always makes us flinch a little. The bookkeeping entry of recording depreciation on fixed assets does *not* generate cash inflow. Sales revenue is the source of cash inflow for a business—not its expenses. The cash inflow from sales revenue reimburses a business for its expenses. Putting it another way, cash inflow from sales revenue recoups the costs of making sales and operating the business, as well as providing a little extra for profit, of course.

When you eat in a restaurant, part of the amount you pay for your meal pays the business for the use of its kitchen equipment, its tables and chairs, its building, and so on. When you take a taxi, part of your fare pays the cab owner for using a few miles of the auto. The depreciation cost component imbedded in sales revenue cash flow reimburses the business for the use of its fixed assets.

Depreciation cost recovery is based on the *historical* cost of the company's fixed assets. Over the useful life of a fixed asset, the business recovers the amount it paid for the asset. However, when the time comes to replace it with a new or better asset, the business most likely will have to spend more for the new asset

than it did for the asset being replaced. New delivery trucks cost more than the old ones, construction costs rise over time, and new machines and tools cost more than their predecessors. In short, historical-cost-based depreciation usually does not provide all the amount needed for capital expenditures.

Depreciation Shortfall for Current Capital Expenditures

Consider the situation shown in Table 7.2. The business's depreciation cash flow recovery for the year was \$750,000. In addition, the business earned \$600,000 net income. As just explained, changes in short-term operating assets and liabilities that affect cash flow are usually minimal for a steady-state business. For all practical purposes, it's acceptable to round off numbers and to assume that net income generated an equal amount of cash flow. Let's not quibble about this. As you see in Table 7.2, the business needed \$1,000,000 for its capital expenditures, which was \$250,000 more than its depreciation cash flow.

Suppose that the business decided to use \$250,000 of its \$600,000 cash flow from net income to close its capital expenditures gap. Of course, this decision takes \$250,000 out of the pool of cash available for cash dividends to stockholders. Presumably, the stockholders understand the wisdom of this course of action. Alternatively, the business could have increased its debt to fund the additional \$250,000 needed for capital expenditures. A steady-state business should think twice about ramping up its

TABLE 7.2—CASH FLOW SOURCES AVAILABLE FOR CAPITAL EXPENDITURES

Cash Flow Sources		Capital Expenditures	
Depreciation	\$750,000	\$1,000,000	Cost of New Fixed Assets
Net Income	\$600,000		

debt. In fact, lenders may be reluctant to loan more money to a business with a flat sales-trend line.

Summing up, a steady-state business often needs to use some of its cash flow from net income for capital expenditures, in addition to its cash flow from depreciation. This limits the amount of cash dividends for stockholders, unless the business increases its debt or lowers its working cash balance. Hopefully, its capital expenditures make the business more productive and improve its profit performance over time.

Funding Capital Expenditures in Growth Situations

We hardly need to tell you that the term *growth* is very popular. However, there's no universally accepted definition or standard for *growth*. Generally, the term refers to sales *volume* increases, although it might refer to a sales revenue uptrend driven by price increases instead of by volume increases. Just how large does the percent increase in sales revenue have to be in order to be called "growth" instead of a more modest descriptor (such as an "increase," or a "rise," or a "step-up" in sales)? Does a 5% increase in sales qualify as growth? Or does it take 10% or higher to classify the business as a growth company? We'll use an example in which the business is planning on a 50% sales revenue increase next year. This meets anyone's definition of a growth business.

A Growth Example

Table 7.3 presents the profit-and-loss (P&L) report of a business for the year just ended and its budget for the coming year. The P&L report shown in Table 7.3 is as brief as possible. Actual P&L reports to managers disclose many operating expenses below the gross margin line, but only two operating expenses are shown in Table 7.3. We need to know the depreciation expense for our present discussion. We don't need a breakdown of the company's "other operating expenses," so they are grouped into one lump sum.

The budget for next year is an ambitious plan, on both the

TABLE 7.3—P&L REPORT FOR YEAR JUST ENDED AND BUDGET FOR NEXT YEAR

	Report for Year Just Ended	Budget for Next Year	Increases	
Sales Revenue	\$50,000,000	\$75,000,000	\$25,000,000	50%
Cost of Goods Sold Expense	<u>30,000,000</u>	<u>42,500,000</u>	<u>12,500,000</u>	42
Gross Margin	\$20,000,000	\$32,500,000	\$12,500,000	63
Depreciation Expense	1,500,000	2,000,000	500,000	33
Other Operating Expenses	<u>14,500,000</u>	<u>21,000,000</u>	<u>6,500,000</u>	45
Operating Earnings	\$ 4,000,000	\$ 9,500,000	\$ 5,500,000	138
Interest Expense	<u>600,000</u>	<u>1,000,000</u>	<u>400,000</u>	67
Income before Income Tax	\$ 3,400,000	\$ 8,500,000	\$ 5,100,000	150
Income Tax	<u>1,200,000</u>	<u>3,000,000</u>	<u>1,800,000</u>	150
Net Income	\$ 2,200,000	\$ 5,500,000	\$ 3,300,000	150

sales and expenses sides of the ledger. Sales revenue is projected to go up 50%, whereas cost of goods sold is scheduled to rise only 42% and other operating expenses 45%. Evidently the business is planning on tighter controls over its product and operating costs. Only time will tell how correct these forecasts will be.

A business can budget one particular expense with a great deal of accuracy: The amount of depreciation expense is predetermined

for each year. Depreciation is calculated according to either a straight-line or an accelerated method for allocating the cost of a fixed asset over the years of its predicted useful life. Once a fixed asset is put in place, its depreciation for each future year is known. In Table 7.3, you can see that \$2,000,000 depreciation is budgeted for next year.

Forecasting Cash Flow from Operating Activities

The business will make major capital expenditures during the coming year to expand its production and distribution capacity, which will cost several million dollars. Clearly the business should forecast the amount of cash that will be provided from its profit-making (operating) activities. Will this internal source of cash be enough to finance its capital expenditures? Or will the business have to borrow more money from its debt sources? Perhaps the business might have to consider issuing additional shares of stock to raise money from its equity sources of capital.

Surely the chief executive officer (CEO) should not plunge ahead and simply hope that the business will have enough money to pay for its capital expenditures. Without a doubt, the CEO should insist on a forecast of cash flow from operating activities for next year. This source of cash is the foundation for planning the amount of additional external capital the business will need to secure during the coming year. (We won't go into a detailed and technical discussion of cash flow budgeting at this point.)

The accounting staff should carry out the actual budgeting process. Indeed, if they can't do this, the business might consider letting them go. One of the main responsibilities of the Controller or the chief accountant is to implement a good financial planning process, which certainly involves cash flow forecasting. Top-level managers don't have the time to get involved in the mechanics of the budgeting process, but they should have a basic

understanding of how cash flow from profit behaves in a rapid-growth situation.

A Balance Sheet for Forecasting Cash Flow

Chapter 3 explained that a business that sells products on credit to its customers makes substantial investments in *accounts receivable* (uncollected sales revenue) and in *inventory* (products awaiting sale). These are nontrivial amounts. Indeed, the total amount tied up in these two assets may even exceed the amount of the company's plant, property, and equipment (fixed assets). Chapter 3 also explained that a business buys inventory on credit and does not pay immediately for many of its expenses. A business has two main types of short-term, non-interest-bearing, operating liabilities: *accounts payable* and *accrued expenses payable*. These liabilities are not the result of borrowing money; rather they arise out of the operating activities of the business.

Table 7.4 presents the summarized balance sheet for this

TABLE 7.4—BALANCE SHEET AT CLOSE OF YEAR JUST ENDED

Assets		Liabilities and Owners' Equity	
Cash	\$ 5,000,000		
Short-Term Operating Assets (mainly accounts receivable and inventory held for sale)	12,000,000	Short-Term Operating Liabilities (mainly accounts payable and accrued expenses payable)	\$ 5,000,000
Long-Term Fixed Operating Assets (net of accumulated depreciation)	18,000,000	Short-Term and Long-Term Debt	15,000,000
		Stockholders' Equity (invested capital plus retained earnings)	15,000,000
Total Assets	<u>\$35,000,000</u>	Total Liabilities and Owners' Equity	<u>\$35,000,000</u>

business example. This is not a conventional balance sheet. Not enough details are provided to satisfy financial reporting standards. Table 7.4 is a condensed balance sheet for management analysis purposes, not for external reporting outside the business. You've probably noticed the broken line enclosing one group of assets and one group of liabilities. You never see things like this in a published financial report. But there's a reason for the quarantine around these two components of the balance sheet.

Cash is the pivotal asset of every business; it's in a category by itself. The business had \$5,000,000 cash at the end of the year (see Table 7.4). The company's short-term operating assets (mainly accounts receivable and inventory) are collapsed into one amount, which is \$12,000,000. On the other side of the balance sheet, the company's short-term operating liabilities (mainly accounts payable and accrued expenses payable) are collapsed into one amount, which is \$5,000,000.

Those Assets and Liabilities That Vary with Sales

Elsewhere in the book, we explain the very important point that certain expenses vary in tight formation with changes in sales. Quite logically, these are called *variable* expenses. Short-term operating assets vary with changes in sales, as do short-term operating liabilities. If sales revenue increases, say, by 10%, the amounts of a business's short-term operating assets and operating liabilities would increase by about 10%—perhaps not exactly 10% but reasonably close to 10%.

These are the *variable* assets and liabilities of a business, which behave like variable expenses do in response to changes in sales revenue. In this example, the business has \$12,000,000 invested in its short-term operating assets, and it owes \$5,000,000 of short-term operating liabilities (see Table 7.4). The net difference between the two is \$7,000,000. Changes in the excess of short-term

operating assets over short-term operating liabilities affect cash flow from operating activities, as we shall see.

In contrast with the variable short-term operating assets and liabilities, the fixed assets of a business and its debt levels do not move in synchronization with movements in sales—at least not over the short run. Managers have a great deal of discretion regarding the timing of capital expenditures. The present capacity provided by its fixed assets may be enough to allow for some growth without major new capital expenditures. It's difficult to generalize. Short-term and long-term borrowing policies differ from business to business. Some companies borrow heavily, and some go light on debt. In short, movements in fixed assets and debt levels generally run on a timeline that is different from that for movements in sales.

Suppose in this example, only hypothetically, that the business did not have any short-term operating assets. Its cash position would have been \$12,000,000 higher. It would not have used cash to invest in these assets. Suppose in this example, only hypothetically, that the business did not have any short-term operating liabilities. Its cash position would have been \$5,000,000 lower. It would have had to pay these liabilities. The net effect would have been a \$7,000,000 higher cash balance.

The point is that the business has \$7,000,000 of cash invested in its short-term operating assets net of its short-term operating liabilities. This net investment moves up and down with rises and declines in sales. When sales go up, the business has to pump more cash into this area, which reduces the pool of cash available for other uses.

Getting Down to the Calculation of Cash Flow

In the company's budget (Table 7.3), we see that sales revenue is projected to increase 50% next year. Therefore, its short-term

operating assets and its short-term operating liabilities should increase 50% next year (give or take a little). Doing the arithmetic, short-term operating assets will increase \$6,000,000, and short-term operating liabilities will increase \$2,500,000. The net effect of these increases on cash flow from operating activities will be a *negative* \$3,500,000. In other words, the business will use \$3,500,000 cash to increase its short-term operating assets after subtracting the increase in its short-term operating liabilities.

There's another way to calculate this cash flow effect. Compare the company's \$7,000,000 *net* cash investment in short-term operating assets less short-term operating liabilities with its annual sales revenue:

$$\begin{aligned} & \$7,000,000 \text{ Net Investment} \\ \div & \$50,000,000 \text{ Annual Sales Revenue} = 14\% \end{aligned}$$

This ratio tends to remain fairly stable, unless the business were to make drastic changes in the credit periods offered to its customers or in its inventory holding periods. Assume the business does not intend to make any changes in the normal credit terms offered to its customers and does not intend to change its inventory holding periods next year. Sales revenue is budgeted to increase \$25,000,000 next year (see Table 7.3). Assuming the ratio remains the same, the cash effect is figured as follows:

$$\begin{aligned} & 14\% \text{ Ratio} \times \$25,000,000 \text{ Sales Revenue Increase} \\ & = \$3,500,000 \text{ Drawdown on Cash} \end{aligned}$$

Given the large increase in sales revenue budgeted for next year, undoubtedly the business will increase its accounts receiv-

able and inventory. And its accounts payable and accrued expenses payable will float up at the higher levels of sales. In short, the \$25,000,000 sales revenue increase drives up its net investment in short-term operating assets less liabilities by about \$3,500,000. This amount is deducted from net income to determine cash flow from net income.

Summing up, the forecast amount of cash flow from operating activities next year for the business example is calculated as follows (see Table 7.5): The \$3,500,000 increase in the business's net investment in its short-term operating assets minus liabilities will take a big chunk out of cash available for other uses, in particular for capital expenditures. The business should expect to have only \$4,000,000 available cash from its operating activities next year. Suppose it is planning \$10,000,000 capital expenditures next year. Management has the unenviable task of figuring out where to get the other \$6,000,000.

TABLE 7.5—FORECAST CASH FLOW FROM OPERATING ACTIVITIES NEXT YEAR

Net Income Budgeted for Next Year	\$5,500,000
Increase in Short-Term Operating Assets less Short-Term Liabilities	<u>(3,500,000)</u>
Forecast Cash Flow from Net Income	\$2,000,000
Depreciation	<u>2,000,000</u>
Forecast Cash Flow from Operating Activities	<u>\$4,000,000</u>

Capsule Summary

The chapter begins with a review of cash flow from operating activities. This is the increase (or decrease) in a business's cash balance attributable to its profit-making operations and activities during the period. The two basic components of this cash flow are depreciation recovery (which is embedded in sales revenue cash inflow) and net income for the period.

Depreciation expense is not a cash outlay during the period. More to the point, cash inflow from making sales includes an amount for depreciation on a business's fixed assets. Each period, a business recoups (or recaptures) part of the money it paid for its fixed assets. Depreciation, even though it's an expense, is a source of cash. The other expenses of a business require cash outlays during (or shortly before or after) the period. Depreciation, in contrast, was "prepaid" when the business bought the fixed assets some time ago.

The cash flow from net income is more complicated to determine, compared with the straightforward cash flow effect of depreciation. For a steady-state business (flat sales year to year), total cash flow from operating activities should approximately equal its net income plus depreciation. This is not a perfect measure of cash flow from operating activities, but it's close enough for most practical purposes.

A declining business (decreasing sales year to year) has a cash flow advantage because two assets—accounts receivable and in-

ventory—should decrease with its declining sales. The business pulls money out of these two assets each year as their balances go down with the fall-off in sales revenue. Moreover, a declining business replaces few or perhaps none of its fixed assets. So, a declining business is a cash cow because it liquidates assets as sales decline.

The amount of cash flow depreciation recovery by a steady-state business usually is not enough to pay for its current capital expenditures. Depreciation is based on the historical costs of fixed assets. The costs of new fixed assets generally are higher than the historical costs of the old assets being replaced. So, a steady-state business usually has to use some of its cash flow from net income to cover the difference.

From the cash flow point of view, a growth business is just the opposite of a declining business. Instead of being a cash cow, a growing business is a cash pit, or sinkhole. An example demonstrates that the short-term operating assets and the short-term operating liabilities of a business vary with changes in its sales revenue. If sales revenue increases by 50%, these assets and liabilities generally increase by about 50%. Therefore, a rise in sales revenue causes a negative effect on cash flow from net income. The negative impact equals the increase in its short-term operating assets in excess of the increase in its short-term operating liabilities. This negative cash flow effect can suck up a large percent of

annual net income—and could even be larger than net income, causing a negative cash flow from net income for the year.

A growth business typically makes major capital expenditures for new fixed assets in order to expand its capacity and to open new locations. Depreciation and cash flow from net income sel-

dom provide all the money needed for these capital expenditures. The first step should be to forecast cash flow for the coming year from net income and from depreciation. Based on this estimate of available cash flow, the managers can start planning where to find the additional capital needed to grow the business.

TAXES AND MORE TAXES: IF IT CAN BE TAXED, IT IS TAXED

*“In this world nothing can be said to be certain,
except death and taxes.”*

—Benjamin Franklin, 1789

Ben Franklin certainly was right about what is certain, although business owners might expand on this famous comment as follows: “Nothing can be said to be certain, except death and taxes, *and I’m not sure which is worse.*” (We discuss the death of a business in Chapter 12.) The focus of this chapter is structured around the plethora of business taxes and governmentally mandated costs that burden every business today.

Prior to jumping into this subject too deeply, two general thoughts should be kept in mind. *First*, the volume and the complexity of taxation issues with which businesses must deal have exploded during the past 20 years. It has become almost impossible to stay in 100% compliance with every taxing and regulatory authority, including a variety of foreign, federal, state, and local governmental agencies, all of which are desperately searching for funds and new revenue sources to balance budgets, provide basic services, and support infrastructure needs. Hence, it is important to remember that a business is

both a taxpayer and a tax collector for foreign, federal, state, and local governments.

Second, a business owner or manager must understand what triggers tax compliance and obligation requirements and what the different types of business taxes are. Executing a business decision as simple as expanding the company’s geographical market by adding a new sales representative into a new state is much easier said than done. This decision can carry with it a requirement to comply with a series of new licensing, taxation, and regulatory-mandated costs, which may erode profits and consume scarce management time and resources. By establishing *nexus* (i.e., the presence of a business operation) in a new legal jurisdiction, a company’s tax compliance requirements often grow exponentially.

This chapter not only expands on the different types of business taxation and regulatory-mandated costs present, but also provides insight on how best to proactively manage this unavoidable element of operating a business.

Income Taxation: Welcome to the Jungle

The most widely understood (just joking) and commonly referred to form of taxation is the federal income tax. For the more than 100 million Americans required to file an annual income tax return with the Internal Revenue Service (IRS) as well as with various state and local government agencies, the annual process of completing the necessary paperwork and ensuring the returns are filed on time has almost become a national trademark. This is also true for the more than 10 million business entities operating throughout the country that each year must file federal, state, and local income tax returns with the appropriate governing bodies. Big or small, foreign or domestic, public or private, for profit or not, all businesses must file annual income tax returns, regardless of the type of legal business entity and whether it made a profit.

Types of Business Legal Entities

The first step in managing business income tax issues is understanding the type of business legal entity present. From a taxation perspective, there are two main types of business legal entities. One type is known as a *pass-through entity*, which includes Subchapter S (S for small) corporations, general and limited partnerships, and limited liability companies (LLC), a relatively new type of business entity that provides for additional structural and taxation flexibility. These types of entities are not subject to income taxes at the business level but rather “pass

through” the income earned by the business to the individual owners of the company, which are then subject to taxation on their individual tax returns. In contrast, a regular C corporation is a separate entity subject to tax itself. In other words, C corporations are subject to income taxes at the legal entity or business level (rather than the personal level).

The simplified example in Table 8.1 of the income statements for TUV, Inc. and XYZ, Inc., illustrate the difference in taxation principles between the two types of business entities. In the end, the various taxing authorities still get their income taxes with the only real difference being who (i.e., a business or an individual) actually forwards the money.

It is important to note that even though the subchapter S corporation (at the corporate level) has no income tax obligation, the three individual owners of TUV, Inc., must report ordinary taxable income ranging from \$164,450 to \$59,800 on their personal returns. Assuming each owner is subject to a marginal tax rate of 38% (combined federal and state), the owners pay income tax ranging from \$62,491 to \$22,724 individually, or \$113,620 in total. Hence, the subchapter S corporation will most likely want to make a distribution from net profit to the owners in the amount of at least \$113,620 (in total) so that they have sufficient funds available to cover their personal tax liabilities.

The preceding example presents a situation where the taxing authorities receive the same amount of income taxes from either entity, just through different channels. Why use an S corporation

TABLE 8.1—TAXATION OF PASS-THROUGH SUBCHAPTER S CORPORATION VERSUS C CORPORATION

	TUV, Inc., Subchapter S Corporation Year-End	XYZ, Inc., Regular C Corporation Year-End
Income Statement Summary	12/31/06	12/31/06
Revenue	\$15,265,000	\$15,265,000
Cost of Goods Sold	<u>11,503,000</u>	<u>11,503,000</u>
Gross Profit	\$ 3,762,000	\$ 3,762,000
Gross Margin	24.64%	24.64%
Selling, General, and Administrative Expenses	\$ 3,251,000	\$ 3,251,000
Other (Income) Expenses	<u>212,000</u>	<u>212,000</u>
Net Profit before Tax	\$ 299,000	\$ 299,000
Income Tax Expense	<u>0</u>	<u>113,620</u>
Net Profit	<u>\$ 299,000</u>	<u>\$ 185,380</u>
Amount of Net Profit Included in Personal Tax Returns		
Owner A, 55% Ownership	\$ 164,450	\$ 0
Owner B, 25% Ownership	74,750	0
Owner C, 20% Ownership	<u>59,800</u>	<u>0</u>
Total	<u>\$ 299,000</u>	<u>\$ 0</u>
Distribution of Net Profit to Cover Personal Income Tax Liabilities		
Owner A, 55% Ownership	\$ 62,491	\$ 0
Owner B, 25% Ownership	28,405	0
Owner C, 20% Ownership	<u>22,724</u>	<u>\$ 0</u>
Total	<u>\$ 113,620</u>	<u>\$ 0</u>
Net Profit Retained in Business	<u>\$ 185,380</u>	<u>\$ 185,380</u>

over a C corporation, or vice versa? The answer lies in the ability to utilize proper tax-planning techniques to manage potential income tax obligations over the long term. If earnings are generated and can be passed through to owners at a lower marginal income tax rate (by utilizing a pass-through entity), then tax dollars are saved, and capital is retained in the business—capital that can be used to finance business growth.

In addition, earnings from a pass-through entity are taxed only once, whereas earnings from a C corporation are taxed at the business level and then again at the personal level if any distribution of earnings are made in the form of a dividend (producing a double taxation environment). The list of “technical” tax differences between the two types of business entities is extensive and goes well beyond the scope of this book. However, it is extremely important to understand the pros and cons of the two business types (from a taxation perspective) when establishing and operating a business.

How Income Is Measured

The second issue regarding income taxes is the necessity of understanding how income is measured. The majority of this book has discussed business profitability from a generally accepted accounting principles (GAAP) basis. These accounting principles are applied in recording business transactions to produce financial statements based on complete/full accrual theory. The two main sources of authoritative pronouncements on accounting principles and financial reporting standards are the Securities and Exchange Commission (SEC) and the Financial Accounting Standards Board (FASB).

The national organization of certified public accountants (CPAs)—the American Institute of Certified Public Accountants

(AICPA)—also plays an important role in setting accounting standards. (Until the establishment of the Public Company Accounting Oversight Board by the Sarbanes-Oxley Act of 2002, the AICPA was the preeminent authority for setting auditing standards.) Hence, the majority of financial statements prepared for external distribution are based on accrual-basis accounting principles, and many businesses have their financial statements audited by an independent CPA.

Congress enacts income tax laws, and the Treasury Department and the IRS issue many regulations and rulings governing the interpretation of the Income Tax Code (to say nothing about a large number of court cases that deal with income tax issues). This complex body of income tax law is not in perfect harmony with generally accepted accounting principles (GAAP). The primary differences can be broken down into two areas—*permanent* versus *timing* (temporary) differences.

Permanent and Timing Differences

Permanent differences relate to those transactions that under the Internal Revenue Code are not recorded as income or expense in the determination of annual taxable income. Needless to say, most permanent differences relate to expense deductions that are disallowed by the IRS when calculating taxable income. For example, consider the costs of meals and entertainment of a business. The basic rule is that only 50% of expenses incurred for meals and entertainment can be deducted to determine taxable income. Hence, if a business incurred \$100,000 of meals and entertainment expenses during the year, for tax purposes, only \$50,000 could be deducted on the tax return. Several other types of permanent differences exist, including certain penalties/late fees and life insurance premiums (depending on how the beneficiary is established). The important thing to remember regard-

ing permanent differences is that no tax benefit or liability will be present with the transaction, and, as such, the company should plan accordingly.

Timing differences relate to when revenue and expenses have to be recorded in calculating annual taxable income, and the period in which the expense or income is recorded differs from the GAAP-based financial statements. The following examples have been provided of some of the most common timing differences:

Timing Differences between GAAP-Based Financial Statements and Taxable Income

- ♦ ***Depreciation Expense:*** For GAAP purposes, a company may elect to use the straight-line method of depreciation and to expense the capital asset over a 60-month period in equal monthly charges. For tax purposes, the IRS provides the opportunity to accelerate the depreciation to expense more of the asset in the first two or three years of its use, thus providing the business a tax incentive.

- ♦ ***Bad Debt Expense:*** For tax purposes, the IRS generally only allows the so-called direct write-off method to be used. Bad debt expense can only be deducted when specific receivables deemed uncollectible are actually written off because no future collection is expected. For GAAP purposes, companies often utilize the allowance for doubtful accounts method to record bad debt expense by estimating how many receivables will become worthless. For example, suppose a business during the year wrote off specific customers' accounts receivable. In addition, based on its past experience, the business estimates that \$100,000 of its year-end \$5,000,000 accounts receivable will be uncollectible. Accordingly, the business recorded \$100,000 bad debt expense for these future write-offs, in addition to the customers' accounts

written off during the year. In effect, the income tax law says: Not so fast! You can't deduct bad debt expense until you actually write off specific accounts receivable. The business can deduct the amount of accounts receivable it actually wrote off during the year, but it cannot (yet) deduct the \$100,000 estimated future write-offs.

♦ **Deferred Compensation:** Companies often use deferred compensation plans and programs to provide additional earning potential to employees with pretax dollars; that is, employees can set aside certain earnings in these deferred compensation programs, which are not subject to personal income taxes. While these are a great deal for the employee, the employer often is not allowed to deduct the deferred compensation contribution currently but rather must wait until the employee actually receives the earnings and records it as taxable income (in the year of receipt).

Revisiting Key Points

This next statement may sound far-fetched, but we will go out on a limb anyhow and say, “The volume and complexity of income tax permanent and timing differences are extensive” (translation—“the IRS has killed more than a few trees in producing the complete tax code”). When summarizing income tax issues and providing for a reasonable basis on which to be at least somewhat knowledgeable, the following key points need to be revisited:

Key Points Regarding Business Income Taxation

- ♦ Know the type of entity that is present for income taxation purposes—pass-through, or nontaxed, entities versus taxed entities.
- ♦ Understand the basic concept of how taxable income is measured, including timing versus permanent differences.
- ♦ Comply with all of the various authorities requiring income tax returns to be completed, including federal, state, local, and, if applicable, foreign.
- ♦ Produce and maintain a sound set of GAAP-based financial statements. This represents the starting point for properly managing income tax issues and for generating the information required to prepare various income tax returns.
- ♦ Don't be afraid to ask for help and/or to retain professional assistance to manage income tax issues. There is almost no way for a business owner today to stay on top of the multitude of foreign, federal, state, and local income tax issues and still operate a business.
- ♦ Realize that income tax obligations are not due unless a taxable profit (as defined by the various rules and regulations established) is present. If this is the case, remember that income tax obligations are usually paid in quarterly installments (pay as you go) over the tax period.

The Hidden Dangers of Payroll Taxes

To be successful in real estate, the old saying goes, the three most important considerations are “Location, Location, and Location.” When operating a business, the three most important rules for managing tax issues are “Pay your payroll taxes, Pay your payroll taxes, and Pay your payroll taxes.” Although payroll taxes are relatively simple to manage and understand in relation to the complexities associated with income taxes, the risks of not properly managing payroll taxes (to the business and its principal owners) can be far greater than those involved with income taxes.

Taxes withheld from employees wages and payroll-based taxes paid by a business must be remitted to various federal, state, and local government agencies on a periodic basis. In almost all cases, wages paid to employees are subject to payroll taxes based on established guidelines, tables, and formulas as determined by those government agencies. Unlike income taxes, which are only due and payable if the business has generated taxable profits, payroll taxes are due when wages (including salaries, hourly compensation, bonuses, commissions, spiffs, and other forms of compensation that are reported as W-2 earnings per the IRS) are paid to an employee. And once again, the various taxing authorities at the federal, state, and local levels all seem to have their hand in the pot.

At the *federal level*, there are four primary payroll taxes: (1) Social Security, (2) Medicare, (3) individual income, and (4) unemployment (a form of insurance). The first three of these taxes are paid by the individual and are withheld from each employee’s

wages. The fourth, federal unemployment tax, is a burden not on the individual but rather on the employer; thus, no tax is withheld from the employee’s wages for this particular tax. It is important to note that Social Security and Medicare taxes tend to be the most burdensome: Not only are these taxes withheld from the employee’s wages; but in addition, the employer must match, dollar for dollar, the amount withheld and periodically remit these two payroll taxes to the IRS.

At the *state level*, two types of payroll taxes are generally present: (1) personal income and (2) unemployment. Personal income taxes are withheld from the employee’s wages, whereas, similar to the federal unemployment tax, the state unemployment tax represents just the obligation of the employer. Other forms of mandatory withholdings are also present at the state level, including local taxes and disability insurance. However, these vary significantly on a state-by-state basis and are not discussed in any great detail here.

Table 8.2 provides an example of how payroll taxes are calculated for three employees (at different wage levels) from both the employee and the employer perspective.

Social Security taxes are imposed on both employees and employers. Employers withhold Social Security taxes assessed on employees from their wages, as you probably know. Employers are also required to withhold income taxes from their employees’ wages. Certain wage-based taxes are paid by employers, but not by their employees.

TABLE 8.2—EMPLOYMENT TAXES FOR DIFFERENT WAGE EARNERS

Employee	Randall S.	Rich E.	Dennis B.
Annual Wages/Earnings	\$95,000	\$46,800	\$6,240
Payroll Tax Withholdings, Employee:			
Social Security	5,394	2,902	387
Medicare	1,378	679	90
Federal Personal Income Tax	19,000	7,020	624
State Personal Income Tax	4,750	1,404	125
Federal Unemployment Insurance	0	0	0
State Unemployment Insurance	0	0	0
Total Withholdings, Employee	<u>\$30,522</u>	<u>\$12,005</u>	<u>\$1,226</u>
Payroll Tax Expense, Employer:			
Social Security	\$5,394	\$2,902	\$387
Medicare	1,378	679	90
Federal Personal Income Tax	0	0	0
State Personal Income Tax	0	0	0
Federal Unemployment Insurance	56	56	50
State Unemployment Insurance	245	245	218
Total Expense, Employer	<u>\$7,073</u>	<u>\$3,882</u>	<u>\$746</u>
Payroll Tax Withheld Plus Tax Paid by Employer:			
Social Security	\$10,788	\$ 5,804	\$ 774
Medicare	2,756	1,358	180
Federal Personal Income Tax	19,000	7,020	624
State Personal Income Tax	4,750	1,404	125
Federal Unemployment Insurance	56	56	50
State Unemployment Insurance	245	245	218
Total Obligation, Employer	<u>\$37,595</u>	<u>\$15,887</u>	<u>\$1,971</u>
Summary:			
Total Expense (Wages and Taxes), Employer	\$102,073	\$50,682	\$6,986
Take-Home Pay, Employee	64,478	34,795	5,014
Total Tax Obligation, Employer	37,595	15,887	1,972
Ratio: Total Tax Obligation/Total Employer Expense	<u>36.83%</u>	<u>31.34%</u>	<u>28.23%</u>

Social Security taxes (used to fund the U.S. national retirement and Social Security program) are applied at a rate of 6.2% on the first \$87,900 of wages earned in 2004, which is slightly higher than the 2003 limit used in Table 8.2. (*Note:* The IRS raises this figure annually to account for inflation and other factors.) As is evident from Table 8.2, a business is responsible not just for withholding the Social Security taxes amount from the employee's wages but also for matching the amount and remitting the total to the IRS. This matching requirement represents an expense to the company.

Medicare taxes (used to fund the U.S. national healthcare system for qualifying parties) are applied at a rate of 1.45% of all employee earnings. Similar to Social Security, the business must match the amount withheld and remit it to the IRS on a periodic basis. However, unlike the Social Security component, there is no limit and/or cap on the Medicare tax component—it is applied to all wages earned, including commissions, bonuses, salaries, and hourly wages. This matching requirement also represents an expense to the company.

Federal personal income taxes are withheld just from the employee's wages; there is no company-matching requirement. The federal government bases these taxes on what it estimates the individual will owe in federal personal income taxes at the end of the year. The federal government provides tables to assist employers with calculating the amount of federal personal income tax that should be withheld, depending on the employee's individual tax reporting status, which takes into consideration marital status, number of children/exemptions, and other personal factors. The IRS provides the W-4 form (completed by all employees) to assist with determining what the proper personal income tax withholdings should be.

Federal unemployment taxes (used to support the unemployment insurance payment programs administered by the states to provide supplemental income to unemployed workers) represent just an expense of the company; nothing is withheld from the employee's wages. Currently, the federal government requires 0.8% of an employee's first \$7,000 in annual wages to be remitted for this tax. For anyone who struggles with math, this amounts to a whopping \$56. These types of taxes tend to be paid during the first two quarters of each year, as once the employee exceeds the base wage level, no further tax is due. However, it is extremely important to note that the wage base level applies on a company identification basis and not to the employee. Hence, if you hire an employee in midyear, at which time they've already earned in excess of \$7,000 with their previous employer, the unemployment tax will be due again as the new company has not yet paid any wages to the employee.

At the state level, generally only personal income tax and unemployment taxes are involved. Similar to federal personal income taxes, a state collects these taxes based on what it estimates the individual will owe in personal income taxes at the end of the year. Tax tables are established by the state and provided to employers so that the appropriate amount of taxes can be withheld from the employee's wages and remitted to the state periodically. State unemployment taxes operate in much the same fashion as federal unemployment taxes: A rate is established and applied to the first X dollars of wages. The company absorbs the expense; no withholdings are made from the employee's wages. The main difference between federal and state unemployment taxes is based in the rates used and the wages subject to the rate. Most states use a rate well in excess of 0.8% and wage levels of above \$7,000. Hence, the bite at the state level is usually five times (or greater) higher than the \$56 at the federal level.

If you remember just one thing about payroll taxes remember this: Payroll taxes are held in trust for the employee by the withholding party (i.e., the business). As such, if the payroll taxes are not paid, the taxing authorities will not only pursue the business in their attempt to secure funds for payment, but will also pierce whatever legal business form is present to collect the taxes. Hence, the officers, board members, check signers, senior managers, and/or any other party aware of the deficiency or of who was responsible for remittance of the payroll taxes can be pursued individually to collect the outstanding obligation. This includes attaching to about any type of personal asset—homes, retirement accounts, college funds, savings, and so on. Needless to say, businesses do not want to find themselves in trouble for unpaid payroll taxes.

Beyond the all-important concept of paying your payroll taxes, the following additional thoughts should be kept in mind concerning payroll taxes:

Additional Points to Remember Regarding Payroll Taxes

- ♦ A number of external payroll services (including ADP and Paychex) and other organizations are available to assist in managing payroll tax issues. These organizations are cheap and reliable, provide quality services, and are one of the best outsourcing values in which a business can invest.
- ♦ Payroll taxes are remitted to the various taxing authorities on a periodic basis, depending on the dollar amount of the payroll tax obligation. The larger the periodic amount, the more frequently the business will be required to remit payroll taxes (including being required to transfer funds electronically).

- ♦ Payroll tax compliance reporting is essential and is usually completed on both a quarterly and an annual basis (at both the federal and state levels). These reports reconcile the amount of payroll taxes withheld and owed against the amount paid to ensure employers are remitting their obligations in a timely manner.
- ♦ The amount of payroll-based taxes remitted to various government agencies (withholdings from employees' plus em-

ployers' taxes) is typically about one-third of the total wages including employer taxes. This is extremely important to understand as the nation continues to evolve into more of an employee-based service-orientated economy from a production/manufacturing-based one. Effective management of payroll taxation issues can improve bottom-line performance.

Other Forms of Taxation (The Fun Is Just Starting)

Now that you're an expert on income and payroll taxes, it's time to move into the third major area of taxation—everything else. It would be almost impossible to address and cover every other type of taxation, due to the volume and variety of federal, state, and local enacted legislation. For example, the hotel/hospitality industry is subject to a room tax passed through to the end customers. For communities dependent on tourism, such as San Diego, Las Vegas, and New York, this represents a significant government revenue source. In the oil and gas industry, federal and state excise taxes are present that significantly raise the per gallon price of gas that a typical motorist pays.

These two examples highlight that it's really not a matter of who pays the ultimate tax (i.e., the end consumer) but rather where the tax is applied and how it is administered. In the hospitality example, the hotel charges the customer the tax (with a clear reference to the tax on the customer's bill) and remits it to the government. In the oil and gas example, the wholesale distributor charges the retail outlet the tax and remits it to the various authorities (thus, the end customer never sees the tax component of each gallon of gas purchased). With this in mind, the remainder of this section will be focused on taxation issues most businesses will need to comply with and manage.

First on the list are the ever-popular sales and use taxes. We will start here because basically every consumer in the United States is subject to this tax. Sales taxes are generally produced from the sale of tangible personal property (from automobiles to

zippers). For example, a retail store that sells jewelry is required to collect sales tax from the customer purchasing a product and to remit it (periodically) to the appropriate taxing authority. Sales tax rules, regulations, and rates are established at the state, local, and city levels, depending on the need for these jurisdictions to generate revenue.

In some instances, no sales tax is due because the specific jurisdiction has opted not to impose a sales tax. For instance, the state of Oregon does not have a sales tax. In other states, certain types of purchases are not subject to sales taxes. For example, Rhode Island and Massachusetts exempt clothing and food from sales taxes. But, almost all states impose a sales tax on most consumer purchases, which provide a significant share of their revenue. It should also be noted that sales tax rates can be a function of multiple government entities as the state, county, city, and other local organizations (e.g., a metropolitan transit authority) all may have a need to generate revenue. Although the state sales tax rate may be 6%, the actual rate charged for a local purchase could be 8% to account for the other governmental agencies.

Accompanying the sales tax is its close cousin the *use tax*. Use taxes are similar to sales taxes (and often administered at the same rates), but they are applied to the organization consuming and/or using the tangible personal property. *Consumption* is the key word here, as property purchased that is subsequently resold is not subject to sales or use tax (e.g., inventory purchases made by a wholesale operation that sells them to a retail store).

The important distinction between sales tax and use tax lies not in the tax rate applied but in who is responsible for paying the tax. The best way to illustrate this point resides in how a number of catalog companies sell their goods. For example, a customer in California orders a piece of clothing from a catalog company located in Maine, pays for the purchase with a credit card, and then receives the product via the U.S. Postal Service parcel delivery service. Because the catalog company in Maine has not established “nexus” in the state of California, it is not required to collect and to remit sales tax. Rather, the end user, or consumer of the product, is obligated to remit a use tax to the government agency where the product is consumed (and we all know how often this occurs). This loss of sales/use tax revenue by various government entities has been an issue for a number of years and is being amplified by the proliferation of purchases over the Internet.

For consumers, the potential risk of not paying use tax on a \$100 out-of-state clothes purchase is minimal. For businesses, the story is different, as they must understand the importance of properly accounting for and complying with use-tax rules and regulations. Purchases of property consumed in the normal course of business (ranging from office supplies to tools used in a manufacturing process to inventory that is purchased originally for resale but that is consumed internally) that were obtained without paying sales tax must be reported to the appropriate taxing authority for assessment. If a business fails to do this, audits may be undertaken by the taxing authority, which would trigger not only the use tax due but also penalty and interest charges. It goes without saying that businesses are much easier and bigger targets for the taxing authorities to pursue for tax receipts due.

Property taxes represent nothing more than a tax assessed on the value of tangible/real property owned. For most of us, the most prevalent form of property tax is based on the value of real

estate owned (i.e., your primary residence), which is paid either directly or included with a normal monthly mortgage payment (and paid through an escrow account). For businesses, property taxes are most often assessed annually and are based on the value of the tangible/real property owned by a company.

A business is required to complete an annual property tax return that identifies all of the assets owned, leased, and/or in its possession summarized by date of purchase, amount, and type of asset (e.g., computer equipment, office furniture, production tools). This return is then forwarded to the various taxing authorities for review and assessment. Subsequent to this, a property tax bill is forwarded to the company for payment. Generally speaking, property taxes are administered and managed by county tax assessors, as opposed to income, payroll, and sales/use taxes, which are federal and state responsibilities.

Beyond sales, use, and property taxes lay a series of other taxes, which are widely utilized but not nearly as well known and/or understood. Rather than attempt to list and explain every potential tax (which of course would provide grounds for every reader of this book to yell and scream at the authors), the following examples have been provided:

Other Business Taxes to Worry About

- ♦ ***Unclaimed Property Taxes:*** Property that is in the possession of a business that rightfully belongs to another party and has never been claimed is not the property of the business; rather, it must be turned over to the appropriate taxing authority for administration. For example, a business does not get to keep the money owed to former employees who never cashed their payroll checks. Rather, an unclaimed property tax return needs to be completed, with the money owed turned over to the taxing authority for eventual “hopeful” distribution to the rightful owner.

♦ **Head Taxes:** A periodic tax is applied that is based on the number of full-time employees present. For example, a state may assess a \$25 per head, per quarter payroll tax. If a company has 100 full-time employees, a \$2,500 tax would be due. The state of Nevada has recently implemented the use of head taxes because it has no state personal income taxes generating revenues.

♦ **Excise and “Sin” Taxes:** These come in all shapes, sizes, and forms and are applied on everything from fuel to liquor and tobacco (i.e., sin taxes) to the rendering of certain services. Yes, certain taxing authorities have begun to tax the rendering of services in their never-ending search for revenue, with an increasing number beginning to look at industries such as personnel staffing to generate additional tax receipts.

♦ **Incentive Tax Credits:** Amazingly enough, not all taxes represent the outflow of money from businesses. Various federal, state, and local tax laws and regulations provide tax credits as in-

centives for companies to pursue certain business strategies. Some of the most common incentive tax credits reside in hiring qualified employees (from certain economic classes) and using environmentally friendly energy sources.

In summarizing the various other forms of business taxation issues present, three critical issues should be kept in mind. (1) Educate yourself to understand how these types of other taxes apply to your business and can influence economic decisions. Missing even the slightest tax issues can result in significant added costs. (2) Proper tax reporting and compliance is once again extremely important. The bigger the dollars, the more frequent the reporting and the more closely your business will be monitored. (3) Understand that a number of these taxes are held in trust (similar to payroll taxes) for the government. If they are not paid, be prepared for the taxing authority to disregard the business’s legal structure and to pursue the persons responsible for the taxes at the individual level.

Government-Mandated Costs (We're Not Done Yet)

As much fun as we've had in attempting to discuss the plethora of business taxation issues, this fun pales in comparison to the sheer enjoyment we're going to have discussing other government-mandated costs. (You might detect a note of sarcasm here.) This cost area within a business has become one of the most problematic for employers to manage; and it only looks to get worse as federal, state, and local governments attempt to "fix" the problem by burdening companies with more and more costs. The good news, however, lies in the fact that this cost area represents a significant opportunity for employers to proactively manage risks within the organization to reduce expenses and to gain competitive advantages.

First, let's discuss the wonderful world of *workers' compensation* insurance. Workers' compensation insurance is basically required in every state of the country. This form of mandated insurance is charged to the employer to cover costs of potential employee injuries, accidents, and similar types of events. Workers' compensation insurance is designed to cover both medical-related costs (e.g., a worker falls and breaks his ankle requiring medical services to be rendered) as well as lost wages/earnings (e.g., the same worker is laid up for two weeks, during which time he cannot work and earn a paycheck). In addition, workers' compensation insurance premiums also cover the related administrative costs associated with managing this form of insurance as well as other potential costs, such as legal fees.

State laws, rules, and regulations dictate the types of workers'

compensation insurance benefits that will be provided to the injured worker. The actual workers' compensation insurance premium charged to the employer is generally based on the level of risk the employees are undertaking as they work. For example, a construction worker operates in a much higher risk environment than does a paper-pushing accountant. Although both may earn \$20 per hour, the workers' compensation insurance premium for the construction worker may average 15% of this hourly rate (i.e., \$3.00 per hour) whereas the premium for the accountant may be only 1% of the hourly rate (i.e., \$0.20 per hour). Clearly a significant difference, but one that is designed to account for the increased risk associated with a construction worker getting hurt on the job.

Because states mandate that the employer carry workers' compensation insurance, state-operated programs are made available to employers to secure coverage. Hence, a business basically has the option of either securing workers' compensation insurance coverage from a quasi-governmental agency, such as the State Compensation Insurance System in California, or going to the open market and obtaining insurance from carriers willing to "write" (i.e., extend) these types of coverages. In some states, carriers openly provide quotes and aggressively pursue business, as state laws tend to be "employer friendly."

In other states (let's pick on California for a moment), carriers apply strict underwriting criteria and guidelines, as the states tend to be employee friendly. Needless to say, the differences

between state coverage levels can vary widely because a workers' compensation insurance claim in one state may run \$2,000, whereas the same claim in another state may reach \$10,000 or more. It's not too hard to figure out why businesses locate certain operations (e.g., a manufacturing plant) in one state over another, given the potential added workers' compensation insurance expenses present.

Business owners and managers should keep some key issues in mind with workers' compensation insurance. (1) If you don't have the coverage, penalties assessed by the states can be severe and actually may include criminal charges in certain situations (against the officers/owners of the business). (2) State-operated and -supported workers' compensation insurance programs are often inefficient, expensive, and burdensome. If your company has the resources, private coverage should definitely be pursued. (3) Properly and proactively managed workers' compensation insurance programs can provide your business with a competitive weapon. Investing internally in the needed corporate infrastructure for risk-management tasks can often produce substantial returns.

Beyond workers' compensation insurance, health/medical insurance represents the next most pressing "potential" regulatory-mandated business cost. We use the term *potential* because health/medical insurance is still generally provided to employees at the option of the employer. However, California has taken the lead in requiring businesses of certain sizes, starting in 2006, to

provide mandated employee health/medical coverage or pay a premium to the state for similar coverage. Clearly, states are experiencing significant economic discomfort from the past three-plus years of annual double-digit increases in health/medical costs, which show no signs of abating soon. States once again are looking to pass the economic burden of rising expenses on to businesses rather than attempting to manage the issue internally with limited/inadequate resources. Business owners and managers will need to stay on top of this issue in the years to come, as having to absorb medical/health insurance costs internally, which can easily exceed 10% of an employee's base compensation, could significantly change economic operating models.

And finally, let's spend a moment discussing the various *fees*, *licenses*, and *permits* a business must obtain in order to operate in certain local jurisdictions (e.g., cities and unincorporated county locations). If a business has established nexus (or presence) in a local jurisdiction, chances are that a periodic license, permit charge, or fee will be due. This can range from a one-time annual flat fee (which depends on the number of employees a company has) to a fee based on the amount of receipts generated within that jurisdiction (sounds like another tax). The easiest rule of thumb to apply here is really quite simple: If you have a business presence in a local jurisdiction, assume a license, fee, and/or permit will need to be obtained and paid for in order to "legally" operate.

Taming the Business Taxes Beast

Thus far the emphasis of this chapter has been centered on discussing business taxation and regulatory-mandated costs from more of an informational perspective; that is, an effort was made to provide a basic overview of the major types of business taxation and regulatory-mandated costs present, the underlying logic inherent within each one, and the associated compliance requirements (with each one). In addition, various tips and suggestions were provided that offered management ideas on how to proactively tackle this increasingly complex and burdensome business area. In an effort to summarize the issues covered in this chapter and to draw some sort of logical conclusion on how to manage this area, the following reference points are provided:

Final Checklist for Managing Business Taxes

- ♦ ***Accounting Books and Records:*** Development and maintenance of a sound set of accounting books and records is essential to the management process. The data and information needed to properly administer business taxation and regulatory-mandated costs are located here.
- ♦ ***Knowledge and Education:*** Business owners and managers must obtain a base knowledge/education (however tough this may be) with this subject matter. It is very difficult for business plans and economic models to be developed and understood without it.

- ♦ ***Nexus and Compliance:*** If you proactively manage nexus and compliance requirements, you will save countless hours and dollars down the road. If you don't, working with a taxing authority in a reactive mode (i.e., letting them find you) will undoubtedly waste valuable company resources.

- ♦ ***Professional Support:*** Retaining professional support to assist with the management of business taxation and regulatory-mandated costs is often worth every penny spent. Experts abound in this area, due to the volume and the complexities of the issues present.

- ♦ ***Economic Opportunities:*** Numerous opportunities are present to enhance a company's performance by actively managing these issues. A decision as simple as locating a business just on the other side of a state border (let's say from California to Nevada) may save business countless dollars due to differences in workers' compensation laws, state income tax rates, and related expenses. It's no wonder that certain states and foreign countries maintain such strong competitive positions.

- ♦ ***Strategic Planning and Company Management:*** Business taxation and regulatory-mandated costs should be an active part of a company's strategic planning process. Adequate business resources (internal or external) need to be dedicated to this function.

♦ *State and Local Taxing Authorities:* Most people recognize the IRS as the predominant taxing authority in this country. From a collection standpoint, this is true, as the federal government is the single largest taxing authority in the country. However, states, counties, and cities often represent a bigger business-management challenge because of the different types of taxes present, the volume of compliance issues, and the agencies' aggressiveness (in collecting tax receipts). Remember that almost every state in the country is experiencing budget problems and, as such, is looking to generate as much tax receipts (and as quickly) as possible.

♦ *Added Liabilities and Risks:* Finally (and if you haven't picked up on this yet), numerous of the aforementioned business taxation and regulatory-mandated costs will pierce the company's legal structure and may attach to the officers, directors, and senior managers at the personal level. The last thing you want to have happen is a taxing authority attaching to your personal assets to collect obligations due. It's not a pretty sight.

Capsule Summary

This chapter surveys business taxes and certain other legally imposed costs on businesses (in particular, workers' compensation insurance). Taxes are not the favorite topic of business managers, of course. However, business owners/managers ignore taxes at their own peril. Failure to fully comply with tax requirements can cause serious business problems and could leave its owners vulnerable to legal action against them as individuals and against their personal assets.

The chapter is not an exhaustive treatise on the federal income taxation of business entities. Just bare fundamentals are covered, including the important distinction between businesses that are taxed as a separate entity (regular "C" corporations) and pass-through tax entities. Regular corporations are subject to tax on their annual taxable income. If any portion of after-tax net income is distributed to stockholders, the dividend income is subject to individual income tax in the hands of the stockholders. In contrast, a pass-through entity does not pay income tax itself, as a separate entity. Instead, its annual taxable income is allocated among its owners, and the owners must include their individual shares in their annual personal income tax returns—whether or not any of the business's taxable income was distributed to them.

Unfortunately, certain accounting methods and restrictions under the income tax law differ from the accounting methods

used to prepare the financial statements of businesses. These are either permanent differences or timing differences; examples of both types are provided in the chapter. The chapter spends a fair amount of time discussing payroll-based taxes—both on employees and employers. The responsibility of the business employer to withhold Social Security, Medicare, and income taxes from employee wages is explained. The total amount remitted to government agencies (withholdings plus taxes paid by an employer) is a significant percent of the basic labor cost of a business. Looking at this more broadly, the soundness of our Social Security and Medicare programs depends on business employers carrying out their responsibilities in these areas.

In addition to income and payroll taxes, a business pays many other types of taxes and must comply with workers' compensation insurance requirements. Also, businesses play a vital role in the collection of sales taxes for state and local governments. A business should take the lead and determine every tax it has to collect and pay. Then it must file all the required forms and returns on time. Many businesses need the advice and expertise of professionals such as certified public accountants on tax matters. Like many other areas in managing a business, the devil is in the details. Tax laws are plagued with a bewildering amount of details, that's for sure. But, this should not prevent taking a proactive approach to minimizing the tax cost of a business.

PREVENTING FRAUD AGAINST BUSINESS: CONTROLS FOR COMBATING FRAUD ATTACKS

“There’s only one way to deal with student cheating—prevent it!”

—Sage advice given to John Tracy early
in his teaching career by a senior professor

The senior professor quoted was absolutely right, of course. Once a professor catches a student cheating, you are in a quandary. The student knows what he did was wrong (at least you don't have to explain that to him. Should you give him an F on the exam or an F for the course? Should you report this to the Dean? Should you call his mother? Would he possibly consider suicide if you came down too hard on him? Should you offer him a second chance and give him a makeup exam?

Suppose a professor catches one person cheating on the exam. How many others cheated that were not caught? In hindsight, the professor should have done more to prevent students from cheating. However, designing and enforcing anticheating controls take time. If the controls are too intrusive, they may violate

the rights of students. On the one hand, you can't strip-search students to make sure they don't have crib notes with them. On the other hand, you can forbid cell phones and PDAs (personal digital assistants) in the exam room. The student-cheating example provides a parallel to the problems facing managers in preventing and dealing with *business fraud*.

Business fraud has been around for a long time. At its core there's very little new about business fraud. Only the devices and the methods for doing it are different today from those in the past. This chapter takes an unflinching look at business fraud and offers suggestions on how to prevent fraud—or at least how to minimize its effects. The chapter takes a no-holds-barred approach. Business managers are not exempt from criticism in the chapter.

Business Fraud and Its Two Basic Types

In the chapter, the term *fraud* is used in its broadest and most comprehensive sense; the word covers the waterfront. It includes all types of cheating, stealing, and dishonest behavior by anyone inside the business and by anyone outside with whom the business deals. The fraud may be illegal; or even if it isn't illegal, it is immoral, unethical, or unacceptable. Examples of fraud range from petty theft and pilferage to diverting millions of dollars into the pockets of high-level executives. Fraud includes shoplifting by customers, kickbacks by vendors to a company's purchasing managers, embezzlement by trusted employees, inflated expense reports submitted by salespeople, deliberate overcharging of customers, and so on. A comprehensive list of business fraud examples would fill an encyclopedia.

Speaking as a business manager, there are two types of business fraud:

Type 1: The kind you *don't* want to happen because it damages the business and may raise questions about your competence in not having prevented the fraud.

Type 2: The kind you *do* want to happen, or the kind you do nothing to stop even though you have to hold your nose while the fraud goes on.

In other words, there is fraud *against* the business and fraud *by* the business. Type 1 fraud can be classified by who does it. It includes all kinds of schemes and scams by vendors, by employees, by customers, and even by a business's own managers. Unfortunately, a business is vulnerable to all kinds of fraud attacks from virtually everyone it deals with. And, we regret to say, the business may engage in fraudulent practices, too.

Fraud Perpetrated by Businesses

Accounting and business finance articles and books dealing with business fraud focus almost exclusively on Type 1 and either side-step or downplay Type 2. However, you can't do justice to the topic without mentioning that some businesses engage in Type 2 fraudulent practices. Most experienced business managers would agree with us on this point, in private if not on the record.

Most frauds perpetrated by businesses are illegal under various state and federal statutes. Also, restitution for damages suffered from the fraud can be sought under the tort law system. No one advocates this type of fraud, of course. Very few people make the argument that this type of fraud is a necessary evil, which, viewed in a larger frame of reference, has to be tolerated in order to achieve the overall benefits from our economic system. In other words, the "for the greater good" argument doesn't carry water when it comes to fraud by business.

In any case, the evidence is clear that many businesses deliberately and knowingly engage in fraudulent practices and that their managers do not take action to stop it. Indeed, the managers are complicit in the fraud. They initiate a fraud; or for fraud going on in the business, they look the other way. The managers may not like fraud and not approve of it, but they live with it. Sometimes a manager is convicted of being part of a fraud conspiracy. However, over their careers, few managers are ever prosecuted for fraud.

You read about Type 2 fraud all too often in the financial and business press. Examples include bribing government and regulatory officials, knowingly violating laws covering product and

employee safety, failing to report information that is required to be disclosed, misleading employees regarding changes in their retirement plans, conspiring with competitors to fix prices and divide territories, condoning misleading advertisements, and discriminating among employees on grounds of gender and race. One "duty" of a manager is to keep quiet and to cover up and prevent publicity regarding fraud by the business. Managers are under pressure to follow the "three monkey" policy: See no evil, hear no evil, speak no evil.

And then there is the whole area of *accounting fraud* and *fraudulent financial reporting* by a business's executives and its financial and accounting officers. These topics require a separate chapter—Chapter 10. This present chapter focuses on Type 1 fraud, which managers do not want to happen and should take actions to prevent. Other than what has already been said, Type 2, or "management complicity" fraud, is not discussed further in this chapter—except to make one final point: Fraud condoned by management makes a business more vulnerable to Type 1 fraud by employees. The literature and official pronouncements on business fraud stress the key point that preventing fraud depends first and foremost on the "tone at the top." Employees generally are aware of what's going on in the business. When they see fraudulent practices in the business that are sanctioned by its top-level managers, then some employees might be more inclined to adopt an "entitlement" attitude and commit some fraud on their own. And they may be very good at it.

Antifraud Controls

Businesses handle a lot of money, have a lot of valuable assets, and give managers and other employees a lot of authority. So it's not surprising that a business is vulnerable to fraud. The 2003 Fraud Survey by the Big Four CPA (certified public accountant) firm KPMG, for example, includes the following types of fraud against businesses:

- ◆ Diversion of sales.
- ◆ Duplicate billings.
- ◆ Extortion.
- ◆ False invoices and phantom vendors.
- ◆ Inventory theft.
- ◆ Kickbacks and conflicts of interest.
- ◆ Loan fraud.
- ◆ Theft of intellectual property.

The main advice offered in the professional literature on fraud against a business is to put into place and to vigilantly enforce preventive controls. The literature has considerably less advice to offer regarding the course of action managers should take once an instance of fraud is discovered, other than to say that the manager should plug the hole that allowed the fraud to happen.

The KPMG Fraud Survey found that the companies in its survey took the following actions:

- ◆ Begin an investigation.
- ◆ Immediately dismiss employees who commit fraud.
- ◆ Seek legal action.
- ◆ Notify a government regulatory agency or law enforcement.

An Example of Lack of Controls

Just as we were starting this chapter, the local paper reported a case of business fraud that serves as an excellent example to illustrate several key points. The police charged a young woman who worked as a hostess in a restaurant and who was in charge of the cash register with stealing \$115,000 over a period of five years. The owner, who evidently was not an “on the premises” manager, noticed that sales peaked during the two weeks that the woman took a vacation.

In the past, the owner had noticed that sales seemed to be lower during the shifts she worked. Some of the employees told the police they had suspected that she was not ringing up all sales and that she also was stealing tips. The police investigation found that the woman and her husband lived a lifestyle beyond their

combined incomes. To top it off, the police found the woman had a rap sheet that included jail time for similar offenses.

Certain basic controls, had they been in place, would have prevented this fraud. First, the background of all new employees, especially those who will be handling money, should be checked to determine whether they have a criminal record. Second, every business should have strong controls over cash receipts because cash is the preferred asset to steal. Cash transactions are a high-risk area.

Many restaurants, for example, have a conspicuous sign at the cash register that your meal is free if you don't get a receipt. Prenumbered order forms should be used, and all numbers should be accounted for to make sure that all sales are rung up. A video surveillance camera could have been used to watch cash register activities. If the owner had some questions regarding the hostess, he could have had a friend or two eat at the restaurant and closely observe whether the hostess rang up their cash. The owner could have hired a private investigator to discreetly look into the situation.

The owner should have noticed early on the mismatch between the sales revenue and expenses in the monthly or quarterly profit-and-loss (P&L) reports. A business owner/manager should develop a profit model for the business against which actual results are compared. For a certain level of sales revenue, the owner/manager should know how much expenses should be. The owner should have noticed that sales revenue was too low for the recorded expenses or that the two were out of kilter.

The restaurant owner comes off looking rather dim-witted or naïve in this case. Still, you have to give the owner some credit for noticing the variation in sales when the hostess was on duty versus when she was off duty. Finally, one other possibility comes to mind. Perhaps the owner was also skimming some cash and

not reporting all sales revenue in the income tax returns for the business and in his tax returns. This might help explain why the owner took five years to take action.

The Twofold Purpose of Internal Accounting Controls

Antifraud controls are generally called *internal controls* or *internal accounting controls*. The accounting department of a business is delegated the responsibility for most antifraud controls. These controls consist of required forms that must be used and procedures that should be followed in authorizing and executing transactions and operations. The accounting department records the financial activities and transactions of a business, so it is natural that the accounting department is put in charge of designing and enforcing internal controls. The accounting profession has a long history in designing and using internal controls.

Most internal accounting controls have both an antifraud purpose and an accounting-reliability purpose. Keep in mind that the accounting system of a business is the source of information for its financial statements, tax returns, and management reports. The accounting purpose of internal controls is to eliminate (or at least to minimize) errors in capturing, processing, storing, and retrieving the large amount of detailed information needed in operating a business. Many controls are needed to ensure the accuracy, completeness, and timeliness of information held in the accounting system of a business.

Controls have to keep up-to-date with changes in a business's accounting system and procedures. For example, a whole new set of internal controls had to be developed and installed as businesses converted to computer-based accounting systems. This was a difficult transition for many businesses.

Internal Control Guideposts for Managers

Accountants have a large repertoire of internal controls from which to choose. This book is directed to business managers, not accountants. Therefore, we will not delve into the details of a large number of specific controls. Rather, we'll discuss a relatively few general guideposts for managing internal controls that apply to all businesses.

Internal Control Checklist for Managers

♦ **High-Risk Areas:** Strong and tight controls are needed in high-risk areas. Managers should identify the areas of the business that are the most vulnerable to fraud against the business. The most likely fraud points in a business usually include the following areas (some businesses have other high-risk areas, of course):

- ♦ Cash receipts and disbursements.
- ♦ Payroll (including workers' compensation insurance fraud).
- ♦ Customer credit and collections, and writing off bad debts.
- ♦ Purchasing and storage of inventory.

♦ **Legal Considerations:** Pay careful attention to the legal aspects of internal controls and to enforcing the controls. For example, controls should not violate the privacy rights of employees or customers. Needless to say, a business should be very careful in making accusations against an employee suspected

of fraud. Of course, the absence of basic controls possibly could expose a manager to legal responsibility on grounds of reckless disregard for protecting the company's assets. A legal opinion may be needed on your internal controls, just to be safe.

♦ **Separation of Duties:** Where practicable, have two or more employees involved in the authorization, documentation, execution, and recording of transactions, especially in the high-risk areas. This is called the *separation of duties*, the idea being that it would require the collusion of two or more persons to carry out and conceal a fraud. For instance, two or more signatures should be required on checks over a certain amount. Or the employee preparing the receiving reports for goods and materials delivered to the company should not have any authority for issuing a purchase order and should not make the accounting entries for purchases. Instead of the concentration of duties in the hands of one person, duties should be divided among two or more employees, even if there is some loss of efficiency.

♦ **Surprise Audits:** Make use of surprise counts, inspections, and reconciliations that employees cannot anticipate or plan for. Of course, the people doing these surprise audits should be independent of the employees who have responsibility for complying with the internal controls. For instance, a surprise count and inspection of products held in inventory might reveal missing products, unrecorded breakage and damage, products stored in the wrong locations, mislabeled products, or other problems.

Several such problems tend to get overlooked by busy employees. The inventory errors could be evidence of theft. Many of these errors should be recorded as inventory losses, but they may not be if surprise audits are not done.

- ♦ **Whistle-blowing:** Encourage all employees to report suspicions of fraud by anyone in the business (which has to be done anonymously in most situations). Admittedly, this is tricky. You're asking people to be whistle-blowers. Employees may not trust upper management; they may fear that they will face retaliation instead of being rewarded for revealing fraud. On the one hand, employees generally don't like spying on each other; but on the other hand, they want the business to take action against any employees who are committing fraud.

- ♦ **Audit Trails:** Insist that good audit trails be created for all transactions. The documentation and recording of transactions should leave a clear path that can be followed back if it is necessary to do so. Supporting documents should be organized in good order and should be retained for a reasonable period of time. The Internal Revenue Service publishes recommended guidelines for records retention, which are a good point of reference for a business.

- ♦ **Access to Accounting Records and End-of-Year Entries:** Strictly limit access to all accounting records to accounting personnel, and require that no one other than the accounting staff be allowed to make entries or changes in the accounting records of the business. Also, managers are well advised to keep a close eye on end-of-year accounting entries that are made to close the books for the period. Managers need to provide critical information for these entries, which may have a large effect on the amount of profit recorded for the period. (Providing the information to their accountants for these entries provides the man-

agers with the opportunity to massage the financial statement numbers, which Chapter 10 explains.)

- ♦ **New Employee Background Checks:** Make thorough background checks on all employee applicants, especially those who will handle money and work in the high-risk fraud areas of the business. Letters of reference from previous employers may not be enough. A business may have to consider more extensive background and character checks, possibly using private investigators, when hiring mid- and high-level managers. Studies have found that many manager applicants falsify their resumes and list college degrees that they have not earned. Databases are available to check on a person's education, credit history, driving record, criminal record, workers' compensation insurance claims, and life insurance rejection record.

- ♦ **Periodic Audits of Internal Controls:** Consider having an independent assessment done on your internal controls by a CPA or other professional specialist. This might reveal that critical controls are missing or, conversely, that you're wasting money on ineffectual controls. If your business has an annual financial statement audit, the CPA evaluates and tests your business's internal controls. But you may need a more extensive and critical evaluation of your internal controls that looks beyond just the accounting-oriented controls.

- ♦ **Regular Appraisals of Key Assets:** Schedule regular "check-ups" of your business's receivables, inventory, and fixed assets. Generally speaking, over time, these assets develop problems that are not dealt with in the day-to-day bustle and pressures on managers and other employees. Receivables may include seriously past due balances, but these customers' credit may have not been suspended or terminated. Some products in inventory may not have had a sale in months. Some items in fixed assets may

have been abandoned or sold off for scrap value, yet the assets are still on the books and are being depreciated.

- ♦ **Computer Controls:** Be particularly vigilant regarding computer controls. Computer hardware and software controls are extremely important, but most managers don't have the time or the expertise to get into this area of internal controls. Obviously, passwords and firewalls should be used, and managers know about the possibility of hackers breaking into their computers and about the damage that computer viruses can cause. Every business has to adopt internal controls over e-mail, downloading attachments, updating software, and so on. If the business is not large enough for its own IT (information technology) department, it will have to bring in outside consultants. There is one good piece of news. The business accounting and enterprise software packages that are available today generally have strong security features—but you can't be too careful.

- ♦ **Special Rules for Small Businesses:** Be sure that internal controls are in place. The lament of many small business owners/managers is, "We're too small for internal controls." This is not true. Even a relatively small business can enforce certain internal controls that are effective. Among these are the following:

- ♦ Require that the owner/manager sign all checks, including payroll checks. This forces the owner/manager to keep a close watch on the expenditures of the business. Under no conditions should the accountant, bookkeeper, or Controller of the business be given check-signing authority.

This person could easily conceal fraud if he or she has check-writing authority.

- ♦ Require that employees working in the high-risk fraud areas (generally cash receipts and disbursements, receivables, and inventory) take vacations of two weeks or more, and, furthermore, make sure that another employee carries out their duties while they're on vacation.
- ♦ Although separation of duties may not be practicable, consider the job-sharing approach such that two or more employees are regularly assigned to one area of the business on alternate weeks, or some other schedule.
- ♦ Without violating their privacy, keep watch on the lifestyles of your employees. If your bookkeeper buys a new Mercedes every year and frequently is off to Monte Carlo, you might ask where the money is coming from. You know the salaries of your employees, so you should be able to estimate the sort of lifestyles they can afford.

In addition to internal controls, most businesses need what are generally referred to as *security measures*. Some of these are obvious, such as locking the doors when the business is closed and limiting access to areas where products are stored. Other measures may or not be needed, such as security guards, surveillance cameras, motion detectors, ID cards for employees, and security tags and devices on products. Generally these practices are not under the authority of the accounting department. Larger businesses employ a director of security. In a smaller business, the general manager may have to take on this duty.

Control Guidelines for Accepting New Customers and Clients

One area where internal controls are needed but are often overlooked by many businesses concerns taking on new customers—especially if the business extends credit to its customers. Of course, most businesses put a high priority on securing new customers. But the wrong kind of customer can cause large losses instead of yielding additional profit. Some new customers may be out-and-out crooks who never intended to pay for their purchases from the business. Other new customers may have good

intentions but may be on thin ice financially and end up not being able to pay their accounts on time, or may not pay them at all. A business should have controls guiding its sales staff for sorting out the wheat from the chaff.

An internal memo to the sales staff of a California business provided the following guidelines for making an assessment of the financial integrity and viability of new customers. It has been condensed and edited to protect the identity of the business.

Macrolevel Business Credit Risk Flags

- **Related Parties:** No, we're not talking about visits from the dreaded in-laws during the holiday season but rather the risk inherent in conducting business with an entity that transacts with a number of closely associated entities. Various entity forms (corporations, LLCs [limited liability companies], partnerships) are available to structure businesses and to protect assets that are legal and represent legitimate and viable strategies. However, multiple related parties can be hidden in a maze of legal entities that can pose all types of problems. No one needs to look any further than the recent disaster with Enron Energy to understand why related-party transactions should be viewed as a red flag. On the flip side, understanding all of the related parties involved with an account may offer new leads.
- **Concentration Risk:** Accounts that generate high volumes of sales with only a few customers (or just one) have always been singled out as having increased business risks. This concentration risk (as it is referred to in the banking world) can be a major problem for accounts that rely heavily on only a couple of customers to generate significant revenue. Cash flow problems, profitability issues, and so on all increase as a result of this business model. Also, the concentration risk works both ways: If the customer is dependent on a key supplier or vendor to operate and produce products/services, then if that supplier/vendor experiences problems, so will the customer.

- **The Consummate Salesperson:** Simply put, if the customer spends the majority of the time “selling” the business (rather than discussing the operating issues with which they’re confronted), then a flag should be raised. Although it is important to understand the business of your customer, being constantly “sold” on why the business is so good and has so much potential should raise an eyebrow. I think most of the management team would agree that we are generally retained to support the customer and to help manage an operational issue. We are not there to invest in the company and/or to help promote its legitimacy.

- **Industry Association:** One should always be keenly aware of the general characteristics of industry within which the customer operates. Different risks and operating standards are present within various industries that when understood may help us evaluate the risks present. For example, companies that operate in the health/medical care industry are often subject to lengthy billing and cash-receipt cycles (e.g., 90 days) as a result of how the insurance sector works. This is vastly different from a retail operation, which generates most of its sales in cash at the point of contact (but which has much larger inventory issues to manage).

- **The Hot New Business:** Without question, this has been one of the most difficult credit and collection issues for our company during the past year. Needless to say, Dot.Com to Dot.Bomb companies are a perfect example of this. However, other companies in other industries represent just as big a risk. These types of companies tend to be very young, in rapid employee ramp-up stages, make references to additional capital/investments being needed, are prerevenue, and so on. The length of time a business has been in operation should be an important focal point. A company that has been in business for 10 years, weathered an economic downturn, and built a solid reputation helps ease some anxiety, as opposed to a company that is simply riding a short-term economic wave, which almost always crashes.

- **Recent Material Event:** A significant and recent material event with a customer may be cause for concern or optimism. For example, if your customer was recently acquired by another organization, then payment cycles may change, usage levels may fluctuate, and so on. Other common references to events such as these may include a corporate restructuring, senior management terminations, awarding of a large contract, and ramping up for production. Once again, a recent material event shouldn’t be viewed as a negative but rather as a business risk that needs to be proactively managed.

- **The Management Team/Reputation:** The importance of a qualified and reputable management team (at the customer) cannot be emphasized enough. The problem for our company is how to gain an understanding of this issue in relation to understanding business risks. I think most management team members would agree that once you’ve operated in a market for a while, some amount of common knowledge is obtained as to whom we want to work with. What is more difficult is to evaluate the management team of the company in a very short period. Key points of reference with this issue may include identifying information on the availability of organization charts, family members involved in management, titles of key management members, qualifications of the management team, availability of basic operational and financial information, use of external professionals (e.g., a CPA firm, banking relations, an insurance company) to support the operation. In addition, the ability of the management team to clearly communicate issues and problems to us (on a proactive basis) is critical. This displays an attitude that our company is a partner rather than just another vendor.

- **Instinct:** Last but not least is the issue regarding following your sense, gut, and/or instinct. If something smells like you-know-what, looks like you-know-what, feels like you-know-what, and tastes like you-know-what, it probably is you-know-what. This doesn’t mean that our company wouldn’t conduct business with the account, but rather that further evaluation and investigation may be needed to manage the business and credit risks present. Sometimes, just touring a facility or observing simple employee actions can provide a great deal of information about the account.

Important Note: It is extremely important to understand that the guidelines just noted do not mean that we will not conduct business with the customer just because flags are raised. Conversely, it may provide us with even greater business opportunities. However, how we manage the risk with a particular customer may change as a result of the flags raised.

(Continued)

Questions and/or Customer Inquiries

Needless to say, hundreds of potential questions could be listed to assist our company's management team in performing inquiries of the customer. Rather than list all of the questions, we've broken them down into the following five main segments/areas:

1. Business Stability: How long has the company been in business? Has it moved recently? If so, why did it move? Has the management team remained intact, or has there been turnover in the managers? How many customers does the company have? Do any customers represent significant accounts (e.g., over 10% of total sales)? What industry would you classify the company as operating in? What issues are currently impacting the industry?

2. Growth Potential: How has the company's overall head count changed during the last year (or three years or five)? Has the mix between temporary staff and permanent staff changed? Is the company expecting any near-term change (increase or decrease) in business? If yes, how will the company manage it (e.g., adequate financing, personnel strategies, etc.)?

3. Management Qualifications and Strategic Focus: What is the total number of years of management experience on board? Has the management team incurred recent turnover? Does the company prepare a business plan? Does the company utilize forecasts/projections? Is this a family-owned-and-operated business? If yes, what type of succession plan is in place (i.e., will the kids take over the business)? What type of training and/or human resource skills are available to the company (internal and external)? Does the company have an active board of directors (or similar type of supporting group)?

4. Financial Resources: How has the company performed financially during the past three years (i.e., has revenue increased, decreased, or remained flat)? Is the company operating at a profit, at a loss, or at the breakeven level? Is the company currently relying on external financing to fund operations, or is it self-sufficient? Are audited/reviewed financial statements available? How often are internal financial statements prepared? How have the company's key financial ratios trended recently (e.g., debt to equity, current ratio, etc.)?

5. Material Events, Transactions, and Relationships: Does the company have any significant partners? If yes, what is the basis of the relationship? Has the company acquired or sold any business interests recently? If yes, what was the strategic objective of these transactions? Who owns the company? What is the legal structure of the company? Is the company private or public?

In summary, we wouldn't expect that all of the preceding guidelines should be applied to every situation. Certain of the guidelines may not be appropriate and/or feasible (or, conversely, other guidelines not mentioned may need to be applied). Rather, the guidelines were prepared to provide the senior management team of our company with an additional tool to assess business and credit risks. Also, a number of alternatives are available to us for better protecting our business interests when a material business risk is detected (i.e., guarantees, prepayment options, letters of credit, UCC [Uniform Commercial Code] security interest filings, etc.). These strategies/tools have not been presented in this memo, as they are often very technical. Our finance/accounting and legal corporate service groups should be contacted to evaluate the appropriateness of these strategies/tools.

The guidelines presented in this “memo” illustrate how one business deals with the issue of avoiding taking on new customers and clients that may prove troublesome and may cause serious problems and losses. An ounce of prevention is worth a pound of cure, as they say. Every business has to adopt its own individual set of rules for new customers.

In this connection, it’s very interesting to note that CPA firms are bound under their professional standards to establish policies and procedures for deciding whether to accept or continue a client relationship and whether to perform a specific engagement

for that client. The main purpose is to minimize the likelihood of association with a client whose management lacks integrity. One of the key characteristics that CPA firms list is that the client should have “appropriately comprehensive and sound internal controls that are consistent with the size and organizational structure of the business” (AICPA, “Acceptance and Continuance of Clients and Engagements,” January 2004, *Practice Alert*, J1-2). So, if your business contacts a CPA, you should be aware that the CPA firm will be doing a check on how good your internal controls are.

Policies and Problems Concerning Internal Controls

A good deal of business is done on the basis of trust. Internal controls can be viewed as a contradiction to this principle. Yet in a game of poker among friends cutting the deck before dealing the cards is not viewed as a lack of trust. Most people see the need for internal controls by a business or by card players—at least up to a point.

Many businesses, especially smaller ones, adopt the policy that some amount of fraud simply has to be absorbed as a cost of doing business and that it's not worth the time and cost of instituting and enforcing an elaborate set of internal controls. This mind-set reflects the fact that business by its very nature is a risky venture. Despite taking precautions, you can't protect your business against every possible risk. This is true but it is also true that a business invites trouble and becomes an attractive target if it doesn't have basic internal controls. Deciding how many different internal controls to put into effect is a tough call.

Internal controls are not free. Internal controls take time and money to design, install, and use. It's difficult to measure or to estimate the costs of an internal control or of a related group of related internal controls in one area of the business—such as purchasing, or cash receipts, or payroll, or customer credit.* Fur-

*One exception to this general comment is the cost of fidelity insurance. The insurance company quotes a definite cost for premiums per period under these policies. Also, it should be noted that the insurance company will do a background investigation on each employee being bonded under a policy, which is a good internal control.

thermore, there can be serious side effects from some internal controls. Customers may resent certain internal controls, such as checking backpacks before entering a store, and take their business elsewhere. Employees may deeply resent entry and exit searches, which may contribute to low morale.

It's very difficult to estimate the number of instances of fraud prevented by the internal controls used by a business and the damage that would have been done by the frauds. Where do managers look for information about fraud, then? Well, for one thing, they read articles in newspapers about frauds. Also, managers trade information with business associates. Business trade associations provide information about frauds in the industry in formal reports. At regional and national meetings, managers swap stories about fraud. Some cases of fraud are truly astonishing.

You wouldn't think the perpetrator could have gotten away so long with the fraud or could have stolen such a large amount without being noticed. We remember newspaper stories years ago reporting that a long-time, trusted bookkeeper had stolen virtually half of the assets of a small bank in the Midwest. This happened to more than one bank, as a matter of fact. The bookkeeper realized that many of the savings accounts in the bank were owned by older depositors and were inactive. The bookkeeper also knew that the bank officers never took a close look at these accounts.

So the bookkeeper "withdrew" money from these savings

accounts and sent monthly statements to the depositors that reported their original balances. Because the bookkeeper prepared the depositor statements, it was easy to falsify the balances. The simple internal control of separating the duty of preparing depositor statements from the duty of recording deposits and withdrawals in the accounts would have prevented the fraud, unless the two employees colluded. Of course, the bank's officers should have been held accountable for not keeping a close eye on inactive savings accounts.

Keep in mind that internal accounting controls are not 100% foolproof. A disturbing amount of fraud still slips by these preventive measures. How are these frauds found out? Well, the 2003 Fraud Survey by KPMG reported that common methods for uncovering frauds included:

- ◆ Internal controls
- ◆ Internal audits
- ◆ Notification by an employee
- ◆ Accident
- ◆ Anonymous tip
- ◆ Notification by customer
- ◆ Notification by regulatory or law enforcement agency
- ◆ Notification by vendor
- ◆ External audit

One test of a good internal control is that it will detect a fraud if it fails to prevent it. Of course, this is like closing the barn door after the horse has escaped. Still, it's critical to learn what fraud has happened in order to close the loophole in the system.

An internal control may fail because it is not carried out conscientiously or because it is done in a perfunctory manner. In theory, managers should not tolerate such a lackadaisical attitude toward internal controls by employees. But until something serious happens, managers may let this attitude slide. Sometimes a manager intervenes and overrides an internal control. This sets an extremely bad example and, in fact, might be evidence of fraud by the manager.

Fraud by high-level managers is particularly difficult to prevent and detect. By the very nature of their position, these managers have a great deal of authority and discretion. Their positions of trust and power give them an unparalleled opportunity to commit fraud and the means to conceal it. If you have any doubt about this, look in the financial press over the past few years and read the many articles describing the gross abuses by top executives of many corporations. Evidently their huge salaries and stock options were not enough. One commentator said it's not just about money, but rather about hubris—meaning that these individuals did not consider themselves bound by normal rules of behavior and they had to demonstrate that they could break the rules. Good old-fashioned greed seems behind most of the corporate scandals, however.

Public Companies and Internal Controls

As you probably remember there was a plethora of high-profile business fraud cases over recent years—Enron, WorldCom, Waste Management, Rite Aid, HealthSouth, and many more. Then came along the mutual fund scandals of 2003. I've lost count of the number of high-level executives that have pleaded guilty to extremely serious fraud charges. Many have gone to jail. One result of these many scandals was passage of the Sarbanes-Oxley Act of 2002, which sailed through Congress and was immediately signed by President George Bush. The act had a major impact on the CPA auditing profession, including establishing the Public Company Accounting Oversight Board to oversee the auditing profession.

One section of the Sarbanes-Oxley Act deals with internal controls of public companies. PricewaterhouseCoopers, one of the Big Four CPA firms, ran a full page ad in the *Wall Street Journal* (March 12, 2003, A20) under the main title “Internal Control Is No Longer Just Internal.” Three paragraphs describe the act's impact on internal controls:

The Sarbanes-Oxley Act of 2002 includes several important sections related to internal control for public companies—the spirit of which is to improve the completeness, accuracy and transparency of financial reporting and to foster compliance with laws and regulations.

Section 404, a key part of Sarbanes-Oxley, requires an annual assertion by management regarding the effectiveness of internal control

over financial reporting, as well as an attestation by the company's auditors on management's assertions.

Many public companies have long relied on control procedures to guard against fraud, unethical behavior and honest human error. But now management not only will be asked to acknowledge its responsibility for having in place an adequate internal structure, it will need to assess the effectiveness of that structure, publicly report that assessment, and subject that assessment to attestation by the company's auditors.

The act applies to publicly owned businesses, which include approximately 10,000 corporations whose securities (stocks and bonds) are traded in public markets. These are large businesses, of course. Roughly speaking, a business needs to have a market cap of \$25 million or higher to be affected by the regulations under Sarbanes-Oxley. One concern is whether there might be a “trickle down” effect on small businesses.

States and other regulatory agencies might use the act as a model to pass similar laws that cover businesses domiciled in their states. It seems more likely, however, that states will be more interested in other features of the act—especially the sections dealing with which services CPAs should be prohibited from providing their audit clients in order to ensure the independence of CPAs for doing audits.

Large businesses have one tool of internal control that is not practical for smaller businesses—*internal auditors*. Most large

businesses, and for that matter most large nonprofit organizations and governmental units, have internal auditing departments. The internal auditors have broad powers to investigate any of the organization's operations and activities, and they report their findings to the highest levels in the organization. Small

businesses cannot afford to hire a full-time internal auditor. But even a relatively small business should consider hiring a CPA to do an assessment of its internal controls and to make suggestions for improvement. In fact, this might even be of more value than having a CPA audit its financial statements.

Why Did They Do It?

The easy and quick answer is that people commit fraud for the money. However, this shallow answer does not get to the root causes of why people take risks and engage in fraud. Good internal controls should make it difficult for employees and anyone else with whom a business deals to carry out a fraud. But internal controls are lacking in many situations, or the controls are not enforced. In many situations, people so inclined see the opportunity and devise all sorts of ways to steal money and other assets from a business. Do they need the money that bad? Don't they see the risks of getting caught?

Well, many people seem to think that business is a fair target because businesses rip them off every day. Or they might commit fraud to get even with the owner of a business. I was passing through an airport recently and got talking with a man working in one of the stores in the airport. He asked what I did, and I told him I was a retired professor of accounting and that I had written several books on accounting and financial business management. We got talking and he told me that he had served time in the state penitentiary for fraud. Of course, I asked why he did it.

He was the accountant for a business. He said that the owner of the business was arrogant and treated him with contempt. So, to get even as it were and to prove that he could do it, he embezzled \$300,000 over a period of years. However, he was caught and convicted. He didn't go into details regarding how he was caught. Ironically, he had just returned from being a guest

speaker at a national convention of forensic accountants and fraud specialists. (He showed me the permission letter signed by his parole officer to travel to Los Angeles for his talk.) Of course, I think he did it for the money, but the other factors probably played a role also in his fraud.

How do people that commit fraud rationalize or justify their actions in their minds? A line from the *Seinfeld* comedy series offers a clue. In one episode, when Jerry asked George, "How do you beat a lie detector test?" George responded "Remember, it's not a lie if you believe it's the truth." Fraud often originates as a result of a number of different complex business factors that are often misunderstood and, worse yet, difficult to detect. Fraud involves a variety of business, personal, emotional, and other factors that can encourage even the most honest, hard-working person to push the limit of what's legal and reasonable to what's illegal and dishonest.

Fraud driven by the need to survive probably is far more commonplace and represents a much greater risk to the average business than fraud driven by greed alone. How far will a business owner push the envelope to survive? The business owner views his or her company as a part of the family and will do almost anything to ensure its survival. Wouldn't you do the same for one of your children?

A simple adjustment or revision to an estimate may be all that's needed to make the company's financial statements look much better. The mentality of "I'll make up for it next quarter or

next year” is prevalent. An employee in a bind (health, spousal layoff, etc.) may push the envelope by simply “borrowing” an asset for a while with the intent to repay. An employee may feel he or she should receive a bonus for hard work and takes advantage of a simple control lapse to reap an added benefit.

Businesses should know that their employees and managers will sometimes have problems paying their bills on time, to say

nothing about all the other financial pressures caused by divorce, health problems, medical emergencies, kids going to college, drug addiction, and on and on. You can make the argument that a business is responsible for having good internal controls that prevent its employees and managers from committing fraud. Good internal controls are not only good business, but also good for everyone.

Capsule Summary

Most people are honest most of the time. Businesses have to deal with the exceptions to this general rule. A business cannot afford to assume that all the people with whom it deals are honest all of the time. Fraud against business is a fact of life. One function of business managers is to prevent fraud against their business. It goes without saying that managers should not commit fraud on the behalf of the business. (But some do, of course.)

A business is vulnerable to many kinds of fraud from many directions—customers who shoplift, employees who steal money and other assets from the business, vendors who overcharge, managers who accept kickbacks and bribes, and so on. The threat of fraud is present for all businesses, large and small. No one tells a business in advance that they intend to engage in fraud against the business, of course. Compounding the problem is the fact that many people who commit fraud are pretty good at concealing it.

Every business should institute and enforce controls that are effective in preventing fraud. An ounce of prevention is worth a pound of cure. And a business needs many accounting controls to ensure that its financial records are accurate, timely, and complete. Otherwise, its financial reports and tax returns may be seriously mistaken and misleading. The terms *internal*

controls and *internal accounting controls* generally refer to both antifraud controls and antiaccounting error controls. Nevertheless, it's useful to keep in mind the difference between controls designed primarily to stop fraud (such as employee theft) and procedures designed to prevent errors creeping into the accounting system.

The chapter provides examples of frauds that cost a business hundreds of thousands of dollars. Internal control guideposts for managers are explained, which they can use as a checklist to assess the adequacy of their business's internal controls. One company's guidelines for accepting new customers and clients are presented in the chapter. Controls for this area are often overlooked by many businesses.

Problems in managing internal controls are discussed, including cost/benefit trade-offs and what to do when fraud is uncovered. The responsibilities of top management of public companies for internal controls under the Sarbanes-Oxley Act of 2002 are explained briefly. This act was the direct result of the plethora of high-profile corporate fraud over the past few years. Finally, the chapter briefly explores the question, "Why did they do it?" It's not just the money, although greed is certainly a motivating factor.

MANAGING YOUR PROFIT ACCOUNTING: YOU MIGHT MASSAGE THE NUMBERS, BUT DON'T COOK THE BOOKS

*“Accountants would rather be precisely wrong
than approximately correct.”*

—Kenneth Boulding, late economist
who had a well-known sense of humor

The quoted one-liner by Ken Boulding plays off the caricature green-eyeshaded accountants so obsessed with details that they lose sight of the main purpose of what they're doing. As in most humor, there's an element of truth in this quip. Accountants tend to view accounting as an end in itself. Business managers look at accounting as the means to an end—the means to assist in operating the business and to help in achieving its financial goals. Accountants like to stick closely to the rules. Business managers are willing to bend the rules if necessary. Accountants think that profit depends on the facts. Business managers argue that profit depends on how you look at the facts.

This chapter takes the business manager's viewpoint. One main theme is that managers should be intimately involved with the profit accounting of their business. Being managers, they call the shots and make the final decisions. Managers depend on the

expertise and experience of their accountants, of course. Business managers should work closely with their accountants so that both are on the same page and singing the same tune. But we're reminded of the adage, "War is too important to be left to the generals." Likewise, profit accounting is too important to be left to the accountants.

Business managers need a basic understanding of profit accounting—not the debit-and-credit bookkeeping mechanics of accounting, but the way that choices of methods and estimates affect the profit and the financial statements of the business. Managers should be clear on the difference between massaging the numbers and fluffing the pillows (which are accounting manipulations tolerated in the financial world) and accounting fraud and cooking the books (which are practices that are not tolerated and might land you in jail).

The Nature of Profit Accounting

One primary function of accountants is to prepare the financial statements of the business in order to report its profit (or loss) for a period and its financial situation at the end of the period. Table 10.1 presents an illustrative income statement and balance sheet for a midsize business. These two financial statements are not the whole of a financial report. The statement of cash flows and footnotes to the financial statements are included in a financial report. This is not the place to delve into the differences between financial reports of public and private companies and between larger and smaller private companies. Profit accounting issues and problems are largely the same for all businesses.

As you probably know, the income statement for a period reports the revenue minus the expenses of a business for that period. The bottom-line profit is usually labeled “net income” or “net earnings.” You might quickly read down the company’s income statement in Table 10.1. The company reports \$2,642,000 net income for the year. Is this key figure correct? Is its sales revenue figure true and correct, and is every one of its expenses true and correct?

Chapter 9 emphasized that every business needs good internal

accounting controls to eliminate (or at least to minimize) honest and unintentional accounting errors. Business managers should keep alert for possible errors in their accounting systems. Errors are not the concern here. Rather, the purpose of raising these questions is to direct attention to the nature of profit accounting and its inherent, unavoidable problems.

Is profit accounting comparable to measuring the size of a parcel of land, or is it more like judging an athlete’s performance in a gymnastics competition? Well, it has elements of both. Sometimes profit accounting is referred to as “scorekeeping.” This analogy assumes that the scoring rules for the business profit game are clearly defined and that there’s an impartial referee to make the calls. Such is not the case.

A profit report, such as the income statement in Table 10.1, appears to be factual and precise. A profit report depends first and foremost on the accounting methods used to record revenue and expenses. These accounting methods are not singular and uniform but involve choices among alternatives. Moreover, many estimates and assumptions are made that have the result of tilting the accounting numbers one way or the other.

TABLE 10.1—EXAMPLE OF INCOME STATEMENT AND BALANCE SHEET FOR A BUSINESS**Income Statement for Year**

Sales Revenue	\$52,000,000
Cost of Goods Sold	<u>33,800,000</u>
Gross Margin	\$18,200,000
Depreciation Expense	785,000
Amortization Expense	325,000
Other Operating Expenses	<u>12,480,000</u>
Operating Earnings	\$ 4,610,000
Interest Expense	<u>545,000</u>
Earnings before Tax	\$ 4,065,000
Income Tax Expense	<u>1,423,000</u>
Net Income	<u>\$ 2,642,000</u>

Balance Sheet at End of Year**Assets**

Cash	\$ 3,265,000	
Accounts Receivable	5,000,000	
Inventory	8,450,000	
Prepaid Expenses	<u>960,000</u>	
Current Assets		\$17,675,000
Property, Plant, and Equipment	\$16,500,000	
Less Accumulated Depreciation	<u>4,250,000</u>	12,250,000
Goodwill	\$ 7,850,000	
Less Accumulated Amortization	<u>2,275,000</u>	<u>5,575,000</u>
Total Assets		<u>\$35,500,000</u>

Liabilities and Owners' Equity

Accounts Payable	\$ 3,320,000	
Accrued Expenses	1,515,000	
Income Tax Payable	165,000	
Short-Term Notes Payable	<u>3,125,000</u>	
Current Liabilities		\$ 8,125,000
Long-Term Notes Payable		4,250,000
Stockholders' Equity:		
Capital Stock (800,400 shares)	\$ 8,125,000	
Retained Earnings	<u>15,000,000</u>	<u>23,125,000</u>
Total Liabilities and Owners' Equity		<u>\$35,500,000</u>

Different Strokes for Different Folks

Someone must decide which particular methods to use for recording the recurring stream of revenue and expenses of a business. Deciding on accounting methods may be delegated to the business's chief accountant. A small business may depend on an outside certified public accountant (CPA) for advice regarding which accounting methods to adopt. In any case, managers should not abdicate their responsibility here. Managers should be intimately involved in making the key accounting decisions for the business—they should either make the final decisions on accounting methods or at least review and put their stamp of approval on the methods. Whatever their role in making accounting decisions, managers definitely should understand that different methods cause different results in their financial statements, especially the income statement. Profit depends on which methods are used to record the revenue and expenses of a business.

For revenue and for many expenses, there is not just *one and only one* method that has to be used, but rather there are *alternative* methods to select from. One of the alternatives has to be used; the choice is left to the business. The alternatives are equally acceptable under established financial accounting standards. One method does not dominate the other(s) on theoretical grounds, or according to the authoritative pronouncements on accounting standards, or by the particular circumstances of a business. Accountants have not whittled

down the alternatives to just one method that all businesses should use.

These alternative accounting methods differ regarding *when* revenue and expenses are recorded. Compared with the alternative(s), one method records revenue or an expense either sooner or later. In other words, the differences between alternative accounting methods are *timing* differences. The term *conservative* accounting means that the profit accounting methods used by a business, in normal circumstances, record revenue later and expenses sooner. Thus, profit is reported later rather than sooner. The term *aggressive* accounting means just the opposite: The business records revenue sooner and expenses later causing the result that, in normal circumstances, profit is reported sooner rather than later.

Once specific profit accounting methods have been chosen, a business sticks with these methods consistently over time. (Well, a business may occasionally change from one method to another, although switching methods is not common and is frowned upon.) The selection of basic revenue and expense accounting methods is the first decision point in the profit accounting process of a business. But this is not the end of the story. There are other accounting decision points, which are much more dicey.

Before closing its books for the period, a business should take a hard, critical look at its assets and liabilities, as well as at any

other financial problems that may be lurking in the bushes. The business should take a final look at its accounts to determine whether it should make *end-of-period adjustments* to its revenue and expense accounts for the period. And the business should decide whether it should record any *unusual or extraordinary*

losses or gains. Like choosing among the alternative revenue and expense methods, the end-of-period accounting problems are essentially *timing* questions: Should certain adjustments and certain gains or losses be recorded *now*, or should the effects be deferred until *later*?

Bad Debts, Inventory Shrinkage, and Product Warranty Liability

Most businesses have accounting problems with two assets in particular: (1) accounts receivable and (2) inventory. The problem with accounts receivable concerns *bad debts*—customer balances that the business will be able to collect only in part or not at all. Deciding exactly *when* and *how much* of these particular balances to write off and charge to expense is rather arbitrary. Different businesses follow different rules for recording bad debts expense.

One method is to charge off all customer balances that become, say, 60 days past due or 90 days past due. Or a business may wait until a customer actually declares bankruptcy or skips town. Another approach is to decide bad debt write-offs or write-downs on a customer-by-customer basis; each receivable is evaluated on its own merits.

The problem with inventory concerns what generally is called *inventory shrinkage*. In its balance sheet at year-end, the business reports \$8,450,000 in inventory (see Table 10.1). The handling and storage of products usually results in some amount of breakage, deterioration, damage, theft, obsolescence, and losses from other causes. One important internal accounting control is doing a regular physical count and inspection of products being held in inventory in order to determine the extent of inventory shrinkage.

A good time to do this is at the end of the accounting year. Of course, the cost of products missing from inventory is recorded as an expense. And the loss of value caused by products that have

been damaged or that have deteriorated, as well as the loss in market value of products that cannot be sold at normal prices, should be recorded. These inventory write-downs from their original costs depend on evaluations by managers regarding the salability and likely sales prices of the products.

Accounts receivable and inventory are typically the two biggest end-of-period accounting problems, but a business can have other problem areas as well. For instance, a business may have to service products after the sales to its customers under warranty and guarantee provisions. In its balance sheet at year-end, the business reports \$1,515,000 for its accrued expenses liability (see Table 10.1). A significant component of this amount is the cost of fulfilling its warranties and guarantees for products already sold. Estimating the future costs of fulfilling these obligations is not cut-and-dried, as you might imagine. As with accounts receivable and inventory, managers play a key role in deciding the costs of these future obligations that are recorded as expense. Usually, this type of expense is recorded by an end-of-year adjusting entry.

In summary, adjusting accounting entries—such as for bad debts, inventory shrinkage, and product guarantee costs—can have a huge impact on the recorded profit (or loss) for the period. In making or approving these accounting decisions, managers can lay a heavy hand on the profit (or loss) for the period.

The income statement presented in Table 10.1 does not report any unusual or extraordinary losses or gains for the year,

such as a one-time write-off of fixed assets that have been abandoned or sold off for salvage value, or a large legal settlement that was in favor of the business. Many public businesses disclose in their income statements “asset restructuring” and employee severance charges running into the billions of dollars. It’s not unusual for a public company to write off a big chunk of its intangible assets—just wipe them off its balance sheet in one fell swoop.

The whole area of recording extraordinary, nonrecurring

losses and gains is beyond the scope of this book. Suffice it to say that many businesses record these losses too often, apparently to clear the decks of future expenses. This is a very troublesome aspect of financial reporting by public companies, which causes serious problems for security analysts and investors trying to get a bead on the normal, recurring profit performance of a business. (You can read more on this topic in John A. Tracy, *How to Read a Financial Report*, sixth ed. [New York: John Wiley & Sons, 2004], starting on page 169.)

Timing Discretionary Expenses to Lift or Lower Profit

As you can see in Table 10.1, the company reports \$12,480,000 “other operating expenses” for the year. This composite total includes many different kinds of expenses, including payroll and payroll taxes, employee health and medical insurance benefits paid by the business, contributions by the business into the retirement plans for employees, advertising and sales promotion costs, casualty and general liability insurance premiums, gas and electricity bills, real estate and personal property taxes, back office costs (accounting, computing, recordkeeping, etc.), delivery and transportation costs, repair and maintenance expenditures, employee training costs, and many other expenses.

Consider two operating expenses: (1) salaries and wages and (2) rent. On a regular basis—every week, or two weeks, or month—these expenses are paid and recorded. The business does not have discretionary latitude over when these expenses are recorded. Many operating expenses are of this character, such as gas and electric bills, insurance premiums, and real estate taxes. In contrast, business managers have discretion over the timing of several expenses: advertising, employee training, repair and maintenance, sales incentive programs, and so on. Business managers decide *when* these expenses are incurred, which impacts profit for the period. For example, a manager could decide to spend more on repair and maintenance toward the end of this year, rather than waiting until early next year when the building normally would be painted, or when its equipment would nor-

mally be overhauled, or when new tires would normally be put on its delivery trucks, and so on. By the timing of discretionary expenditures, a manager can boost expenses this year and thereby depress the amounts of taxable income and profit recorded this year. The reverse effect on profit is rendered if a manager delays making such expenditures until next year.

Generally, a manager has a fair amount of slack regarding the timing of several expenses. There’s nothing illegal about moving these expenses forward or back in time for the primary purpose of depressing or boosting profit for the year. The business’s CPA auditor may not like this sort of profit manipulation, but there’s little he or she can do about it, unless expense shifting between years gets out of hand.

We have worked on audits where a business changed its bottom line 20% by using these tactics. It’s hard to prove, but we would say that almost any business can move its bottom line up or down by at least 10% by manipulating one or more of its discretionary expenses. If managers are really good at this sort of thing, our guess is that the bottom line of most businesses could be shifted up or down by 25% or more.

Keep in mind the “robbing Peter to pay Paul” effect of expense timing. Suppose you hold off and don’t do certain repair and maintenance work during November and December, the last two months of your fiscal year. This work would have cost \$25,000. Your expense this year would be \$25,000 less of course. But, presumably, this work should be done and will be done early

next year; so next year's expenses are hit with an extra \$25,000—unless you do the same thing again during the final two months of next year. Of course, this works in reverse as well. If you had accelerated \$25,000 of repair and maintenance work in December, your expenses would have been \$25,000 higher this year but would escape this \$25,000 of expenses next year.

As you probably know, a business does not disclose in its financial report whether it is manipulating its expenses. CPA auditors do not comment on this practice, unless the auditor judges

that the manipulations are excessive and beyond reasonable limits that are tolerated in the business world. You might argue that business managers should not manipulate the timing of their expenses (or revenue either, for that matter) and that they should let the chips fall where they may. But managers get paid to make profit happen; and if they need to, many managers are willing to do a little massaging of their expense numbers, unless the chief executive makes it very clear that he or she will not tolerate any tinkering with the accounting numbers.

Summing Up So Far: Three Ways Managers Control Profit Accounting

Summing up briefly, managers can take three bites out of the profit accounting apple.

1. They can decide which accounting methods to use for recording the ongoing stream of revenue and expenses of the business. In making these choices, managers can implement either a conservative or an aggressive accounting policy for their business.

2. Managers can play a critical role in recording adjusting entries to recognize such things as uncollectible accounts receivable (bad debts), inventory shrinkage write-downs, and liability for future costs required under product warranties.

3. Managers can decide to delay or to accelerate several discretionary expenses in order to push up or press down the profit that is recorded for the period.

The evidence is fairly convincing that many public companies manipulate the timing of their expenses to smooth out the fluctuations and perturbations in the year-to-year profit numbers that would have to be reported if they did not intervene in the accounting process. The purpose is to report a more steady profit performance trend line, which stock investors seem to prefer. This is called *income smoothing*, or the *management of earnings*. It is more difficult to gather evidence regarding whether *private* businesses engage in income smoothing. They

may have less reason to do so, although their owners may also prefer a steady earnings trend rather than a zigzag, year-to-year profit line.

Despite the opportunity, many managers do not jump into the profit accounting fray. They steer clear of this aspect of the business. Clearly, many business managers have an aversion to anything accounting. And accountants are not anxious to have managers looking over their shoulders. They would just as soon be left alone in making the profit accounting decisions for the business. But accountants don't necessarily know everything that managers do. Some of the missing information could have a bearing on the estimates for accounting adjusting entries.

Accountants can intimidate managers with their technical jargon. And accountants make frequent reference to their "generally accepted accounting principles," as if these official rules constitute the holy grail of profit accounting. If you are a manager, don't let your accountants bluff you on this. Profit accounting is in fact very subjective and flexible. This does not mean that a business and its managers are free to do whatever they please.

For preparing its financial statements that are released outside the business, the basic revenue and expense methods used by a business must be consistent with established standards, which are called *generally accepted accounting principles* (GAAP). The GAAP rulebook is written for professional accountants. Nonaccountants can't really wade through the technical language of these

official pronouncements. Moreover, the rules change somewhat over time. Managers have to rely on their accountants to keep the business within the boundaries of GAAP.

A business would invite all kinds of trouble if it were to issue a profit report (income statement) that was in material violation of GAAP. This is very much like saying that a business should not violate the law. Staying within the boundaries of the law still

leaves a business a great range of choices regarding how it operates. Likewise, staying within the boundaries of GAAP still leaves a business a range of choices regarding how it accounts for profit. Managers should take charge of their profit accounting, like they take charge of most everything else in the business. Otherwise, they are only passengers on the profit ship instead of being the captain.

Two Profit Pictures for One Business

Please refer to the profit report (income statement) for the business in Table 10.1. This is not the only profit report that could have been prepared by the business. As was explained earlier, the business could have used different accounting methods, and it could have made different estimates for recording adjusting entries. Also, the business could have spent more or less for certain discretionary expenses. Therefore, the business could have recorded different figures for its sales revenue and expenses during the year. The business uses moderately aggressive accounting methods, which are within the boundaries of GAAP. Instead, it could have chosen to use more conservative accounting methods and estimates. Table 10.2 presents the business's yearly statement that discloses sales revenue and expenses that would have been recorded if the business had used more conservative profit accounting methods. The first (left) column shows the figures based on the aggressive accounting methods actually used by the business (which are the same figures as shown in Table 10.1, of course). The second (right) column presents the sales revenue and expense figures and the bottom-line profit number that would have been recorded if the business had adopted more conservative profit accounting methods.

The business could have used a slightly different method for recording its sales revenue. The difference has to do with exactly when a sale is considered final. For instance, customers may have a week or two during which the products can be returned with no questions asked. The business could book the sale as soon as the

TABLE 10.2—TWO INCOME STATEMENTS FOR SAME YEAR

	Aggressive Accounting	Conservative Accounting
Sales Revenue	\$52,000,000	\$51,500,000
Cost of Goods Sold	<u>33,800,000</u>	<u>33,875,000</u>
Gross Margin	\$18,200,000	\$17,625,000
Depreciation Expense	785,000	870,000
Amortization Expense	325,000	375,000
Other Operating Expenses	<u>12,480,000</u>	<u>12,725,000</u>
Operating Earnings	\$ 4,610,000	\$ 3,655,000
Interest Expense	<u>545,000</u>	<u>545,000</u>
Earnings before Tax	\$ 4,065,000	\$ 3,110,000
Income Tax Expense	<u>1,423,000</u>	<u>1,088,000</u>
Net Income	<u>\$ 2,642,000</u>	<u>\$ 2,022,000</u>

products are delivered, or it could wait for the sales return period to expire. Another business may install products sold to its customers, which may require a second or third visit to a customer's premises to complete the installation and to have the customer sign off on the sale. The business could wait until the installation is finally completed before recording the sale, or it could record the revenue when the first round of installation is done.

The business could have used a different method for recording the cost of products it sold during the year, which would have caused a higher amount for the cost of goods sold expense reported in its income statement. The difference has to do with the sequence in which the costs of products manufactured or purchased are charged to expense. If product acquisition costs don't vary during the period, there's no difference. Typically, however, acquisition costs drift upward over time. (Of course, some product costs go down or fluctuate over time.)

One method, called *first-in, first-out* (FIFO), uses the first-in, or earliest, cost recorded into inventory as the first cost to charge to expense, then the next cost, and so on in chronological order. The alternative method, called *last-in, first-out* (LIFO), uses the last in, or most recent, costs into inventory as the costs to charge to cost of goods sold expense. Basically, LIFO follows the reverse chronological order sequence for picking costs to charge to cost of goods sold expense.

By using a different method, the business's depreciation expense for the year would have been higher. This has to do with how quickly the costs of a business's fixed assets (its long-term operating assets) are charged off to expense. The so-called *accelerated method* adopts a relatively short useful-life estimate for a fixed asset and loads most of depreciation expense in the front end of its useful life. The *straight-line method*, in contrast, uses longer useful-life estimates for fixed assets and spreads depreciation evenly over the years.

To amortize the cost of intangible assets, such as goodwill, accountants use only the straight-line allocation method. However, the business could have used shorter economic-life estimates for amortizing the costs of its intangible assets. The business could have been more conservative in making adjusting entries for bad debts and for inventory shrinkage. So, its "other operating expenses" would have been higher, as shown in Table 10.2.

Interest expense depends on the amount borrowed, which would have been the same regardless of the accounting methods used by the business. So, "interest expense" for the year is the same in both scenarios. Generally, a business uses the same basic accounting methods for determining both its taxable income and its earnings before tax reported in its income statement. Therefore, as you see in Table 10.2 the "income tax expense" would decrease in proportion to the decrease in "earnings before tax."

As you see in Table 10.2, the business could have reported \$2,022,000 bottom-line profit instead of the \$2,642,000 net income it did report. The difference is \$620,000, or 23% less than its reported profit. Does the difference make any difference? The profit figure reported by a small business definitely influences the amount of cash dividends from net income that are distributed to its stockholders. For a public company, its earnings-per-share amount (net income divided by the number of shares outstanding) is the most important number affecting the market value of its capital stock shares.

We present an alternative profit accounting scenario in Table 10.2. But we don't mean to suggest that a business keeps two sets of books—one for public consumption and the second being the real story, as it were. Some people seem to believe that a business keeps the true numbers hidden from prying eyes and that only management insiders know the true state of affairs about its profit and financial condition. Not many, if any, businesses go to the trouble of keeping a complete second set of books (i.e., making a second series of accounting entries for all the transactions of the business that are posted in a second set of accounts). Keeping a second set of accounting records would be a nontrivial task, to say the least.

But managers have, or should have, a good idea of how different their profit number would be if they had made different estimates in their end-of-year adjustments. Also, as explained earlier,

a manager may deliberately delay or accelerate making certain discretionary expenditures in order to lift profit up or push it down for the year. In these situations, the manager certainly has a profit-effect number in mind.

In short, a business does not have a second set of books to refer to for an alternative profit number. But its managers should be able to estimate approximately how much “play,” or elasticity, there is in its profit number for a period. In their financial reports, businesses do not disclose more than one bottom-line profit number.

The only other profit number you occasionally see in a financial report is a so-called “pro forma” profit figure. Often this term refers to a profit measure before a special, nonnormal charge or gain is taken into account. Sometimes the term is used to refer to the combined profit of two companies—as if two had been merged before they will be merged in fact. Or the term may refer to the past profit of a business as if it had disposed of a segment before it did in fact. Don’t confuse a pro forma profit figure with the bottom-line profit figure in an income statement.

Asset and Liability Effects of Revenue and Expenses

Different accounting methods and adjusting entries cause differences in the amounts of revenue and expenses that are recorded, as just explained. Different accounting methods and adjusting entries also cause differences in the amounts (balances) in assets and liabilities, which are reported in the company's balance sheet at the end of the period. In recording sales revenue, either cash or accounts receivable is increased. (Some businesses receive cash from customers in advance of delivering products or services to them; in recording sales revenue, the liability for revenue collected in advance is decreased.) In recording expenses, an asset account is decreased, or a liability account is increased. The assets and liabilities affected by sales revenue and expenses are generally called *operating* assets and liabilities.

The operating assets and liabilities for the business example are shown in the shaded areas of Table 10.3. These year-end balances would have been different if the business had used different accounting methods and had made different estimates for its year-end adjusting entries. For instance, accelerated depreciation results in higher amounts in the accumulated depreciation account, which is deducted from the cost of fixed assets—property, plant, and equipment (see Table 10.3). Therefore, the book value of fixed assets (i.e., the undepreciated cost of the assets) is lower than if the business used straight-line depreciation.

The LIFO inventory cost reported in the balance sheet is

considerably lower than the FIFO inventory cost (assuming product costs have risen steadily over the years). The amount reported for accounts receivable would be lower if the business had estimated that more of its accounts receivable would turn out to be bad debts than it did. Cash would be higher if discretionary expenditures had been delayed to next year. Or perhaps accounts payable is lower because these expenditures are generally purchased on credit. The liability for accrued expenses would be higher if the business had been more conservative in estimating its future costs for product warranty and guarantee work.

In general, the main purpose of massaging revenue and expense numbers is not to manipulate the asset and liability balances reported in the company's balance sheet,* but to control the amount of profit reported for the period. But you can't

*One accounting trick called "window dressing" is used to increase a company's year-end cash balance or to improve the appearance of its short-term solvency. Cash receipts from customers in payment of their accounts receivable that are not actually collected until after the end of the year are recorded as if the money were received on the last day of the year. The cash balance is increased, and the accounts receivable account is decreased. There are other reasons for holding the books open a few days in order to capture transactions that actually take place after the close of the year.

TABLE 10.3—OPERATING ASSETS AND OPERATING LIABILITIES (IN SHADED AREA)

Balance Sheet at End of Year		
Operating Assets (All assets in this example)		
Cash	\$ 3,265,000	
Accounts Receivable	5,000,000	
Inventory	8,450,000	
Prepaid Expenses	<u>960,000</u>	
Current Assets		\$17,675,000
Property, Plant, and Equipment	\$16,500,000	
Less Accumulated Depreciation	<u>4,250,000</u>	12,250,000
Goodwill	\$ 7,850,000	
Less Accumulated Amortization	<u>2,275,000</u>	<u>5,575,000</u>
Total Assets		\$35,500,000
Operating Liabilities		
Accounts Payable	\$ 3,320,000	
Accrued Expenses	1,515,000	
Income Tax Payable	165,000	\$ 5,000,000
Debt Sources of Capital		
Short-Term Notes Payable	\$ 3,125,000	
Long-Term Notes Payable	<u>4,250,000</u>	7,375,000
Equity Sources of Capital		
Capital Stock (800,400 shares)	\$ 8,125,000	
Retained Earnings	<u>15,000,000</u>	<u>23,125,000</u>
Total Liabilities and Owners' Equity		\$35,500,000

change profit without also changing the balance sheet. Sophisticated financial statement analysts search for red flags in the balance sheet that reveal that a business may be using questionable profit accounting. The balance sheet serves as a “whistle-blower” by providing pointers to possible accounting problems or even accounting fraud.

Cooking the Books (Accounting Fraud)

By using the means previously explained, the managers of a business can control the amount of profit recorded for the year. Using these accounting tricks and techniques to manipulate profit is referred to as *massaging the numbers*. Most businesspeople, bankers, and professionals know that this goes on, although it's difficult to know for certain whether a particular business is manipulating its profit numbers or not. One danger is that a business may cross the line and do more than just massage its profit numbers. A business may engage in out-and-out accounting dishonesty with the intent of misleading those who rely on its financial statements.

Businesses in desperate situations may do desperate things. It should not be surprising that when a business finds itself in dire straits, it may resort to distortion and falsification of its profit performance and financial condition. A business resorts to these extreme tactics to buy time, hoping that it will be able to work itself out of its troubles. Or its motive may not be so innocent. The deliberate distortion and falsification of financial statements is popularly called *cooking the books*. Prosecutors call it *accounting fraud*, or *financial reporting fraud*.

Accounting fraud is subject to both civil and criminal law. You are most likely aware of the many high-profile accounting fraud cases that were reported in the press over the past several years. The widespread accounting fraud at some companies (Enron, Waste Management, and HealthSouth come to mind) would take

a book to explain fully. The growth of accounting fraud has spawned a new professional specialty, *forensic accounting*.

Accounting fraud may be part and parcel of a fraudulent business scheme. The fraudulent accounting is done to cover up business fraud—such as recording bribes and kickbacks paid by a business as payments for consulting fees. Or fraudulent accounting may be done to artificially pump up the profit reported by a public corporation in order to inflate the market price of its stock shares so that its executives can make millions of dollars off their stock options or so that managers receive bonuses that are based on the profit performance of the business. Audits by CPAs have a poor track record in discovering accounting fraud in financial statements, even though this is one of the main reasons for having an audit.

Large public companies get most of the press coverage, but accounting fraud is found in businesses that are public and private, large and small. Private businesses, as well as those individuals who suffered losses as the result of accounting fraud, frequently want to keep it out of the press. A private business may engage in accounting fraud to depress the valuation of the business in order to minimize estate taxes when the principal owner dies. Accounting fraud may be done to overstate the valuation of a business when the business is put up for sale. Or a private business may engage in accounting fraud when securing a loan from its bank or in raising capital from its stockholders.

Suppose a business decided on a course of accounting fraud and ordered its accountant to cook the books. The accountant had to decide whether to go along with the scam. We would think that many accountants made the decision not to be involved in the fraud and quit the company. But actual cases have shown that accountants at many businesses did not quit and were active in carrying out the fraud, which made them coconspirators. We read one deposition of an accountant who was under investigation by the Securities and Exchange Commission (SEC). He was accused of participating in an accounting fraud by a business—it was a sad story.

There are many accounting “recipes” for cooking the books. Many accounting frauds consist of overstating sales revenue. A business may concoct a scheme to record substantial amounts of sales revenue sooner than it should or sales revenue for nonexistent sales. The schemes are endless. Here are just a few examples of sales revenue fraud:

- ♦ Products are shipped before scheduled shipment dates without the customers’ consent but are recorded as sales.
- ♦ Customers are sent invoices for goods that are still in the process of being manufactured (sales should not be recorded until products are completed and delivered, of course).
- ♦ A business holds its books open to record sales but shipments are not made until after the close of the year.

- ♦ Duplicate shipments are deliberately sent to customers and recorded as sales, even though the business knows the second shipment will be returned.
- ♦ Shipments are sent to public warehouses, bogus sales invoices are prepared, and sales revenue is recorded.

Many businesses commit accounting fraud by understating some of their expenses or by not recording certain expenses at all. One business did not depreciate its fixed assets, if you can believe it. Another business refused to write off certain of its assets that were obsolete and worthless. A business may not record its liability for a lawsuit that legal counsel has said it will have to pay. A business could have a huge future obligation for environmental damage it has caused over the years, but it may not record this liability. A business could deliberately make wrong estimates for its obligations under its employee retirement plan.

Massaging the numbers involves nudging up or down the recorded profit for the year. Cooking the books, in contrast, involves gross distortions of the facts or the complete falsification of facts. Massaging the numbers puts a spin on the profit message. Cooking the books is a flat out lie. But beware: One person’s spin may be another person’s lie. History teaches that business and accounting fraud has been around a long time. In the late nineteenth and early twentieth centuries, business fraud was widespread, and accounting rules were practically nonexistent. Businesses and accountants are held to higher standards of conduct today.

Capsule Summary

This chapter is not meant to be a “how-to” manual but rather a “watch-out” guide. It deals with the nefarious side of accounting—massaging the numbers and cooking the books. Business managers should be involved in all aspects of making profit, including the accounting for profit. The starting point is understanding the basic accounting methods of the business. However, profit accounting consists of more than selecting which accounting methods to use for recording the revenue and expenses of a business.

The final profit or loss figure for the year depends on estimates and assumptions provided by managers to record the end-of-year adjusting entries, which is the last step in closing the books for the year. The final profit or loss number also depends on the extent to which managers have accelerated or delayed certain discretionary expenditures in order to control the amount of expenses recorded in the year.

Some businesses adopt conservative accounting methods, use conservative estimates for their year-end adjusting entries, and prohibit their managers from timing expenditures to manipulate expenses for the year. Other businesses adopt an aggressive accounting policy. They choose accounting methods that record revenue sooner and expenses later, so that profit is reported as soon as possible. They use optimistic estimates and assumptions for making their year-end adjusting entries. And their managers

may defer certain expenditures until next year to keep expenses lower this year.

Tinkering with or tweaking the estimates and assumptions used in making end-of-year adjusting entries and timing discretionary expenditures to control expenses generally are referred to as *massaging the numbers*. Examples are given to illustrate how revenue and expenses can be manipulated. In the business and financial world, massaging the numbers is viewed as a venial sin, or as an accounting misdemeanor. Few like it, and many rant and rave that it shouldn't go on; but as a practical matter, not much can be done about it.

The main lesson to be learned from the general practice of massaging the numbers is to be more cautious about accepting the bottom-line profit or loss reported by a business. You should realize that this one figure is not the only profit number that could have been reported. Take a profit number with a grain of salt, and keep in mind that the reported profit could have been higher or lower. The quote at the start of the chapter from Ken Boulding makes an important point. The best we can hope for is that a profit number is approximately correct.

Accounting fraud, generally called *cooking the books*, is a different matter altogether. Accounting fraud involves the deliberate distortion and/or falsification of a company's accounting records, usually to report profit that the business has not yet earned, and

may never earn. The purpose is to mislead those who rely on the financial statements of the business. A few examples of revenue and expense accounting fraud are provided in the chapter. The only good thing about cooking the books is that eventually these accounting frauds are found out, although the lid may not blow off for many years.

In closing, we take note of the alarming number of high-profile accounting frauds that have come to light over the past few years. These could indicate a moral decay in our society at

large. Perhaps this is so. But we see a breakdown in one particular mechanism that was in place and that should have prevented these accounting frauds. Businesses have audits of their financial reports by outside, independent CPAs. The main purpose is to have the auditor pass judgment on the accounting and disclosure by the business. The CPA auditors failed to discover these accounting frauds. Hopefully the newly established Public Company Accounting Oversight Board will raise the level of performance of CPA auditors.

Part Three

**SELLING OR
BURYING A BUSINESS**

BUSINESS VALUATION: THE ENDGAME

“Time is the most valuable thing a man can spend.”
—Theophrastus (died 278 B.C.)

Each and every day throughout the world, hundreds or thousands of businesses are bought and sold. From megamergers handled by the power brokers on Wall Street to the local dry cleaning operation being sold after 50 years of family ownership, selling and buying companies represents big business. But how are the values for these transactions determined? Is it similar to residential real estate, where comps (comparables) and appraisals are used? Or is it closer to a retail environment,

where the cost of the product or service is calculated and then a profit component added? This chapter explores commonly applied models and concepts used to generate business valuations and the most critical underlying element in the business valuation process—cash flow. By this we mean *cash flow from operating activities* or *cash flow from profit*. (You might go to Chapter 2 for a refresher on this very important topic before continuing this chapter.)

Why Businesses Are Valued

Before exploring how a business is valued, understanding *why* business valuations are critical to managing an operation is needed. On the surface, the answer to this would appear fairly obvious: How much is this business worth, and (more important) how much will I make from owning all or a portion of this business? Everyone has heard the stories about the young entrepreneur, we'll say Harvey Smindlap, starting a business in his garage, selling it years later for millions of dollars, and living the good life in sunny Southern California (of course hoarding his wealth and not bestowing any of his windfall on his children). There is no question that calculating an owner's value in a business represents a useful piece of information, but this is just one of the many uses of this all-important data point. The "why" part of valuing a business (beyond the obvious) is often more important than the "how," which the following examples and situations illustrate.

Business Management

Business valuations represent an essential element of almost any employee equity participation plan. Businesses often provide long-term compensation incentives to their employees via the utilization of various forms of stock option or equity participation plans. Basically, the goal is to provide the employees with an opportunity to generate future income and compensation in exchange for committing their services to the company for an ex-

tended period of time. Discussing these plans in detail is beyond the scope of this book, but it is important to note that business valuations are essential to ensuring the plans work efficiently.

For example, SAIC, a multibillion-dollar governmental contracting and technology company headquartered in San Diego, California, establishes a fair market value for its stock on a quarterly basis. This is undertaken to ensure that all of its employees, investors, and other interested parties have a fair basis on which to base investment decisions. If an employee needs to liquidate shares owned and sell them back to the company, a fair value or per-share price is readily available. Determining the business valuation (in this instance) supports an invaluable management tool.

Strategic Business Decisions

In today's economic environment, a change in business direction, for whatever reason, can occur almost overnight. A market that once looked like it held all the promise in the world (e.g., providing workers' compensation insurance to California businesses in the late 1990s) can quickly change, resulting in the need to liquidate or terminate the business unit. As such, having a reliable business valuation available can assist management with making important and timely decisions that may impact a company in numerous ways (e.g., losses or gains that may be realized from selling a business or a division could impact accounting reporting, tax planning, investor relations, etc.).

Business Insurance

All businesses bind various forms of insurance to manage operating and legal risks the company is exposed to. It is hard to find a business that goes completely naked and self-insures against every loss it could incur. The most widely used insurance types are general liability (to protect against a customer claiming damages from using the company's product or service), workers' compensation insurance (mandated by almost every state in the country to cover injuries suffered by employees), directors' and officers' (to provide additional liability coverage to the directors and officers of the business), and medical/life (to provide coverage to employees for health-, medical-, and death-related claims).

In addition, almost every business will utilize property and casualty insurance to protect the company's assets from damage and/or loss of use. The basis for determining the property and casualty insurance premium is a function of both tangible (e.g., what is the replacement cost of all the equipment in the office?) and intangible (e.g., what is the value of the business' cash flow stream?) assets. Understanding the value of a business will assist in securing the proper type, form, and amount of property and casualty insurance, which includes the value associated with "loss of use." Companies often mismanage this issue in an effort to reduce expenses (i.e., lowering insurance expense to increase the bottom line) at the risk of exposing the organization to lost income and cash flow streams. Improper insurance coverage can cost a company mightily in terms of impairing its business value.

Life Insurance and Business Planning

Most businesses operating throughout the world are privately held by a family, a small group of owners, or an individual. Quite

often, a need arises to value the business for planning purposes. For example, a corporation may be owned by three partners, all of whom are married. In the event one of the owners dies, the remaining owners may want to purchase the deceased owner's interest in the company from the surviving spouse, rather than having the surviving spouse become a partner (which can often lead to significant management problems).

Often, companies will purchase term life insurance on each owner to provide enough coverage to purchase the interest held. Hence, if a company was valued at \$10 million and the deceased partner owned 25%, term life insurance of approximately \$2.5 million would be required. Rather than utilize internal resources (which the company may not have or the use of which would place it in a difficult operating environment) to purchase the interest, life insurance could be used to help protect all of the parties' interests (including the business itself and the individual owners). Clearly, having a business value established becomes an essential part of the planning and management process.

Individual Estate Planning

Just as, in the previous discussion, business valuation is relevant to life insurance and business planning, valuation is necessary for an individual's estate planning. Large, illiquid, individually held investments can wreak havoc with estate planning and taxation issues if not properly planned for and understood. Having a firm and fair business valuation both supports the estate management process (i.e., there are no delays as different parties squabble over the value of the assets) and provides for a solid data point for financial planning purposes (i.e., the amount of life insurance needed to cover the potential estate tax burden). The failure to plan for estate taxes is not only a problem for the estate, but may be even more of a problem for the business itself as a result of a

forced or premature sale. If the estate cannot secure the necessary funds to cover the estate taxes, it may have no other option than to sell its interests in the business, which may result in new partners/investors or, worse yet, a complete business liquidation.

The “whys” it is important to value a business could be expanded upon. The aforementioned examples highlight that the need to value a business goes well past just “looking to cash out”

or determining “what I’m worth.” Business valuations represent an extremely important piece of information supporting a company’s strategic business planning process and management functions. So, before we let our egos direct us toward answering the question “How much am I worth?” we need to answer the real issues: why this information is needed and how it can be used to better plan for the future.

How Are Businesses Valued?

This discussion will be easy. Or perhaps we should say that the discussion of the fundamentals of how a business is valued is straightforward, although it can devolve into many technical details if you're not careful. A business's valuation is based on the present value of its future cash flows, in particular its operating cash flows from its profit-making activities (as opposed to, say, selling off some of its long-term operating assets). No matter what valuation model, methodology, logic, concept, technique, and/or guiding principle is used, it all comes back to the company's ability to generate cash flow from profit (i.e., its operating activities). Even when a company is being liquidated, the end value is based on how much cash will be left over for the equity investors. Simply put, cash flow reigns as king when valuing a business.

Although countless business valuation models, techniques, and concepts can be utilized, this section will be geared toward keeping the discussion simple and will be focused on the basics, with two of the more common business valuation techniques examined—"Main Street" and "Wall Street."

Cash Flow Multiple—Main Street

Under this method, a simple cash flow multiple is applied to a company's expected future "adjusted" cash flow stream. This adjusted cash flow stream is most commonly referred to as EBITDA (earnings before interest, taxes, depreciation, and amortization).

Generally speaking, the cash flow multiple ranges from 2 to 5 (but can be higher or lower) for private businesses that are not the size of IBM. This key ratio, or multiple, depends heavily on the company's perceived risk and forecast growth factors. In addition, historical cash flow information tends to be used as a basis or starting point when calculating the expected/future "adjusted" cash flow stream. For example, if a company's average EBITDA for the past three years has been \$750,000 annually and a multiple of 4 is applied, the business's value would be approximately \$3,000,000. This business valuation method is more widely utilized by "Main Street" due to the nature of how these companies operate (i.e., a high volume of relatively small and unsophisticated businesses, as compared to corporate America as represented by Wall Street).

Price Earnings Multiple—Wall Street

Using this technique, a business valuation is derived from taking the net after-tax earnings of a company and multiplying that number by a market-driven factor. For businesses that enjoy the prospects of high growth rates, which translate into potential significant future cash flows, a multiple of 20 or more may be applied. For businesses that are more mature with relatively steady cash flow streams, a lower multiple may be applied, such as 10. This is one (but certainly not the only) reason why a company such as Microsoft may be valued using a factor of 30, whereas Exxon may

be valued using a factor of only 13. This technique is most prevalent with publicly traded companies listed on the New York Stock Exchange, the Nasdaq, and other markets. The market quickly and efficiently establishes the total value of the company (i.e., its market capitalization), which is readily available at any point in time.

Table 11.1 illustrates these two valuation techniques, which, although different, come to the same general valuation conclusion in the example given. As you can see in Table 11.1, both techniques essentially value the company at approximately \$4,000,000. In other words, a potential acquirer would provide \$4,000,000 of consideration to generate a potential operating cash flow of approximately \$661,000 per year (i.e., net profit of \$410,983 plus depreciation expense of \$250,000), producing a simple investment return of approximately 16.5%.

Also note that the valuation derived is approximately one times the company's gross profit generated of roughly \$4.2 million. You will often find that within certain industries, common valuation reference points are made such as X times revenue, Y times gross profit, or Z times book value. For example, in the banking world, business valuations are often based in terms of the multiple achieved on the bank's net book value (or net equity). Although this valuation technique may appear to be different, if you look closely enough and apply the lessons of valuing a business on its ability to generate cash flow, you'll quickly understand why one bank will sell for two times its book value and another for one times—its ability to generate cash flow.

So in summary, business valuations are really based on two critical pieces of information: (1) the expected or future cash flow the company has the ability to generate, and (2) the multiple applied to the expected or future cash flow stream (by the market). Both of these issues will be explored in more detail as our discussion on business valuations continues.

TABLE 11.1—COMPARISON OF BUSINESS VALUATION METHODS

XYZ Wholesale, Inc.		
Summary Income Statement	Cash Flow Multiple FYE 12/31/00	Price Earnings FYE 12/31/00
Revenue	\$15,265,000	\$15,265,000
Cost of Goods Sold	11,067,125	11,067,125
Gross Profit	<u>\$ 4,197,875</u>	<u>\$ 4,197,875</u>
Gross Margin	27.50%	27.50%
Selling, General, and Administrative Expenses	\$ 3,001,000	\$ 3,001,000
Depreciation Expense	250,000	250,000
Interest Expense	72,000	72,000
Other (Income) Expenses	<u>212,000</u>	<u>212,000</u>
Net Profit before Tax	\$ 662,875	\$ 662,875
Income Tax Expense (Benefit)	<u>251,893</u>	251,893
Net Profit (Loss)	<u><u>\$ 410,982</u></u>	<u><u>\$ 410,982</u></u>
EBITDA	\$ 984,875	N/A
Cash Flow Multiple	<u>4.00</u>	N/A
Business Value	\$ 3,939,500	N/A
Net Earnings	N/A	\$ 410,982
Price Earnings Multiple	N/A	<u>10.00</u>
Business Value	N/A	<u>\$ 4,109,820</u>

What Drives Business Valuations?

The hard thing about valuing a business lies in the great unknown of future cash flows. Although historical operations can provide a sound starting point to determine future cash flows, they can also be very misleading. For example, a biotechnology company in an early stage of clinical trials has no historical positive earnings or cash flows, but it may hold an extremely high market valuation based on the promise of future cash flows from the eventual production and sales of a new drug. Conversely, a cemetery operation may have a one-time (nonrecurring) event due to a liquidation of (long-held) real estate holdings. Hence, future cash flows can be distorted by historical events that are nonrecurring (positive or negative). The key lies in the ability to calculate a core, or operating, cash flow figure on which to base the valuation.

Exploring further, the following common situations and issues regarding how cash flows are determined are provided. These are not meant to be all-inclusive but rather are offered to give you a sense for how cash flows are and should be “adjusted” when used as a basis for determining business value.

Common Cash Flow “Adjustments” for Business Valuation Purposes

♦ **Expense Savings:** A company may be interested in acquiring a business that offers tremendous expense savings opportuni-

ties via implementing the concept of economies of scale. By combining the two entities, a once unprofitable business may now actually produce a positive cash flow (which has value).

♦ **Added Expense Removal:** Pushing through other or personal expenses in closely held businesses has been around as long as the Internal Revenue Service (IRS). Generally, these are not necessary expenses for the ongoing business to operate, but the owners take advantage of getting the tax break. Removing these expenses to increase cash flows will lead to higher business valuations.

♦ **Potential Cost Increases:** Certain companies may be at a stage where a significant reinvestment in capital equipment, assets, and so on is required to continue to support and generate cash flows. These one-time expenditures will need to be factored into a business valuation model to reflect the impact on future cash flows.

♦ **Hidden Assets:** Certain assets may have a significant value present, external to the core business. For example, years ago a company may have purchased real estate (for future business expansion) that is no longer needed internally. To an outside party, the value may be substantial, and as such, this hidden value needs to be reflected in the complete business valuation.

♦ **Intangible Assets and/or Intellectual Property:** Brand names, research in process, patents, trademarks, contracts for

retail shelf space, and similar assets have the ability to generate significant cash flows if managed properly. While one company may struggle with generating adequate cash flows, another may prosper by applying its marketing or financial muscle to their assets.

- ♦ **Lost Future Business:** In service organizations, a business valuation may decrease as a result of a key principal leaving or retiring. Anyone who has evaluated an acquisition within the service industry knows how critical this issue can be in terms of negatively impacting future cash flows. If a partner of 30 years leaves, chances are a portion of his accounts will also leave.

This sort of list could fill a book. The issue of importance is that in valuing a business, all elements and facts of importance must be evaluated in terms of determining what is the most reasonable future cash flow stream that can be expected.

Step two in the business valuation process is based in how the multiple applied to the cash flow or earnings stream is determined. The following factors all play a role in determining the multiples used:

Factors Affecting Multiples Used in Business Valuation

- ♦ **Concentration or Diversification Risks:** The higher the concentration or diversification risk, the lower the multiple. Two like companies with the same cash flow stream operating in the same industry may receive different valuations because one company generates its revenue equally from 100 accounts and the other from just 10 accounts (equally). The impact of losing 1 account in 10 is far greater than 1 in 100 and increases the concentration risk.

- ♦ **Interest Rates:** Interest rates, simply stated, represent the cost of capital. Higher interest rates produce lower valuation

multiples. Today's low-interest-rate environment provides for higher multiples; but when the Federal Reserve Board even mentions that rates may rise, well, it should come as no surprise that valuations may be pressured.

- ♦ **Growth Potential:** Higher growth opportunities, which translate into stronger future cash flow potential, will demand higher multiples. Just ask the dot-coms of the late 1990s and early 2000s about how they received astronomical valuations based on the premise of extremely high future-growth rates.

- ♦ **Length of Cash Flow Stream:** Cash flow streams that are longer and more secure, or reliable, will produce higher valuation multiples than shorter, uncertain cash flow streams. If a company has patent production in place for the next 10 years (supporting the cash flow stream) versus 3 years, it's safe to say the valuation multiple will be favorable.

- ♦ **Liquidity:** If an investment is readily liquid with multiple buyers available, a higher multiple will generally be provided. Illiquid investments with limited market appeal increase risks and drive down valuation multiples.

- ♦ **Management Continuity:** This issue works both ways. Eliminating poor management may actually help the valuation multiple, whereas losing key executives may hurt it. However, if poor management was in place, it's safe to say the historical cash flow stream was not as strong as it might have been.

The valuation multiple really boils down the risks present (perceived and actual). Needless to say, the higher the risks, the lower the valuation multiple received.

In summary, it should be stressed that there are no set rules in the business valuation game. Whereas a seller may want to maximize cash flows and lower the risks (thus increasing the value),

the acquirer may want to deflate potential future cash flows and increase the perceived risks (thus decreasing the value). Conversely, an estate may want to justify a lower valuation to reduce potential estate taxes, whereas the IRS may be more aggressive and increase the valuation for obvious reasons. While the basics in the business valuation process remain the same—cash flow and multiples—how these figures are “managed” or “manipulated”

represents the real basis of valuing a business. Quite clearly there’s a fair amount of “wobble room” in coming up with the figures on which the valuation of a business is based. Honest and fair-minded people can and do disagree on cash-flow forecasts and the appropriate multiples for setting a value figure. At the same time, there’s a point beyond which the good faith of a party to the negotiation can be questioned.

Quick Review of Business Acquisitions

Thus far, the chapter has focused mainly on the why, how, and what of business valuations. We've not said anything about how a business acquisition is undertaken and structured. It would be impossible to overview all of the attributes of a business acquisition, as documenting the legal issues alone might kill a couple of trees. Rather, a quick review of some key elements of business acquisitions have been highlighted to provide a map of some sort from the business valuation process to an acquisition.

Business acquisitions tend to come in one of two types: (1) *asset deals* or (2) *stock deals*. Under an *asset deal*, specific assets of a business are acquired, with the remaining legal entity left intact either to wrap up its affairs or to continue with another business opportunity. This deal may mean buying just the ongoing business operations (including inventory; property, plant, and equipment; and the intangible assets [e.g., customer lists, patents, trade names, etc.]) and leaving the remaining assets (such as trade receivables, prepaid expenses, and cash) with the old legal entity. The acquiring company purchases the assets and then integrates them into its operation for the purpose of realizing economic gain (i.e., produce cash flow). The selling company is left to finalize its business affairs by liquidating the remaining assets, paying off the creditors, and hopefully having a return available to the owners or shareholders. It should be noted that in a variety of situations, the selling company may still have an ongoing operation intact, as the sale may involve only one division or segment of the business. Hence, the selling

business continues its operations as usual, with the exception of having one less division to manage. Asset deals tend to be associated with smaller businesses or companies looking to shed a specific business interest.

Under a *stock deal*, instead of purchasing specific assets of the selling company, the stock or equity of the selling company is purchased at fair market value with all assets being acquired and all liabilities assumed. The acquired company usually survives as a legal entity and continues to operate as subsidiary of the acquiring company or is in some capacity merged into a new entity formed for the specific purpose of acquiring the target company. Generally, the equity owners of the acquired company sell their holdings (i.e., stock, LLC membership interests, etc.) for cash, equity or stock in the acquiring company, a note payable, or a combination of these items. Stock deals tend to be associated with larger, publicly traded companies (as well as the larger privately held businesses) that have ample liquid resources and freely traded stock to complete the transaction.

As you probably would surmise, there are certain key advantages and disadvantages that determine whether to use an asset deal or a stock deal. However, the same premise usually holds under either transaction, in that the general business interests of the acquired company are maintained on an ongoing basis because the acquisition was based on the premise that an economically viable operation is present.

Once the acquisition value and deal type have been selected,

the structuring of the transaction can be undertaken. The following structuring issue examples have been presented to provide some basic insight as to how business acquisitions are put together.

Business Acquisition Structuring Issues

♦ ***Forms of Consideration:*** It should go without saying that the acquiring company will need to remit payment to the selling company. This usually is in the form of cash, stock or equity, debt (such as a note payable), or a combination of these items. For sellers, the preference is to get cash or liquid stock/equity in hand. For acquirers, the tendency is to conserve cash and manage the financing element of the transaction with some debt or restricted stock/equity.

♦ ***Restrictive Agreements:*** A number of restrictive agreements are usually required, the majority of which tend to fall on the seller. For example, the acquiring company will want to ensure that the selling company or its founders do not compete against it in the future. This will trigger the use of a noncompete agreement. When stock is provided as consideration, the acquiring company will often place a restriction period on when and how much of the stock can be sold after the fact to avoid too much of their stock being dumped on the open market at once (driving down the price).

♦ ***Representations and Warranties:*** Both parties will be required to provide representations and warranties that the busi-

ness being acquired is viable and that the acquiring business is of sound “mind and body.” In this day and age of fraud, deceit, and misrepresentations, both parties will want to ensure that added legal protection is in place to prevent the “take the money and run” attitude from prevailing.

♦ ***Variable Acquisition Control Features:*** A number of business acquisitions will place controls on the valuation and consideration paid by implementing such elements as variable debt payments (or “earn-outs”), continued employment agreements for key management, meeting future operating performance objectives, and others. The general idea is that some future event needs to occur (e.g., management needs to stay intact for three years, X number of stores need to be opened, or the acquired business needs to produce Y cash flow) before additional consideration will be remitted. This tends to favor the acquiring company, but it can also benefit the seller in that added deal kickers can be put in place if the acquired business actually performs better than expected.

This concludes our abbreviated discussion on acquisition types and structuring issues. We haven’t even touched on the issues of courting business acquisitions, due diligence, packaging the business for sale, and how friendly the attorneys can become. Hopefully, this has provided you with a little more insight on the acquisition process. Remember that all this is for naught if an economic value (i.e., cash flow) cannot be justified.

Final Thought on Business Valuations

More than one person has asked us why the owners' equity in the most recent balance sheet of a business is not a good measure of its value. Or, putting it another way: Shouldn't the value of a business equal its total assets minus its total liabilities? This is called its *net assets*, which equals the book value of its owners' equity. Why not use this number, which is conveniently available? Well, this sounds like a simple answer. But this makes sense if, and this is a mighty big IF, the assets and liabilities reported in the balance sheet were based on their current market and replacement values and if accountants recorded the values of the experienced work force of the business, its reputation with customers, its well-known brand name, and so on. But accountants don't record these assets.

Accountants, following generally accepted accounting principles, use the historical cost basis for preparing a business's financial statements. Accountants do not record the "intangibles" or "invisible assets" behind the numbers reported in the financial statements of a going business. The historical cost basis of accounting is backward looking; accountants record the financial history of a business. Business valuation is forward looking. The most recent financial statements of a business are an invaluable point of departure, but they are just the starting point for looking into the future, which has both predictable and unpredictable elements.

Capsule Summary

This chapter explores the whys and the how of putting a value on a business, with some advice thrown in for good measure. This relatively short chapter cannot do full justice to the broad topic of business valuation. Just fundamentals are presented in the chapter, but these are essential building blocks that business managers, as well as sellers and buyers of a business, definitely should understand.

Even if there is no prospect or likelihood of putting a business on the market, its managers are well advised to determine the value of the business. Employee equity (ownership) participation plans need a sound business valuation basis. When a business decides to shed a major segment, it needs a reliable valuation for that piece of the business. Deciding on business insurance coverage needs a valuation for the business that takes into account all resources that contribute to its success, including intangibles such as customer loyalty and its experienced employees. Valuation of a business is needed to determine the appropriate life insurance amounts on the lives of the principal owners of a business. The value of the interest of a deceased shareholder is based on the valuation of the business as a whole.

Putting a valuation number on a business can get rather technical. Most valuation methods focus on the future cash flows of the business as far out as can be forecast and apply a multiple times the cash flow stream to determine value. The most appropriate multiple is a matter of judgment, of course. The chapter compares two basic valuation methods, which we call the “Main

Street” and the “Wall Street” methods, to distinguish between privately and publicly owned businesses. In either case, future cash flows are always uncertain to one degree or another. Projecting cash flows can be done with more certainty for some businesses than for others.

The historical pattern of cash flows of a business is normally used as the point of departure for forecasting its future cash flows. Instead of drawing a simple trend line into the future, adjustments usually have to be made to the historical pattern of cash flows. These modifications include projected changes in expenses, the way established brand names and established products will fare in the future, and key personnel changes that might happen if new ownership takes over. Also, factors such as concentration of customers, interest rate changes, the growth potential of the business, and the length of cash flow streams should be considered.

The chapter also covers business acquisitions, which are divided into two types: asset deals and stock deals. A buyer may want to take control of the assets of a business. Or the buyer might want the stock shares of the business in order to continue the business as before. Structuring the acquisition is very important. When and how the money will be paid over, restrictive agreements, and several other key points have to be ironed out in business acquisition negotiations.

The chapter also explains that the amount reported for owners' equity in the balance sheet of a business usually is significantly

different from the market value of a business. The book value of owners' equity is the result of recording the history of transactions over the years that have affected the owners' equity. In contrast, the market value of a business is forward looking. The price a buyer is willing to pay for ownership of a business may be quite a bit higher (or lower) than the book value of owners' equity that is reported in its balance sheet.

Finally, keep one thing in mind above all others. The price you pay for a business does not in any sense drive its future cash flows. Just the other way around: The future cash flows of a business should determine the price you are willing to pay for a business. The future cash flows will be the same regardless of the price you pay for the business. Don't pay too much; but to be fair, you shouldn't pay too little either.

TERMINATING A BUSINESS: WHEN THE DOG NO LONGER HUNTS

*“O! that a man might know
The end of this day’s business, ere it come.”*
—William Shakespeare

It is fitting that this book should be brought to a close by exploring a subject matter that is more relevant than most people think in relation to managing business interests, but one that is not well understood by the business community—*terminating a business*. On the surface, it would be easy to assume that terminating a business is as simple as locking the doors, shutting off the phone and utility services, and turning off the lights (without even having the courtesy to leave a forwarding phone number or address). Conversely, one might think that electing to pursue entering bankruptcy is a more viable option in terms of letting the lawyers handle the final company affairs. Yes, both of these avenues are utilized to help close the 80%-plus of all businesses

that fail within the first five years of their lives, and both will be briefly touched on within this chapter.

The objective of this chapter, however, is not to simply review the options available for terminating a business but rather to delve into how the termination process actually works and ties back to all of the accounting and financial concepts discussed throughout this book. From the initial birth of the business to its almost certain death (at some point), the same accounting, financial, and business principles need to be applied to ensure that a proper burial is achieved. If a business termination is not properly managed, well, let's just say the ghosts of past business failures have come back to haunt more than a few aspiring entrepreneurs.

Voluntary versus Involuntary Business Terminations

As discussed in the previous chapter on business valuation, companies are usually sold using one of two different methodologies: an asset sale or a stock sale. Under a stock sale, the acquired company usually survives as a legal entity and continues to operate as a subsidiary of the acquiring company or is in some capacity merged into a new entity formed for the specific purpose of acquiring the target company. Under either scenario, the general business interests of the acquired company are maintained on an ongoing basis because the acquisition was based on the premise that the business is economically viable.

This assumption of a viable going business also holds true for an asset sale, as it is deemed that the assets acquired have some economic value to the acquiring company. The major differences between these types of transactions were presented in the previous chapter, one of which directly feeds into understanding why properly managing a business termination is so critical. Under an asset sale, the legal entity, which sold the assets, still remains and either continues to operate as a business entity or needs to be formally terminated to ensure that proper closure is brought to all company affairs.

Stock sales and asset sales are generally considered *voluntary* terminations; that is, the selling party or parties have an interest or a desire to liquidate their holdings in a fair market value transaction with the acquiring party or parties. The good news with a voluntary termination is that an orderly close of the business is undertaken with both creditors and equity investors usually on

board with the process. Hence, the biggest hurdle to face is managing the administrative process of closing the business, which can be accomplished either internally (retain a close down management team to finalize the business's affairs) or externally (hire professional support to finalize the business's affairs).

On the flip side of the voluntary termination process is the ever-so-popular (yet unfortunate) involuntary termination. Involuntary business terminations tend to get more of the headlines because they are usually centered on an unfortunate event leading to a high-profile failure (which of course the press loves to report on). This type of termination is usually brought on by external parties (e.g., creditors, shareholders, government agencies) protecting their interests in a failing business. Generally, the heart of the problem lies in the inability of the business to grasp the extremely important concept of "positive cash flow and net income." The dot-com darlings of the 1990s quickly learned that a business must actually produce net income and positive cash flow to stay in business for an extended period of time (hardly a novel concept in a capitalist society). Most involuntary business terminations are managed under the context of bankruptcy proceedings and/or equivalent processes, such as an Assignment for the Benefit of Creditors. As such, the federal court system, trustees assigned/retained to support the process, and/or business creditors are the ones who generally manage and control involuntary business terminations.

Whether a business termination will be voluntary or

involuntary, one critical element must be remembered: The business's owners, founders, entrepreneurs, and/or key executives often have a difficult time accepting the economic reality of the situation and the proximate end of the business. These individuals will often pursue any course of action to keep the doors open and to not let their business concept (i.e., their child) die. As noted in the discussion on fraud, the emotional state of these individuals may push them to make decisions that to external parties are clearly crossing the fraudulent line but to them are still within the bounds of acceptable accounting and business practices.

What these individuals fail to realize or simply don't want to accept is that the business enterprise's cash flow (or lack thereof) does not and will not support a competitive economic model. To an external party, a quick review of the business plan and/or economic model may clearly project an unviable operation. To an internal party, however, he or she may be self-deluded into believing the economic model does work. How? By increasing revenue assumptions, reducing expenses unreasonably, and/or presenting information (actual or forecast) to capital sources that is not supportable. Being realistic is just as important in the life of the business as in its death.

A Quick Review of Bankruptcy Protection

Bankruptcy filings by individuals and businesses have reached all-time highs during the past decade. It's almost impossible to have missed such high-profile bankruptcy actions as K-Mart, Enron, Johns-Manville, United Airlines, FAO Schwarz, and Zales Jewelry; and the list goes on and on. In some cases, the bankruptcy filing results from an economic model that is no longer viable (e.g., K-Mart's inability to compete in the highly intense mass-merchandising market) or a one-time event that burdens the company with an unreasonable monetary obligation (e.g., claimants being awarded huge sums of money against Johns-Manville for asbestos-related claims). In others, bankruptcy results from outright fraud (e.g., Enron). Whatever the cause, bankruptcy filings by businesses have been and will continue to be utilized as an effective strategy to manage a company's affairs in difficult economic times.

Most of the high-profile bankruptcy filings are entered into under the federal government's guidelines known as Chapter 11. Under this provision, a company is granted time to reorganize its financial affairs and to develop a plan to satisfy both the creditors and the equity investors in the company. If you remember the discussion on raising capital, creditors have priority claims against company assets over equity investors. Hence, most Chapter 11 bankruptcy proceedings require a significant amount of input and involvement from the creditors in terms of managing the reorganization process.

The creditors have the majority of the rights and preferences

in these proceedings to protect their financial interests first, and, as such, the investors are usually left "holding the bag." If the Chapter 11 reorganization plan is properly structured to satisfy all of the parties involved (to the fullest extent possible), the company's creditors and, to a lesser extent, its management team, in addition to the federal court, all approve the reorganization plan; the company then exits bankruptcy protection to operate as an independent business. We mention the management team only in the context that someone must be left to keep the business operating and going forward. Needless to say, neither the court nor the creditors have any interest in all the details of keeping the business going forward; therefore, it is necessary that a committed management team emerge from Chapter 11.

Under a Chapter 7 bankruptcy proceeding, the company's goal is not to reorganize but to liquidate all remaining assets to and pay off creditors to whatever extent possible (with the understanding that the legal entity will be formally terminated). Federal laws still govern this type of bankruptcy proceeding, but the focus turns from developing an ongoing viable economic business model toward liquidating remaining company assets as efficiently as possible. The remaining company's affairs are turned over to a court-appointed trustee, who is responsible for managing all of the necessary steps to formally terminate the business. This includes everything from liquidating remaining assets, to repayment of creditors (to whatever extent possible), to processing final paperwork, such as tax returns, legal notifications, and the

like. Similar to a Chapter 11 bankruptcy, significant legal fees are usually incurred to support a Chapter 7 bankruptcy and are usually implemented by larger or more high-profile business operations.

Another type of termination proceeding available to companies in dire straits that warrants discussion is what's known as an Assignment for the Benefit of Creditors (or ABC). For lack of a better term, an ABC is nothing more than a poor man's version of a Chapter 7 bankruptcy proceeding. The same goals and objectives are present, in that a liquidation effort is undertaken to maximize the value of whatever company assets remain and to repay creditors and equity investors in the proper order. In addition, an independent trustee is required to manage the final termination affairs, but rather than being controlled under the laws of the federal court system, the process is left directly to the trustee to administer. This trustee is usually a law firm that specializes in these types of transactions or an independent consulting group with a niche expertise. Beyond the difference with how the trustee is secured, the cost of an ABC is usually far less than a Chapter 7 bankruptcy because the court process is bypassed (unless the ABC turns ugly).

Needless to say, most ABCs do not generate a return to the equity investors and usually produce far less cash than is needed to repay the creditors. ABCs are generally utilized (and represent a more efficient termination strategy) when the business entity is relatively small, legal squabbles are not anticipated, the different types of creditors and equity investors are limited, asset recovery potential is poor, and opportunities for fraud and/or other types of misconduct are not significant. ABCs also tend to follow a common path, in that the business owners clearly have come to

the conclusion that the end is at hand and have already communicated this to the creditors and the equity investors (without much resistance received).

In summary, the following key issues should be remembered when either bankruptcy proceedings or ABCs are implemented:

Key Issues to Keep in Mind When Considering Bankruptcy or Assignment for Benefit of Creditors (ABC)

- ♦ Chapter 7 or 11 bankruptcy proceedings are generally very expensive and may take a relatively long time to complete. A business actually needs to be prepared to enter into bankruptcy with ample liquid financial resources just to get through the process.
- ♦ Chapter 7 and 11 bankruptcy proceedings need to be supported by the proper legal and professional counsel because the issues involved can get highly technical.
- ♦ Fighting, arguing, and bickering among the various creditors (as well as the investors) can get nasty, resulting in lengthy delays and increases in professional fees.
- ♦ An ABC represents a viable option to a bankruptcy when the right conditions are met; the results are significant savings and the ability to streamline the process.
- ♦ Investors' equity values usually get hammered under any of these proceedings. The risk/reward relationship definitely plays out here—with the highest appetite for risks comes either the highest returns or getting left holding the bag.

The Start of the End

The biggest stumbling block to terminating a business is often figuring out how to start. Well, when looking back at how the business was launched, a business plan was developed to guide the business during its formation and its growth years. Similarly, a *business termination plan* should be put together in order to guide the business through its final months. Although this plan will have a slightly different objective than that of the business plan, the basis remains the same—optimizing the business’s remaining economic value and establishing a course of action to pursue. And just like the initial business plan identified the capital required to execute the strategy, so too must the termination plan ensure that the appropriate resources are available to properly end the business.

The business termination plan will most likely not be as formal, in terms of its presentation and data, as the initial business plan. Let’s face it—when a business is shutting down, it’s not attempting to impress potential capital sources. Rather its goal is to outline a termination strategy that maximizes asset values, repays creditors to the fullest extent possible, and provides a potential return to the equity investors, all within the most efficient means possible. The following list was prepared to highlight the macrolevel issues that need to be addressed in the plan:

Key Matters That Should Be Addressed in a Business Termination Plan

- ♦ A *simple executive summary* that outlines the events, market conditions, and so on, that lead to the business termination should be provided. While a number of parties will already have an understanding of the reasons, having proper documentation prepared and available will be extremely helpful to the slew of parties that are caught by surprise.
- ♦ The plan should include a *forecast for the time frame* in which the termination is expected to be carried out and the capital/cash needed to execute the plan. One of the biggest mistakes made when terminating a business is underestimating how much capital/cash is required to execute the plan correctly. Remember, nobody is going to extend credit to the business when it will soon be out of existence.
- ♦ A concise *summary of the company’s remaining assets and liabilities* should be presented in the business plan. On the asset front, a detailed listing of all assets should be prepared with a marketing plan provided on how the assets will be disposed. For the liabilities, a listing of every liability by class (i.e., secured, unsecured, priority level, etc.) is essential to ensure that

creditors are paid in the right order. *Note:* A summary of the equity investors by investment class should also be provided to identify potential liquidation preferences.

- ♦ A *summary of the internal* (i.e., remaining employees) *and external personnel resources* will need to be incorporated into the plan. Most business terminations require the support of external legal/professional counsel, and these resources (and their costs) need to be managed at the start of the process. There aren't too many professionals willing to extend payment terms in a business termination.
- ♦ Finally, an *overview of the various operating factors* should be provided, including insurance requirements, physical locations needed, outstanding operating leases and commitments, and similar business issues. Remember, at some point the lights will actually need to be turned off, and the postal service will need to know where the mail should be forwarded.

The business termination plan will be used not only as a “final road map” for the company’s management, but also as a tool for presentation to the key parties responsible for approving the termination. The key parties will be either the board of directors and company officers still in control of the company or the creditors, who have effectively taken control of the company to protect their interests. Under either case, formal approval for the termination needs to be obtained from the responsible and authorized parties. Without formal approval, the company (and potentially the board members and officers) will expose itself to potential risks, acquisitions, and eventual legal action, which can create significant additional costs down the road. The company will want to make sure all relevant parties review the plan, agree that no other economically viable avenues exist, and formally approve the termination plan, which will include helping the officers and board members identify when to formally resign from their positions.

Company Assets—Tangible and Intangible

Liquidating the remaining assets of a company about to be shut down represents one of the most important components of the business termination plan. The cash raised is critical to getting creditors paid off. In addition, hidden values and potential risks are lurking behind the scenes. Table 12.1 presents an overview of the major asset types owned by a business and the hidden value and potential risk for each type. This overview is in no way meant to be all-inclusive; it is provided to highlight the various issues present when a termination effort is underway.

The examples provided in Table 12.1 only begin to scratch the surface. Many other issues (both positive and negative) surround each major asset type. And because each business is so unique, different issues will undoubtedly be present that offer additional value-enhancement opportunities while opening up the company to potential risks.

The following list summarizes several key recommendations to keep in mind when liquidating the assets of a business to be terminated.

Checklist for Asset Liquidations

- ◆ Ensure that the company has as complete and comprehensive an asset listing as possible. This will ensure that management has a solid starting point from which to manage the disposition of assets in terms of allocating resources to the most valuable assets (to increase values) and not wasting time on assets with little or no value.

- ◆ Remember that a number of intangible assets may be present, whether or not a cost is stated on the balance sheet. This may include customer lists, trade secrets, sales databases, a below-market transferable property lease, and even the company name or “Doing Business As” names (DBA). The potential to realize value from these assets should not be underestimated.

- ◆ The potential for fraud, theft, and/or misallocating assets is very high in a business termination. Certain items (e.g., a new computer) have a tendency to “walk away” when management is not paying attention. Proper safeguarding of assets with techniques as simple as making sure all items over \$1,000 are locked in a separate area needs to be a priority.

- ◆ Ensure that all material transactions to liquidate assets are based on arm’s-length transactions with fair market value received. Company insiders sometimes have a tendency to secure certain assets (with the idea of starting a new business) without really giving any consideration to the special legal and fairness requirements of the situation. You can be assured that if the dollar amounts are large enough, the creditors and the equity investors will pursue any transaction that smells of a related-party or insider deal.

- ◆ Take advantage of experts such as liquidators, commercial real estate brokers, or investment bankers (when feasible) to enhance the value of the assets being disposed. Even though added

TABLE 12.1—HIDDEN VALUES AND POTENTIAL RISKS IN ASSETS TO BE LIQUIDATED

Asset Type	Hidden Value	Potential Risks
Cash and Equivalents	Outstanding checks may remain that never cleared the bank, with the possibility that these checks could be recovered back into the company's bank accounts (subject to potential unclaimed property tax regulations).	Unprotected blank checks may be stolen, forged, and cashed. Protection of all bank documents and items is extremely important in a termination.
Accounts Receivable	An old account written off as worthless via the customer's bankruptcy may still have some value. Assigning this to a creditor in exchange for a cash payment may be possible. Perhaps a collection agent should be used.	The company's customers become aware of the termination and elect to string out payment in hopes of having to avoid making full payment. Who's going to collect the money if nobody's around?
Inventories	The shelf space the company's inventory occupies may have value to another business looking for additional exposure in a certain retail environment.	Disposing of old, worthless, and/or unwanted inventory may be costly and may contain potential hazardous-material problems.
Property, Plant, and Equipment (Fixed Assets)	Offering a package of fixed assets at a discount may provide the opportunity for the company to rid itself of an office lease with a personal guarantee; that is, the assets are sold below value, but a significant liability is also eliminated (not to mention that the company does not have to move the assets now).	Selling tangible property—desks, furniture, fixtures, computers, etc.—may trigger a sales tax obligation that needs to be remitted to the appropriate parties. Also note that property, plant, and equipment may have a secured lender attached, thus restricting the ability to liquidate these assets.
Intangible Assets	Customer lists, databases, and similar types of information may have significant value to certain third parties. Marketing of these intangible assets holds potential for raising additional cash.	Allowing management and/or insiders to acquire databases and other key information without consideration may trigger a potential claim of wrongdoing by creditors or equity investors.
Other Assets—Prepays, Deposits, Loans Receivable, etc.	Prepayments for rent, insurance, advertising, and similar items offer an opportunity to recover cash for the unutilized time period.	Terminating insurance coverage too early may leave the company's assets exposed to potential third-party claims.

costs are present, the extra value obtained via their marketing knowledge and muscle may be more than enough to offset their costs.

- ◆ Document all asset sales transactions appropriately to ensure that future disclosures and accounting can be completed correctly. For example, if inventory is liquidated to a reseller, then no sales tax will be due (one business to another business). However, if inventory is sold at a bargain price to company employees (business to the end user), then sales tax will need to be collected.

- ◆ The ultimate value of an asset is really based in nothing more than its future cash flow (hmmm, haven't we discussed this issue before?). If other businesses are willing to buy a used computer for \$250, then this is the value of the computer. If a patent generates a small royalty each month, then the future value of this royalty stream (discounted at the appropriate rate) represents its value. Similar to valuing and marketing a business for sale, anything that can be done to enhance an asset's future cash flow will increase its value today.

One key point not to forget is that the officers, executives, and/or parties retained to terminate the business have a fiduciary responsibility to the creditors and the equity investors to maximize the value of the assets being disposed. In today's business environment, one that is highly sensitive to fraud and corruption, creditors and investors are just looking for ways to recapture losses, even if it means piercing the corporate entity and pursuing key parties at the individual level.

The Pecking Order for Debt Repayment

Now that we've discussed the asset disposition side of a business termination, we turn to paying off its liabilities. Here, just like with the management of a business's assets, a complete and comprehensive listing of all liabilities must be prepared. This provides management with the necessary starting point to properly structure how the company's assets will be distributed (to its creditors), remembering the following extremely important liability pecking order:

General Payoff Order of Liabilities

♦ **Priority Creditors:** Certain liabilities represent priority obligations that will need to be addressed early in the process. These include wage and vacation obligations (within limits) to employees, unpaid payroll taxes, and sales/use taxes payable. Basically, the government does not want to see itself or the company's employees take a loss; and as such, these types of obligations can often pass through to the officers or the board of a company if they are not paid. Priority creditors, to a certain extent, have preference over almost all other types of creditors and need to be identified and managed first to avoid potential problems. Remember, a number of these items are considered to be held in trust for the recipient by the company's officers, board, and/or other key executives.

♦ **Secured Creditors:** These types of creditors are usually banks, credit unions, equipment financing groups, and the like. These creditors generally only lend on a secured basis with an underlying asset present to support the value of the loan extended. Hence, if the company ever gets into trouble, the value of the liquidated asset is (hopefully) adequate to cover the amount of the outstanding loan. These creditors have preference over the unsecured creditors of the company.

♦ **Unsecured Creditors:** These are typically your primary trade vendors of the company, including material suppliers (for inventory), utilities (e.g., phone, electric, water), professional service firms, and other general corporate vendors (e.g., office supplies, temporary staffing company). These creditors have a claim against the company but are generally not secured with a specific asset. Hence, these creditors generally take a beating when an involuntary company termination is undertaken because, normally, not enough funds are available to cover the outstanding debt obligations. Unsecured creditors may or may not have a preference over subordinated debt, depending on how the subordinated debt agreement is structured.

♦ **Subordinated Creditors:** The subordinated creditors of the company generally are in the last position in terms of receiving any repayment of debt before any payments can be made to the

equity investors. As previously discussed, subordinated debt is often structured with some type of investment-return upside to compensate for the additional risks undertaken. This may be in the form of higher interest rates paid on the subordinated debt or a debt-to-equity conversion option, which allows the debt to be converted to equity if the company performs extremely well. Subordinated creditors may have a preference over unsecured creditors if a “second position” (i.e., the secured lender has the first position) is taken in various company assets.

Two items that warrant further discussions when dealing with the liabilities of the terminating company are (1) personal guarantees and (2) off-balance-sheet commitments, contingencies, and/or other contractual obligations. Vendors may demand a *personal guarantee* (PG) as a condition for extending credit when a company does not appear to be financially stable. The non-stable company may be a new company with limited credit history, or it could be a poorly performing company where the ability to continue as a going concern is in question. As the term suggests, a key founder, executive, or officer makes a personal guarantee, which allows the vendor to pursue personal assets of the individual if the company cannot cover the obligation.

Needless to say, PGs need to be well understood and entered into only when appropriate, as they can create significant financial distress on the individual(s) providing the PG. Also, PGs need to be identified when evaluating the liability repayment order, as a preference will be present to cover this type of debt first, versus obligations that do not have a PG attached (i.e., the individuals who provided the PGs certainly do not want their personal assets pursued to cover the obligation). But beware of a hidden trap: If an unsecured creditor with a PG is paid in full over an unsecured creditor paid at 50% on the dollar (without a PG), problems may arise as to the equitable distribution of cash.

It goes without saying that PGs can produce some of the worst migraine headaches and can expose the individuals providing the PGs to unforeseen risks and significant economic loss.

Businesses often enter into a variety of commitments, contingent obligations, and/or other contractual agreements that are not recorded as “traditional” liabilities on its balance sheet; yet these types of transactions represent real future monetary obligations. Operating leases or rental agreements for office space or equipment represent perfect examples of these types of commitments. A business could easily come to the conclusion that the office space or equipment can simply be returned to the rightful owner with no further rent or lease obligation present. However, if vendors are unable to realize appropriate value from the returned property to satisfy their loss, then these vendors may become unsecured creditors to the company for the losses incurred. For example, if office space is abandoned with 50 months left on the lease and the landlord is unable to release the space or must release it at a reduced rate, then an economic loss has occurred and an unsecured claim may be present.

To make matters worse, these types of contractual obligations may carry PGs for the future payment stream, which would allow the vendor to pursue the personal assets of the individual providing the PG in the case of a default. Countless other examples of off-balance-sheet obligations could be provided, as businesses operating in different industries execute different types of contracts (e.g., raw-material-price and volume-purchase commitments). The critical issue to remember with off-balance-sheet obligations is that every commitment, contingency, and/or contractual obligation executed by the terminating business needs to be accounted for and managed in a similar fashion to the stated or recorded liabilities (as previously discussed).

Finally, a quick review is warranted as to liquidation preferences for equity investors. Easily understood should be the concept of

preferred equity over common equity. By its very nature, preferred equity provides these investors with a preference to any distribution of assets over common equity holders (assuming any assets are even available). The preferred stock agreements should spell out these preferences in terms of distributions to both common shareholders and other preferred shareholders. Companies will often issue different series of preferred stock

with unique terms and conditions, including asset distribution preferences. Needless to say, the more complicated the equity ownership structure of a business, then the more likely you will have to call in a lawyer to sort things out for the distributions among the different classes of equity shareholders. A shrewd lawyer will be sure to get his or her distribution (fee) first, of course.

Operational Issues of Importance

The chapter to this point has focused on more of the technical, accounting, and financial issues surrounding a business termination. Clearly, these are important, but they do not address several operational areas that must be managed to avoid exposing the company to further risks and headaches. The remainder of this chapter will be focused on the plethora of operational-related issues that will need to be managed during the termination process.

Once a decision has been made to terminate the business, the majority of the company's employees will no longer be needed. Management will need to coordinate the termination of the nonessential employees, ensuring that ample warnings are provided, vacation and/or other accrued earnings are paid, employee benefit programs (e.g., 401k plans, medical/health, etc.) are properly transitioned or terminated, and other employee-related matters are properly managed. In certain cases, large employee reductions or reductions in force (RIF) may need to be disclosed to government agencies.

Also, special attention should be paid to the various employee benefit programs to ensure that the plan administrators and third parties (e.g., an external payroll service prepaid to process year-end W-2 forms) will be able to support the employee transitions. Although severance packages are usually not provided for in these types of situations, money should be set aside to ensure that the employees do not get stuck with direct costs from the various benefit plan administrators and third parties. Once again, the last thing the officers, directors, and so on of the terminating com-

pany want is a bunch of angry employees creating problems after the fact.

Next on the list is insurance. The importance of maintaining the proper types and amounts of insurance through the business termination process should not be underestimated. The business may have stopped selling products or offering services to the market, but this does not mean that insurance can be immediately terminated. Rather, focusing on risk-management issues, such as ensuring that the proper insurance is in force, is often more important than ever before. As such, the following forms of insurance will need to be managed during the termination process so the company is not caught short:

Insurance Coverage Checklist

- ♦ **Workers' Compensation:** As long as the company has employees, workers' compensation insurance will need to remain in force (as required by state laws). Generally, most companies will retain a few employees to close down the business and to manage the variety of administrative issues that come with the process.
- ♦ **Directors and Officers:** Directors and officers (D&O) insurance is designed to provide liability coverage to the directors and officers of the company for potential "wrongdoings." This has become an extremely hot issue over the past few years due

to the high-profile fraud cases such as Enron and MCI/World-Com and has driven D&O insurance premiums very high. D&O insurance is often secured for trailing periods (which may be one, two, or three years after the company ceases active operations) to provide additional coverage for legal proceedings from investors, creditors, and/or other groups that finally get around to pursuing an issue.

- ♦ **General Liability:** As long as the doors are open, someone could get hurt on the company's property. For example, if an employee of a company that acquired fixed assets comes to your premise to pack and move the items and then slips and falls, your company may be on the hook. Keeping the general liability insurance in force until the last day of business is often a prudent business idea.
- ♦ **Property and Casualty:** Insuring your assets through their final disposition date provides the necessary coverage in case of theft, accident, damage, and/or other events that may impair the asset's value. Remember, safeguarding the company's assets represents a top priority during the termination process.

As we move forward, let's not forget how much fun we had digesting all of the business taxation and regulatory-mandated costs requirements present and how these can produce an almost unimaginable tax problem. First is the compliance element of business taxation and regulatory-mandated costs. It should go without saying that final returns for payroll, sales/use, property, income, benefit plans, etcetera, etcetera, should be filed for the terminating business. It helps to bring closure with all taxing authorities and governmental agencies that need to know that the business will no longer be operating and thus will not be required to file periodic returns. Although it may take a while for the authorities and agencies to actually acknowledge that the business

has terminated (translation—be prepared to follow up more than once to document the termination), it is important to notify all of the appropriate parties as to the legal status of the entity. This also holds true for all of the business licenses, fictitious name statements, certificates of authority to conduct business, etcetera etcetera, that the company has secured over the years.

Second is the planning and management element of business taxation and regulatory-mandated costs, which of course is where Uncle Sam gets the last laugh. The following two examples have been provided on tax-sensitive issues of which you should be aware when terminating a business and on the fact that nothing is final until the "fat bureaucrat sings."

Sales and Income Tax Issues

1. If the terminating company disposes of tangible business assets (furniture, computers, copiers, desks, and so on), a number of states will require that sales tax be collected on the sale of property to the end user. Just like a retail store selling used or secondhand furniture must collect sales tax, so must the terminating business. The danger here is that sales and use taxes are often held in trust for the taxing authority; and if the company can't pay, then somebody else will have to.

2. In most terminating business situations, not enough funds are available to repay the creditors in full. Okay, this sounds simple enough—the creditors get 35% on the dollar, with the rest written off. They can't pursue the company or its officers, board members, and so on, as no PGs are present and no assets remain. This is commonly referred to as debt forgiveness, which the IRS and numerous states view as income to the business. Yes, the terminating business can actually produce positive taxable income in its final year as a result of the amount of debt forgiveness realized. For a

regular C corporation, where any income tax obligation either will be treated as an unsecured debt (and thus written off) or will be applied to a previous year's net operating loss, this shouldn't present too many problems. However, for pass-through taxable entities (S corporations, partnerships, and LLCs that elect to report taxable income on the accrual basis), the taxable income would be distributed to the individual owners who then must report their pro rata share of the income on their individual tax returns (thus triggering an additional income tax obligation at the personal level, without a distribution available from the company to cover the obligation).

Although other examples could be provided, the lesson with business taxation and regulatory-mandated costs within a terminating business is the same as for a new business or an ongoing operation: *Comply and Plan*.

Managing the Wide Range of Termination Logistical Items

1. All company records (accounting, human resources, corporate minutes, etc.) should be brought up to the most current status possible. This may be difficult to achieve due to the skeleton work staff remaining, but it can greatly assist with the actual termination in process, as well as with posttermination issues that may arise. A little extra effort put in up front can alleviate a number of problems down the road.

2. Certain critical company files, records, information, past transactions, and so on, will need to be stored in a secure location and in the proper format. The files will need to be boxed, indexed, properly packaged, marked, and moved to a physical location for storage over an appropriate period. This may range from

one year to five (or more), depending on the termination environment present and the likelihood of posttermination legal action and/or other inquiries. Also, all of the company's electronic files, records, and information should be backed up and provided to appropriate parties for storage and future retrieval if needed.

Multiple backups may be needed, with one set kept by qualified and appropriate parties (trustee, officer, board member, etc.). Remaining company documents that are not vital or that are duplicates should be properly disposed of, which may include destroying information that is confidential. For example, copies of employee pay records should not be dumped in the local trash bin—this is just the type of confidential information that identity thieves are looking for.

3. A decision must be made regarding the most appropriate time to finalize the termination. Ideally, all termination issues would be resolved prior to the end of the company's annual fiscal year, as this would eliminate the added work and costs of keeping the business open into another fiscal year (e.g., processing another year of tax returns). Plenty of time should be provided to execute a termination with a keen eye kept on the company's annual fiscal year-end.

4. The pre- and post-termination management teams need to be identified and retained. Either internal remaining employees or external professionals can be used for this function, but they should be qualified, reliable, and prepared for the long haul. Setting aside money for these individuals is usually not a problem, as most trustees, courts, boards of directors, and so on, recognize the value these individuals bring and prioritize funds to be allocated for this use. Generally speaking, these individuals will need to be paid up front and to be offered some type of compensation incentive to properly tend to the buried business.

Capsule Summary

This chapter attempted to summarize, in the span of less than 20 pages, a business issue that few people will ever have to address in their life. Or to put it in a different perspective, let's remember what Captain James T. Kirk of *Star Trek* fame used to say at the beginning of each episode: "Space . . . the final Frontier. These are the voyages of the *Starship Enterprise*. Its five-year mission: To explore strange new worlds . . . to seek out new life and new civilizations . . . to boldly go where no man has gone before!"

It would be impossible to cover every potential element of a business termination because of the sheer volume of issues present and the diversity of companies and industries operating in today's economic environment. Rather, what we hoped to do was to provide a brief summary of the process and to remind the readers that planning for the death of a business is just as important as planning for its birth. As such, the following four macrolevel business termination attributes have been provided to summarize the process:

Final Overall Checklist for Business Terminations

1. The business termination will need to be appropriately planned for and managed, with the proper resources secured to complete the execution.

2. Retaining professional assistance to support the business termination process and to manage a number of highly technical issues associated with the termination is usually well worth the money.

3. All aspects of accounting and financial principles applied to birth and build a business are just as applicable to burying the business.

4. The business termination process should be marketed correctly and communicated efficiently to all of the employees, vendors, investors, and other parties tied to the company.

And if nothing else, the following thought should always be kept in mind: Although business terminations originate for a number of reasons and can proceed down various paths, one needs to remember that the termination process is far more than just business. It often involves the death of all of the effort, sweat, hard work, sleepless nights, and emotions put into the business, their child, by its founders.

ACCOUNTING AND FINANCIAL GLOSSARY

Note: This glossary includes some terms that are not discussed in the book but that are part of the lexicon or lingua franca used by business managers, lenders, and investors.

accelerated depreciation The term *accelerated* refers to two things: (1) the estimated useful life of the fixed asset being depreciated is shorter than a realistic forecast of its probable actual service life; and (2) most of the total cost of the fixed asset is allocated to the first half of its useful life and less to the second half (i.e., there is a front-end loading of depreciation expense).

accounting This is a broad, all-inclusive term that refers to the methods and procedures of financial record keeping by a business (or any entity); also refers to the main functions and purposes of record keeping, which are to assist in the operations of the entity, to provide necessary information for managers for making decisions and exercising control, to measure profit, to comply with income and other tax laws, and to prepare financial statements that are included in financial reports.

accounting equation This equation reflects the two-sided nature of a business entity: assets on one side, sources of assets on the other side: $\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$. The assets of a business entity are subject to two types of claims that arise from its two basic sources of capital: liabilities and owners' equity. The accounting equation is the

foundation for double-entry bookkeeping, which uses a scheme for recording changes in these basic types of accounts as either debits or credits such that the total of accounts with debit balances equals the total of accounts with credit balances. The accounting equation also serves as the framework for the statement of financial condition, or balance sheet, which is one of the three primary fundamental financial statements reported by a business. (The other two are the income statement and the statement of cash flows.)

accounts payable These are short-term, noninterest-bearing liabilities of a business that arise in the course of its activities and operations from purchases on credit. A business buys many things on credit; the purchase cost of goods and services are not paid for immediately. This liability account records the amounts owed for purchases on credit that will be paid in the short run, which generally means about one month. These are also referred to as *operating* liabilities.

accounts receivable These are short-term, noninterest-bearing debts owed to a business by its customers who bought goods and services from the business on credit. Generally, these debts should be collected within a month or so. In a balance sheet, this asset is listed immediately after cash. (Actually the amount of short-term marketable investments, if the business has any, is listed after cash and before accounts receivable.) Accounts receivable are viewed as a near-cash type of asset that will be turned into cash in the short run. A business may not be able to

collect all of its accounts receivable. Uncollectible accounts receivable are called *bad debts*.

accounts receivable turnover ratio This ratio is computed by dividing annual sales revenue by the year-end balance of accounts receivable. Technically speaking, to calculate this ratio, the amount of annual *credit* sales should be divided by the *average* accounts receivable balance; but this information is not readily available from external financial statements. For reporting internally to managers, this ratio should be refined and fine-tuned to be as accurate as possible.

accrual-basis accounting Well, *accrual* is not the best descriptive term in the world. Perhaps the best way to begin is to mention that accrual-basis accounting is much more than cash-basis accounting. Recording only the cash receipts and cash disbursements of a business would be grossly inadequate. A business has many assets other than cash, as well as many liabilities, that must be recorded. Measuring profit for a period as the difference between cash inflows from sales and cash outflows for expenses would be wrong and, in fact, is not allowed by the income tax law for most businesses. For management, income tax, and financial reporting purposes, a business needs a comprehensive record keeping system—one that recognizes, records, and reports all the assets and liabilities of a business. This all-inclusive scope of financial record keeping is referred to as accrual-basis accounting. Accrual-basis accounting records revenue when sales are made (though cash is received before or after making sales) and records expenses when costs are incurred (though cash is paid before or after expenses are recorded). Established financial reporting standards are based on accrual-basis accounting. Even though accrual-basis accounting is required, a business also reports a financial statement that summarizes its cash sources and uses for the period.

accrued expenses (payable) This account records the short-term, noninterest-bearing liabilities of a business that accumulate over time, such as vacation pay owed to employees. This liability is different than *accounts payable*, which is the liability account for bills that have been received by a business from purchases on credit.

accumulated depreciation This is a contra, or offset, account; it is coupled with the property, plant, and equipment asset account in which the original costs of these long-term operating assets of a business are recorded. By the way, these resources of a business are also called *fixed assets*. The accumulated depreciation contra account accumulates the amount of depreciation expense that is recorded period by period. So, the balance in this account is the cumulative amount of depreciation that has been recorded since the assets were acquired. The balance in the accumulated depreciation account is deducted from the original cost of the assets recorded in the property, plant, and equipment asset account. The remainder, called the *book value* of the assets, is the amount included on the asset side of a business.

acid test ratio (also called the **quick ratio**) The sum of cash, accounts receivable, and short-term marketable investments (if any) is divided by total current liabilities to compute this ratio. Suppose that all short-term creditors decided to stop extending credit to a business and that they all demanded payment when their debts come due. In this rather extreme scenario, the acid test ratio reveals whether the company's cash and near-cash assets would be enough to pay its short-term current liabilities—assuming that none of the liabilities could be renewed and rolled over. This ratio is an extreme test, which is not likely to be imposed on a business unless it is in financial straits. This ratio is quite relevant when a business is in a liquidation situation or is in bankruptcy proceedings.

amortization Unfortunately, this term has two quite different meanings. First, the term refers to the allocation to expense each period of the total cost of an intangible asset (such as the cost of a patent purchased from the inventor or the cost of goodwill bought by the business) over the useful economic life of the intangible asset. In this sense, amortization is equivalent to depreciation, which allocates the cost of a tangible long-term operating asset (such as a machine) over its useful economic life. Second, amortization refers to the gradual pay down of the principal amount of a debt. *Principal* refers to the amount borrowed that has to be paid back to the lender, as opposed to interest that has to be paid on the principal. Each period, a business may pay interest and

also make a payment on the principal of the loan, which reduces the principal amount of the loan, of course. In this situation, the loan is amortized, or gradually paid down.

asset turnover ratio This broad-gauge ratio is computed by dividing annual sales revenue by total assets. It is a rough measure of the sales-generating power of a business's assets. The idea is that assets are used to make sales, and sales should lead to profit. The ultimate test is not sales revenue on assets, but the profit earned on assets that is measured by the *return on assets* (ROA) ratio.

bad debts This term refers to accounts receivable from credit sales to customers that a business will not be able to collect (or not collect in full). In hindsight the business shouldn't have extended credit to these particular customers. The amounts owed to the business that will not be collected are written off and recorded to expense. The accounts receivable asset account is decreased by the estimated amount of uncollectible receivables, and the bad debts expense account is increased this amount. These write-offs can be done by the direct write-off method, which means that no expense is recorded until specific accounts receivable are identified as uncollectible, or by the allowance method, which is based on an estimated percent of bad debts from credit sales during the period. Under the allowance method, a contra asset account is created (called allowance for bad debts), and the balance of this account is deducted from the accounts receivable asset account.

balance sheet This is the term often used instead of the more formal and correct term—*statement of financial condition*. This financial statement summarizes the assets, liabilities, and owners' equity sources of a business at a moment in time. It is prepared at the end of each profit period and whenever else it is needed. It is one of the three primary financial statements of a business, the other two being the income statement and the statement of cash flows. The values reported in the balance sheet are used to determine book value per share of capital stock. The book value of an asset is the amount, or balance, reported in a business's most recent balance sheet.

basic earnings per share (EPS) This important ratio equals the net income for a period (usually one year) divided by the number of capital stock shares issued by a business corporation. Public companies must report EPS, but private companies are not required to report this ratio. EPS is so important for publicly owned business corporations that it is included in the daily stock trading tables published by the *Wall Street Journal*, the *New York Times*, and other major newspapers. Despite being a rather straightforward concept, several things complicate the calculation of EPS. As a result, a business may have to report its *basic* EPS, which uses the actual number of capital shares outstanding at the balance sheet date, and its *diluted* EPS, which includes additional shares of stock that may be issued when stock options are exercised, as well as any other shares that the business may be obligated to issue in the future. Also, a business may report not one but two net income figures—one before extraordinary gains and losses that were recorded in the period, and a second after deducting these nonrecurring gains and losses. To further complicate matters, some business corporations issue more than one class of capital stock, which makes the calculation of their EPS more technical.

big bath This street-smart term refers to the practice of many businesses of recording very large lump-sum write-offs of certain assets or recording large amounts for pending liabilities. These unusual entries are triggered by business restructurings, massive employee layoffs, disposals of major segments of the business, and other traumas in the life of a business. Businesses have been known to use these occasions to record every conceivable asset write-off and/or liability write-up that they can think of—in order to clear the decks for the future. In this way, a business avoids recording expenses in the future, and its profits in the coming years will be higher. Investors don't seem to mind this accounting practice.

book value and book value per share Generally speaking, these terms refer to the balance sheet value of an asset (or less often of a liability) or the balance sheet value of owners' equity per share. These terms are used to emphasize that the amount recorded in the accounts, or on the books, of a business is the value being used. The total of the ac-

counts reported for owners' equity in its balance sheet is divided by the number of stock shares of a corporation to determine its book value per share of its capital stock.

bottom line A commonly used term that refers to the net income (profit) reported by a business, which is the last, or bottom, line in its income statement. As you undoubtedly know, the term has taken on a much broader meaning in everyday use, which refers to the ultimate or most important effect or result of something. Not many accounting-based terms have found their way into everyday language, but *bottom line* is one that has.

breakeven point The annual sales volume level at which total contribution margin equals total annual fixed expenses. The breakeven point is only a point of reference, not the goal of a business of course. It is computed by dividing total fixed expenses by unit margin. The breakeven point is quite useful in analyzing profit behavior. It provides managers a good point of reference for setting sales goals and for understanding the consequences of incurring fixed costs for a period.

capital This is a very broad term with its roots in economic theory that refers to money and other assets that are invested in a business or other venture for the general purpose of earning a profit, or a return on the investment. Generally speaking, the sources of capital to a business are divided between debt and equity. *Debt*, as you probably know, is borrowed money on which interest is paid. *Equity* is the broad term for the ownership capital invested in a business, and most often is called owners' equity. Owners' equity arises from two quite different sources: money or other assets invested in the business by its owners, and profit earned by the business that is retained and not distributed to its owners (which is called retained earnings).

capital budgeting This term refers generally to analysis procedures for comparing alternative investments given a limited amount of total capital that has to be allocated among the various capital investment opportunities of a business. The term sometimes is used interchangeably with the analysis techniques themselves, such as calculating present value, net present value, and the internal rate of return of investments.

capital expenditures This term refers to investments by a business in long-term operating assets, including land and buildings, heavy machinery and equipment, vehicles, tools, and other economic resources used in the operations of a business. The term *capital* is used to emphasize that these are relatively large amounts and that a business has to raise capital for these expenditures from debt and equity sources.

capital investment analysis This term refers to several techniques and methods for analyzing the future returns from an investment of capital in order to evaluate the periodic capital recovery and earnings from the investment. The two broad approaches for capital investment analysis are spreadsheet models and mathematical equations for calculating the *present value* and *internal rate of return* of an investment. Determining the present value of an investment is also referred to as the *discounted cash flow* technique.

capital stock These are ownership shares issued by a business corporation. A business corporation may issue more than one class of capital stock shares. One class may have voting privileges in the election of the directors of the corporation, and the other class may not. One class (called preferred stock) may be entitled to a certain amount of dividends per share before cash dividends can be paid on the other class (usually called common stock). Stock shares may have a minimum amount for which they have to be issued (called the par value), or stock shares can be issued for any amount (called no par stock). Stock shares may be traded on public markets, such as the New York Stock Exchange, or through the Nasdaq network. There are about 10,000 stocks traded on public markets (although estimates vary for this number).

capital structure, or capitalization These terms refer to the combination of capital sources that a business has tapped for the money to invest in its assets—in particular the mix of its interest-bearing debt and its owners' equity. In a more sweeping sense, the terms also include appendages and other features of the basic debt and equity instruments of a business. Such things as stock options, stock warrants, and convertible features of preferred stock and notes payable are included in the broader sense of the terms, as well as any debt-based and equity-based financial derivatives issued by the business.

capitalization of costs When a cost is originally recorded as an increase in an asset account, it is said to be capitalized. This means that the outlay is treated as a capital expenditure, which becomes part of the total cost basis of the asset. The alternative is to immediately record the cost as an expense in the period the cost is incurred. Capitalized costs refer mainly to costs that are recorded in the long-term operating assets of a business, such as buildings, machines, equipment, tools, and vehicles.

cash burn rate A relatively recent term that has come into use; it refers to how fast a business is using up its available cash, especially when its cash flow from operating activities is negative instead of positive. This term most often refers to a business struggling through its start-up or its early phases that has not yet generated enough cash inflow from sales to cover its cash outflow for expenses (and perhaps never will).

cash flow This term is obvious but at the same time elusive. The term obviously refers to cash inflows and outflows during a period. But the specific sources and uses of cash flows are not clear in this general term. The statement of cash flows, which is one of the three primary financial statements of a business, classifies cash flows into three types: (1) from operating activities (sales and expenses, or profit-making operations), (2) from investing activities, and (3) from financing activities. Sometimes, the term *cash flow* is used as shorthand for *cash flow from profit* (i.e., cash flow from operating activities).

cash flow from operating activities (also called **cash flow from profit** and **operating cash flow**). This equals the cash inflow from sales during the period minus the cash outflows for expenses during the period. According to generally accepted accounting principles (GAAP), a business must use accrual-basis accounting to measure its net income (i.e., to record its revenue and expenses). At the same time, a business is required by GAAP to present a statement of cash flows that includes the amount of cash flow from operating activities. Accountants don't like to admit it, but this cash flow amount equals what profit would be on the cash basis of accounting. So, you get both the accrual-basis profit number and the cash-basis profit number in a financial report. One impor-

tant reason that the accrual-basis number is more correct and realistic is because it deducts an expense for the depreciation of the company's fixed assets. You can't ignore the fact that a business's fixed assets wear out and lose their economic usefulness over time.

cash flows, statement of This is one of the three primary financial statements that a business includes in the periodic financial reports to its outside shareowners and lenders. This financial statement summarizes the business's cash inflows and outflows for the period according to a threefold classification: (1) cash flow from operating (profit-making) activities; (2) cash flow from investing activities; and (3) cash flow from financing activities. *Warning:* The typical statement of cash flows is difficult to decipher; it includes too many lines of information and is overly technical compared with a typical balance sheet and income statement.

contribution margin This is an intermediate measure of profit that is equal to sales revenue minus cost of goods sold expense and minus variable operating expenses—but before fixed operating expenses are deducted. Profit at this point contributes toward covering fixed operating expenses and toward interest and income tax expenses. The breakeven point is the sales volume at which contribution margin just equals total fixed expenses.

conversion cost This term refers to the sum of direct labor and production overhead costs of manufacturing products. The cost of raw materials used to make products is not included in this definition. Generally speaking, this is a rough measure of the value added by the manufacturing process.

cost of capital This refers to the interest cost of debt capital used by a business plus the amount of profit that the business should earn for its equity sources of capital to justify the use of the equity capital during the period. Interest is a contractual and definite amount for a period, whereas the profit that a business should earn on the equity capital employed during the period is not. A business should set a definite goal of earning at least a certain minimum return on equity (ROE) and should compare its actual performance for the period against this goal. The

costs of debt and equity capital are combined, or weighted, into either a before-tax rate or an after-tax rate for capital investment analysis.

current assets The term *current* refers to cash and those assets that will be turned into cash in the short run. Five types of assets are classified as current: cash, short-term marketable investments, accounts receivable, inventories, and prepaid expenses (and they are generally listed in this order in the balance sheet).

current liabilities The term *current* refers to the liabilities that come due and will be paid in the near term, which generally means one year or less. In most cases these include accounts payable, accrued expenses payable, income tax payable, short-term notes payable, and the portion of long-term debt that will come due during the coming year. Keep in mind that a business may roll over its liabilities; the maturing liabilities are normally replaced in part or in whole by new liabilities that take the place of the old liabilities.

current ratio This ratio is calculated to assess the short-term solvency, or debt-paying ability, of a business. It equals total current assets divided by total current liabilities. Some businesses remain solvent with a relatively low current ratio, and others could be in trouble with an apparently good current ratio. The general rule is that the current ratio should be 2:1 or higher, but current ratios vary widely from industry to industry.

debt-to-equity ratio This is a widely used financial statement ratio to assess the overall debt load of a business and its capital structure. It equals total liabilities divided by total owners' equity. Both numbers for this ratio are taken from a business's latest balance sheet. There is no standard or generally agreed benchmark ratio, such as 1:1 or 2:1. Every industry is different in this regard. Some businesses, in particular banks and other financial institutions, have very high debt-to-equity ratios, whereas other businesses use very little debt relative to their owners' equity.

deferred maintenance This term refers to decisions by managers to put off, or delay, making expenditures for the normal repair and maintenance of a company's assets, such as not painting a building or not ser-

ving the company's boiler until the following year. The term implies that this is done to massage the numbers, that is, to avoid recording the expense this year in order to report a higher profit for the year.

depreciation This term refers to the generally accepted accounting principle of allocating the cost of a long-term operating asset over the estimated useful life of the asset. Each year of use is allocated a fraction of the original cost of the asset. Generally speaking, either the accelerated method or the straight-line method of depreciation is used. (There are other methods, but they are not as common.) Useful-life estimates are heavily influenced by the schedules allowed in the federal income tax law. Depreciation is not a cash outlay in the period the expense is recorded—just the opposite. The cash inflow from sales revenue during the period includes an embedded amount that reimburses the business for the use of its fixed assets. In this respect, depreciation is a source of cash.

diluted earnings per share (EPS) This measure of earnings per share recognizes that additional stock shares may be issued in the future for stock options and may be required by other contracts in which a business has entered, such as convertible features in its debt securities and preferred stock. Both basic earnings per share and, if applicable, diluted earnings per share are reported by publicly owned business corporations. Often the two EPS figures are not far apart; but in some cases the gap is significant. Privately owned businesses do not have to report earnings per share. *See also* **basic earnings per share**

discounted cash flow (DCF) This term refers to a capital investment analysis technique that discounts, or scales-down, the future cash returns from an investment. The discount rate is based on the cost of capital for the business. In essence, each future return is downsized to take into account the cost of capital from the start of the investment until the future point in time when the return is received. *Present value* (PV) is the amount resulting from discounting the future returns. The entry cost is subtracted from present value of the investment to determine *net present value* (NPV). The net present value is positive if the present value is more than the entry cost, which signals that the investment would earn more than the cost of capital rate.

Conversely, if the entry cost is more than the present value, the net present value is negative, which means that the investment would earn less than the business's cost of capital rate.

dividend payout ratio This ratio is computed by dividing total cash dividends for the year by the net income for the year. It's simply the percent of annual net income distributed as cash dividends for the year.

dividend yield ratio This ratio equals the cash dividends per share paid by a business over the most recent 12 months (called the trailing 12 months) divided by the current market price per share of the stock. This ratio is reported in the daily stock trading tables in the *Wall Street Journal* and other major newspapers.

earnings before interest and income tax (EBIT) This measure of profit equals sales revenue for the period minus cost of goods sold expense and all operating expenses—but before deducting interest and income tax expenses. It is a measure of the *operating* profit of a business before considering the cost of its debt capital and income tax.

earnings per share (EPS). See **basic earnings per share; diluted earnings per share**

equity This term refers to one of the two basic sources of capital to a business (the other being *debt* or borrowed money). Most often it is called *owners' equity* because it refers to the capital used by a business that "belongs" to the ownership interests in the business. Owners' equity arises from two quite distinct sources: capital invested by the owners in the business, and profit (net income) earned by the business that has not been distributed to its owners (which is called *retained earnings*). Owners' equity in our highly developed and sophisticated economic and legal system can be very complex—involving stock options, financial derivatives of all kinds, different classes of stock, convertible debt, and so on.

extraordinary gains and losses No pun intended, but these gains and losses are extraordinarily important to understand. These are non-recurring, one-time, unusual nonoperating gains or losses that are recorded by a business during the period. The amount of each of these

gains or losses, net of the associated income tax effect, is reported separately in the income statement. Net income is reported before and after these gains and losses. These gains and losses should not be recorded very often; but, in fact, many businesses record them every other year or so, which causes much consternation to investors. In addition to evaluating the regular stream of sales and expenses that yield operating profit, investors also have to factor into their profit analysis these irregular gains and losses reported by a business.

financial condition, statement of. See **balance sheet**

financial leverage The equity (ownership) capital of a business serves as the basis for securing debt capital (borrowed money). In this way a business increases the total capital available to invest in assets and can make more sales and more profit. The strategy is to earn operating profit, or earnings before interest and income tax (EBIT), on the capital supplied from debt that is more than the interest paid on the debt capital. A financial leverage gain equals the EBIT earned on debt capital minus the interest on the debt. A financial leverage gain augments earnings on equity capital. A business must earn a rate of return on its assets (ROA) that is greater than the interest rate on its debt to make a financial leverage gain. If the spread between its ROA and interest rate is unfavorable, a business suffers a financial leverage loss.

financial reports and statements *Financial* means having to do with money and economic wealth. *Statement* means a formal presentation. Financial reports are printed, and a copy is sent to each owner and to each major lender of the business (unless the lender doesn't want a copy). Today, public corporations make their financial reports available on a Web site, so all or part of the financial report can be downloaded by anyone. Businesses prepare three primary financial statements: (1) *the statement of financial condition, or balance sheet*; (2) *the statement of cash flows*; and (3) *the income statement*. The income statement is often called a *P&L* (profit and loss) report, especially inside a business. These three key financial statements constitute the core of the periodic financial reports that are distributed outside a business to its shareowners and lenders. Financial reports also include footnotes to the financial statements and much other information. Financial statements are prepared

according to *generally accepted accounting principles* (GAAP), which are the authoritative rules that govern profit measurement and the reporting of profit-making activities, financial condition, and cash flows. Internal financial statements, although based on the same profit accounting methods, report more information to managers for their decision making and control. Sometimes, financial statements are called simply *financials*.

financing activities This term refers to one of the three classes of cash flows reported in the statement of cash flows. This class includes borrowing money and paying debt, raising money from shareowners and the return of money to them, and dividends paid from profit.

first-in, first-out (FIFO) This is one of the two popular accounting methods to measure cost of goods sold during a period and the cost of ending inventory. It is both an expense measurement and an asset-valuation method; you can't separate these two aspects. The first costs of purchasing or manufacturing products are the first costs charged out to record cost of goods sold expense. Thus, the most recent costs of acquisition remain in the inventories asset account (until the goods are sold sometime later). To offer a simple example, suppose a business bought two units of a new product during the year. The first unit cost \$100 and the second unit, which was purchased sometime later, cost \$105. The business sold one of the two units. FIFO assigns \$100 to cost of goods sold expense and \$105 to the cost of ending inventory. *See also last-in, first out* (LIFO—which uses the same facts but gives different results).

fixed assets This is an informal term used to refer to the variety of long-term operating resources used by a business—real estate, machinery, equipment, tools, vehicles, office furniture, computers, and so on. In balance sheets, these assets are typically labeled *property, plant, and equipment*. The term *fixed assets* captures the idea that the assets are relatively fixed in place and are not held for sale in the normal course of business. The cost of fixed assets, except land, is depreciated, which means the cost is allocated to expenses over the estimated useful lives of the assets.

fixed expenses, or costs These are expenses or costs that remain relatively constant in amount, or fixed, over the short run. These costs do

not vary with changes in sales volume or sales revenue or other measures of business activity. Over the long run, however, these costs are raised or lowered as the business grows or declines. Fixed operating costs provide capacity to carry on operations and to make sales. Fixed manufacturing overhead costs provide production capacity. Fixed expenses are a pivot point for analyzing profit behavior, especially in determining the breakeven point and in analyzing strategies for improving profit performance.

free cash flow Most often this term refers to cash flow from profit (cash flow from operating activities). The underlying idea is that a business is free to do what it wants with its cash flow from profit. However, a business usually has many ongoing commitments and demands on this cash flow, so it may not actually be free in deciding what to do with this source of cash. *Caution:* This term is not officially defined anywhere, and different people use the term with different meanings. Pay particular attention to how an author or a speaker is using the term.

generally accepted accounting principles (GAAP) This term refers to the body of authoritative rules and standards for measuring profit and preparing financial statements that are included in financial reports by a business to its outside shareowners and lenders. The development of these standards has been an ongoing, evolving process for more than 70 years. Congress passed a law in 1934 that bestowed primary jurisdiction over financial reporting by publicly owned businesses to the Securities and Exchange Commission (SEC). But the SEC has by and large left the development of GAAP to the private sector. Presently the Financial Accounting Standards Board (FASB) is the primary but not the only authoritative body that makes pronouncements on GAAP. *One caution:* GAAP are like a moveable feast. New rules are issued fairly frequently, old rules are amended from time to time, and some rules established years ago are discarded on occasion. Professional accountants have a heck of time keeping up with GAAP, that's for sure. New GAAP rules sometimes have the effect of closing the barn door after the horse has left. Accounting abuses occur, and then, after the damage has been done, new rules are issued to prevent such abuses in the future.

gross margin (also called **gross profit**) This first-line measure of profit equals sales revenue less cost of goods sold. This is profit before operating, interest, and income tax expenses are deducted. Financial reporting standards require that gross margin be reported in external income statements. Gross margin is a key variable in management profit reports for decision making and control. Gross margin doesn't apply to service businesses that don't sell products.

income statement This financial statement summarizes sales revenue and expenses for a period and reports one or more profit lines for the period. It also reports any other gains and losses for the period. It is one of the three primary financial statements of a business. The bottom-line profit figure is labeled *net income* or *net earnings* by most businesses. Externally reported income statements disclose less information than do internal management profit reports—but both are based on the same profit accounting principles and methods. Profit is not known until accountants complete the recording of sales revenue and expenses for the period (as well as determining whether any extraordinary gains and losses should be recorded). Profit measurement depends on the reliability of a business's accounting system, the choices of accounting methods by the business, and the end-of-period adjusting entries recorded by the business. *Caution:* A business may engage in certain accounting manipulations; managers may intervene in the normal course of operations for the purpose of improving the amount of profit recorded in the period, which is called *massaging the numbers, earnings management, or income smoothing*.

internal accounting controls This refers to forms and procedures established by a business (which go beyond what would be required for the record keeping function of accounting) that are designed to prevent accounting errors and fraud. Two common examples of internal controls are (1) requiring a second signature by someone higher in the organization to approve a transaction in excess of a certain dollar amount, and (2) giving customers printed receipts as proof of sale. Other examples of internal control procedures are restricting entry and exit routes of employees, requiring all employees to take their vacations and assigning another person to do their jobs while they are away, surveillance

cameras, surprise counts of cash and inventory, and rotation of duties. Internal controls should be cost-effective; the cost of a control should be less than the potential loss that is prevented. The guiding principle for designing internal accounting controls is to deter and detect errors and dishonesty. The best internal controls in the world cannot prevent most fraud by high-level managers who take advantage of their positions of trust and authority.

internal rate of return (IRR) This term refers to the precise discount rate that makes the present value (PV) of the future cash returns from a capital investment exactly equal to the initial amount of capital invested. If IRR is higher than the company's cost of capital rate, the investment is an attractive opportunity; if IRR is less, the investment is substandard from the cost of capital point of view.

inventory shrinkage This term refers to the loss due to customer shoplifting; employee theft; and damage, breakage, spoilage, and obsolescence of products while being handled, moved, or stored in a warehouse; it is also due to accounting errors in recording the purchase, manufacture, and sale of products. A business should make regular physical counts and inspections of its inventory to determine this loss.

inventory turnover ratio This ratio equals the cost of inventories divided into the cost of goods sold expense for a period (usually one year). The ratio depends on how long products are held in stock on average before they are sold. Managers should closely monitor this ratio to tell if products are being held too long before being sold.

inventory write-down This term refers to making an accounting entry, usually at the close of a period, to decrease the cost value of the business's inventory asset account in order to recognize loss of value due to products that cannot be sold at their normal mark-ups or that will be sold below cost. A business compares the recorded cost of products held in inventory against the sales value of the products. Based on the lower of cost or market rule, an entry is made to decrease inventory and to record an expense. (An inventory write-down entry is also recorded for inventory shrinkage.)

investing activities This term refers to one of the three classes of cash flows reported in the statement of cash flows. This class includes capital expenditures for replacing and expanding the fixed assets of a business, proceeds from disposals of its old fixed assets, and other long-term investment activities of a business.

last-in, first-out (LIFO) One of the two popular accounting methods to measure cost of goods sold during a period and the cost of ending inventory. It is both an expense measurement and an asset-valuation method; you can't separate these two aspects. The last, or most recent, costs of purchasing or manufacturing products are the first costs charged out to record cost of goods sold expense. Thus, the oldest costs of acquisition remain in the inventories asset account. To offer a simple example, suppose a business bought two units of a new product during the year. The first unit cost \$100 and the second unit, which was purchased sometime later, cost \$105. The business sold one of the two units. LIFO assigns \$105 to cost of goods sold expense and \$100 to the cost of ending inventory. *See also first-in, first-out* (FIFO—which uses the same facts but gives different results).

management control This term is difficult to define in a few words. The essence of management control is keeping a close watch on everything. Anything can go wrong and can get out of control. Management control can be thought of as the follow-through on strategy and policy decisions, to make sure that the actual outcomes are going according to the purposes and goals of the earlier decisions that set things in motion. Managers depend on feedback reports to know what's going on; and they compare actual outcomes against the plans, goals, and budgets for the period, which focus on major variances and deviations.

mark-to-market This term refers to the accounting method that actually records increases and decreases in assets based on changes in the assets' market values. For example, mutual funds revalue their securities portfolios every day based on closing prices on the New York Stock Exchange and the Nasdaq. Generally speaking, businesses do *not* use mark-to-market methods for their assets. A business, for instance, does not revalue its fixed assets (buildings, machines, equipment, etc.) at the end of each period—even though the replacement values of these assets

fluctuate over time. Having made this general comment, we should mention that accounts receivable are written down to recognize bad debts, and a business's inventory asset account is written down to recognize stolen and damaged goods as well as products that will be sold below cost. If certain of a business's tangible and intangible long-term operating assets become impaired and will not have utility in the future consistent with their book values, then the assets are written down.

market capitalization, or market cap This amount equals the current market value per share of capital stock multiplied by the total number of capital stock shares outstanding of a publicly owned business. This value often differs widely from the book value of owners' equity reported in a business's balance sheet.

negative cash flow The cash flow from the operating activities of a business can be negative, which means that its cash balance decreased from its sales and expense activities during the period. When a business is operating at a loss instead of making a profit, its cash outflows for expenses could be more than its cash inflow from sales. Even when a business makes a profit for the period, its cash inflow from sales could be less than the sales revenue recorded for the period, thus causing a negative cash flow for the period. *Caution:* This term is also used for certain types of investments in which the net cash flow from all sources and uses is negative. For example, investors in rental real estate properties often use the term to mean that the cash inflow from rental income is less than all cash outflows during the period, including payments on the mortgage loan on the property.

net income (also called the **bottom line, net earnings, net operating earnings, or just earnings**) This key figure equals sales revenue for a period less all expenses for the period; any extraordinary gains and losses for the period are included in this final profit figure. Everything is taken into account to arrive at net income, which is popularly called the *bottom line*. Net income is clearly the single most important number in business financial reports.

net present value (NPV) This figure equals the present value (PV) of a capital investment minus the initial amount of capital that is invested,

or the entry cost of the investment. A positive NPV signals an attractive capital investment opportunity; a negative NPV means that the investment is substandard from the cost of capital point of view.

net worth Generally, this term refers to the book value of owners' equity as reported in a business's latest balance sheet. If liabilities are subtracted from assets, the accounting equation becomes: Assets – Liabilities = Owners' Equity. In this version of the accounting equation, Owners' Equity equals net worth, or the amount of assets after deducting the liabilities of the business.

operating activities This term refers to the sales and the expense activities of a business, both those that sell products and those that sell services. The term is used to embrace all types of activities engaged in by profit-motivated entities toward the objective of earning profit. A bank, for instance, earns net income not from sales revenue but from loaning money on which it receives interest income. Making loans is the main revenue operating activity of banks.

operating cash flow. See **cash flow from operating activities**

operating liabilities These are the short-term liabilities generated by the operating (profit-making) activities of a business. Most businesses have three types of operating liabilities: (1) accounts payable from inventory purchases and from incurring expenses that are bought on credit; (2) accrued expenses payable for unpaid expenses; and (3) income tax payable. These short-term liabilities of a business are noninterest-bearing.

operating profit. See **earnings before interest and income tax (EBIT)**

overhead costs This term generally means indirect, in contrast to direct, costs. *Indirect* means that a cost cannot be matched or coupled in any obvious or objective manner with particular products, or specific revenue sources, or a particular organizational unit. Production overhead costs are the indirect costs of manufacturing products. The direct costs of manufacturing products are raw materials and production-line labor. Manufacturing overhead costs include variable costs (such as

electricity, gas, and water that vary with total production output) and fixed costs (that do not vary with increases or decreases in actual production output).

owners' equity This term refers to the capital invested in a business by its shareowners plus the profit earned by the business that has not been distributed to them, which is recorded in an account called *retained earnings*. Owners' equity is one of the two basic sources of capital to a business, the other being borrowed money, or debt. The book value, or value reported in a balance sheet for owners' equity, is not the market value of the business. Rather, the balance sheet value reflects the historical amounts of capital invested by the owners over the years in a business plus the accumulation of yearly profits that were not paid out to its owners.

present value (PV) This amount is calculated by discounting the future cash returns from a capital investment. The discount rate usually is the cost of capital rate for the business. If PV is more than the initial amount of capital that has to be invested, then the investment is attractive. If PV is less, then better investment alternatives should be looked for.

price/earnings (P/E) ratio This key ratio equals the current market price of a capital stock share divided by the earnings per share (EPS) for the stock. The EPS used in this ratio may be the *basic* EPS for the stock or its *diluted* EPS—you have to check to be sure about this. A low P/E may signal an undervalued stock or may reflect a pessimistic forecast by investors for the future earnings prospects of the business. A high P/E may reveal an overvalued stock or may reflect an optimistic forecast by investors. The average P/E ratio for the stock market as a whole varies considerably over time.

product cost This is a key factor in the profit model of a business. Product cost is purchase cost for a retailer or a wholesaler (distributor). A manufacturer has to accumulate three different types of production costs to determine product cost: direct materials, direct labor, and manufacturing overhead. The cost of products (goods) sold is deducted from sales revenue to determine gross margin (also called gross profit),

which is the first profit line reported in an external income statement and in an internal profit report to managers.

profit The general term *profit* is not precisely defined; it may refer to net gains over a period of time, or to cash inflows less cash outflows of an investment, or to earnings before or after certain costs and expenses are deducted from income or revenue. In the business world, profit is measured by the application of generally accepted accounting principles (GAAP). In the income statement, the final or bottom-line profit is generally labeled *net income* or *net earnings*. It equals revenue (plus any extraordinary gains) less all expenses (and less any extraordinary losses) for the period. Internal management profit reports may include several profit lines: gross margin, contribution margin, operating profit (earnings before interest and income tax), and earnings before income tax. External income statements report gross margin (also called gross profit) and often report one or more other profit lines, although practice varies from business to business in this regard.

profit-and-loss report (P&L) This is an alternative moniker for an income statement or for an internal management profit report. Actually it's a misnomer because a business has either a profit *or* a loss for a period. It would be better called the profit *or* loss report, but the term has caught on and won't change.

profit ratios These ratios are based on sales revenue for a period. A measure of profit is divided by sales revenue to compute a profit ratio. For example, gross margin is divided by sales revenue to compute the gross margin profit ratio. Dividing bottom-line profit (net income) by sales revenue gives the profit ratio that is generally called *return on sales*.

property, plant, and equipment This title, or label, is generally used in financial reports for the long-term assets of a business, which include land, buildings, machinery, equipment, tools, vehicles, computers, furniture and fixtures, and other tangible long-lived resources that are not held for sale but are used in the operations of a business. The less formal name for these assets is *fixed assets*.

quick ratio. See **acid test ratio.**

return on assets (ROA) Although practice is not uniform for calculating this ratio, most often it equals operating profit (earnings before interest and income tax) for a year divided by the total assets that are used to generate the profit. ROA is the key ratio to test whether a business is earning enough on its assets to cover its cost of capital.

return on equity (ROE) This key ratio equals net income for the year divided by owners' equity and is expressed as a percent. ROE should be higher than a business's interest rate on debt because the owners take more risk.

return on investment (ROI) This very general concept refers to some measure of income, or earnings, or profit, or gain over a period of time divided by the amount of capital invested during the period. It is almost always expressed as a percent. For a business, an important ROI measure is its *return on equity* (ROE), which see.

return on sales This ratio equals net income divided by sales revenue.

revenue-driven expenses These are those operating expenses that vary with changes in total sales revenue (total dollars of sales). Examples are sales commissions based on sales revenue, credit card discount expenses, and rents and franchise fees based on sales revenue. These expenses are a key variable in a profit model. Segregating these expenses from other types of expenses that behave differently is essential for profit analysis. (These expenses are not disclosed separately in externally reported income statements.)

Securities and Exchange Commission (SEC) This federal agency oversees the issuance of and trading in securities of public businesses. The SEC has broad powers and can suspend the trading in securities of a business. The SEC has supervisory responsibility for the recently established Public Company Accounting Oversight Board, created by the Sarbanes-Oxley Act of 2002. The SEC has the primary jurisdiction over making accounting and financial reporting rules, but over the years it has largely deferred to the private sector for the development of generally accepted accounting principles (GAAP).

solvency This term refers to the ability of a business to pay its liabilities on time when they come due for payment. A business may be in-

solvent, which means that it is not able to pay its liabilities and debts on time. The current ratio and the acid test ratio are used to evaluate the short-term solvency prospects of a business. Also, the liabilities of a business can be compared with its cash flow from operating activities for a rough indication of its debt-paying ability.

stockholders' equity, statement of changes in Although often referred to as a financial statement, this is more in the nature of a supporting schedule that summarizes in one place the various changes in the owners' equity accounts of a business during the period—including the issuance and retirement of capital stock shares, cash dividends, and other transactions affecting owners' equity. This statement (schedule) is very helpful when a business has more than one class of stock shares outstanding and when a variety of events occurred during the year that changed its owners' equity accounts. Also, generally accepted accounting principles allow that certain events that have a positive or a negative effect on owners' equity can bypass the income statement and be reported only in this statement.

straight-line depreciation This depreciation method allocates a uniform amount of the total costs of long-lived operating assets (fixed assets) to each year of use. It is the alternative to *accelerated depreciation*. When using the straight-line method, a business may adopt a longer life estimate for depreciating a fixed asset as compared with the accelerated method (though not necessarily in every case). Both methods are allowed for income tax and under generally accepted accounting principles (GAAP).

sunk cost This is a cost that has been paid and cannot be undone or reversed. Once the cost has been paid, it is irretrievable, like water over the dam or spilt milk. Usually the term refers to the recorded value of an asset that has lost its value to a business. Examples are the costs of products in inventory that cannot be sold and fixed assets that are no longer usable. The book value of these assets should be written off to expense. Sunk costs are irrelevant and should be disregarded in making decisions about what to do with the assets (except that the income tax effects of disposing of the assets should be taken into account).

times interest earned This is the ratio that tests the ability of a business to make interest payments on its debt. It is calculated by dividing annual earnings before interest and income tax by the interest expense for the year. There is no particular rule for this ratio, such as 3 or 4 times, but obviously the ratio should be higher than one.

variable expenses These are operating expenses that vary with changes in either sales volume or sales revenue, in contrast with fixed expenses that remain the same over the short run, not fluctuating in response to changes in sales volume or sales revenue. *See revenue-driven expenses and volume-driven expenses.*

volume-driven expenses Those expenses that vary with changes in total sales volume (total quantities, or units of sales). Examples of these types of expenses are delivery costs, packaging costs, and other costs that depend mainly on the number of products sold or the number of customers served. These expenses are a key factor in a model for profit behavior analysis. Segregating these expenses from other types of expenses that behave differently is very useful for management analysis and control. The cost of goods sold expense depends on sales volume and is a volume-driven expense. Product cost (i.e., the cost of goods sold) is such a dominant expense that it is treated separately from other volume-driven operating expenses.

weighted average cost of capital *Weighted* means that the proportions of debt capital and equity capital of a business are used to calculate its average cost of capital. This key benchmark rate depends on the interest rate(s) on a business's debt and on the return on equity (ROE) goal established by a business. This is a return on capital rate and can be applied either on a before-tax basis or on an after-tax basis. A business should earn at least its weighted average rate on the capital invested in its assets. The weighted average cost of capital rate is used as the discount rate to calculate the present value (PV) of specific investments.

INDEX

- Accelerated depreciation, 40
- Accountants, functions of, 9. *See also* Certified public accountants (CPAs); Financial advisers
- Accounting equation, 43
- Accounting fraud, 92, 140, 151, 174–177
- Accounting methods, 17–20, 30, 83, 136, 161–162, 172
- Accounts payable, 113, 115
- Accounts receivable, 17, 25–26, 30, 39–40, 45, 163, 206
- Accounts receivable turnover ratio, 40
- Accrual-basis accounting, 19–20, 30
- Accrued expenses payable, 113, 115
- Acquisitions, 191–192
- Aggressive accounting, 161
- Allocated fixed expenses, 80
- American Institute of Certified Public Accountants (AICPA), 122–123, 149
- Amortization, 41, 170
- Angels, as source of capital, 56
- Antifraud controls, 141–143, 156. *See also* Fraud prevention; Internal control, fraud prevention strategies
- Arm’s-length transactions, 205
- Asset(s), *see* Business assets
 - deals, business acquisitions, 191–192
 - liquidation, 205–206
 - ratios, 40–41
 - sales, 199, 206
 - turnover ratio, 41
- Assignment for the Benefit of Creditors (ABC), 199, 202
- Audits, 143–144, 151, 153, 165–166, 174
- Backup files, 212
- Bad debts, 123–124, 163
- Balance sheet, 38, 43–44, 66, 113–114, 163, 173, 195
- Bankruptcy, 43, 198, 201–202
- Banks, as source of capital, 56
- Bookkeeping, 134
- Book value, 195
- Breakeven point, 82
- Business assets:
 - expenses connected with, 37, 39–41
 - profile of, 35–36
 - revenues connected with, 37, 39–41
 - types of, 33–34
- Business decisions, 72, 75, 85, 183, 212
- Business entities, 60–63, 121–122. *See also specific types of business entities*
- Business fraud:
 - prevention of, *see* Fraud prevention
 - reasons for, 154–155
 - types of, 139–140
- Business insurance, 184
- Business plan:
 - company operating overview, 50
 - executive summary, 49–50
 - financial segment, 50
 - importance of, 5, 14, 48–49, 51
 - market for product or service, 50
- Business planning, 184

- Business termination:
 - business valuation, 181–195
 - plan, 197–213
- Business valuation:
 - business acquisitions, 191–194
 - drivers of, 188–190
 - methodologies, 186–187, 194
 - purpose of, 183–185, 193–194
- Capital, generally:
 - business entities, 60–63
 - risk, *see* Capital risk management
 - sources of, 55–59, 67
 - types of, 52–54
- Capital expenditures, 23, 109–116
- Capital-raising tools, 49–51, 67
- Capital requirements, 48
- Capital risk management, 63–66
- Cash-basis accounting, 17–18, 30
- Cash flow, generally:
 - business valuation and, 186–188
 - calculation of, 114–115
 - forecasting, 113–116
 - future, 189, 195, 206
 - length of stream, 189
 - multiple, business valuation method, 186
 - from operating activities, 105–107, 113, 182
 - from profit, 182
 - profit report, 19–22
- Cash outflow, 21–22
- Cash receipts, 142, 150
- Cash sources, 42
- C corporation, 60–61, 95–96, 121–122, 212
- Certified public accountants (CPAs), functions of, 122–124, 136, 144, 149, 152–153, 161, 165–166, 174
- Chapter 11 bankruptcy, 201–202
- Chapter 11 reorganization, 201
- Chapter 7 bankruptcy, 201–202
- Chief executive officer (CEO), functions of, 63, 113
- Chief financial officer (CFO), 63
- Commitments, off-balance-sheet, 208
- Computer accounting software, 83
- Computer system, antifraud controls, 145
- Concentration risk, 189
- Conservative accounting, 161
- Contingent obligations, off-balance-sheet, 208
- Contractual agreements, off-balance-sheet, 208
- Cooking the books, *see* Accounting fraud
- Cost of goods sold, 9, 21, 37, 79, 93, 97
- Cost recovery, depreciation, 110, 116
- Creditors, debt repayment order, 207–208
- Credit risk flags, 146–148
- Current assets, 44
- Current liabilities, 44
- Cyclical businesses, 104
- Debt, generally:
 - financing, 52–53, 66
 - forgiveness, 211
 - increase in, 107
 - repayment, 207–209
- Declining business, 108, 116
- Default, 52–53, 66
- Deferred compensation, 124
- Depreciation, 12, 18, 28, 40, 80, 95, 110–113, 116–117, 123
- Direct fixed expenses, 80
- Directors and officers (D&O) insurance, 210–211
- Disclosure, 43, 67
- Discretionary expenses, 165–166, 171–172
- Diversification risk, 189
- Dividends, 90, 106
- Documentation guidelines, 67, 206
- Double taxation, 122

- Earnings, management and manipulation of, 167
- Earnings before interest and income tax (EBIT), 75, 95, 97
- Earnings before interest, taxes, depreciation, and amortization (EBITDA), 186
- Earnings reports, 9
- Employment taxes, *see* Payroll taxes
- End-of-period adjustments, 162, 170
- Equity financing, 52–54, 66
- Equity participation plans, 183
- Estate planning, 184–185
- Excise tax, 129, 131
- Executive summary, 49–50, 203
- Exit strategies, 67
- Expense(s), generally:
 - accounts, 9
 - deductions, 6–7
 - timing of, 17–18
 - types of, 93–94
- External financial reporting, 42–43
- Family, friends, and close business associates (FF&CBA), as source of capital, 55–56, 58
- Federal taxes, 125–128, 130–137
- Fiduciary responsibility, 206
- Financial Accounting Standards Board (FASB), 122
- Financial advisers, 122–124, 136
- Financial leverage, 7, 75
- Financial planning, 27
- Financial profile, 89–90
- Financial reporting fraud, 140, 174
- Financial reports, 19, 113–114
- Financial statements, 39, 83, 123–124, 136, 153, 158, 173, 175, 193. *See also specific financial statements*
- Financing activities, 42
- First-in, first-out (FIFO), 79, 170, 172
- Fixed assets, 26, 39–41, 106, 113–114, 117, 144–145, 164
- Fixed costs and expenses, 8–14, 80, 83, 85, 95–96, 102
- Fixed operating costs, 83
- Forecasting, 5, 92, 101, 113
- Fraud prevention, 141–143, 146–149, 156. *See also* Internal control, fraud prevention strategies
- General liability insurance, 211
- Generally accepted accounting principles (GAAP), 25, 43, 122–124, 167–169
- Gifts, 58
- Goodwill, 39–40
- Gross margin, 21, 81
- Growth companies, 112–116
- Growth phase:
 - cash demands, 112–115
 - price *vs.* volume, 87–102
 - profit, 71–85
- Growth potential, 189
- Growth rate, 102
- Head taxes, 131
- Hidden assets, 188
- Historical cost basis, 110
- Incentive tax credits, 131
- Income measurement, 122–123
- Income smoothing, 167
- Income statement, 9, 63–65, 159–160, 164, 169–171
- Income tax, 37, 75, 121–124, 136, 211–212
- Inflation, 109
- Information technology (IT), 145
- Insurance, 26, 39, 184, 206, 210–211. *See also specific types of insurance*
- Intangible assets, 39–41, 53, 170, 184, 188–189, 205–206
- Intellectual property, 188–189
- Interest expense, 37, 75, 170
- Interest rates, 189

Internal control, fraud prevention strategies:
 management guideposts, 143–146
 policies and problems with, 150–151
 public companies, 152–153
 purpose of, 142
 Sarbanes-Oxley Act (2002), 152–153
 Internal Revenue Code, 17, 123
 Internal Revenue Service (IRS), 53, 121, 123–126, 135, 144, 188, 190, 211
 Inventory, 22, 25, 27–28, 30, 39–40, 109, 115, 163, 172–173
 Investing activities, 42
 Investment bankers, 56
 Involuntary termination process, 199–200
 IRS tax forms, 125–126

 KPMG Fraud Survey, 141, 151

 Last-in, first-out (LIFO), 79, 170, 172
 Leases, 45
 Leasing companies, as source of capital, 56
 Leveraging, 66
 Liabilities, 39–41
 Life insurance, 184
 Limited liability company (LLC), 60–61, 212
 Liquidity, 189
 Local taxes, 131–133
 Long-term liabilities, 44
 Losses, profit report, 162

 Management, generally:
 business termination process, 212
 continuity, 189
 decisions, 72, 75, 85
 fraud by, 151
 fraud prevention strategies, 143–145
 influence, equity financing, 54
 profit accounting controls, 167–168
 teamwork, 51

 Margin, 14, 64, 81, 85, 95–96, 100
 Margin ratio, 10
 Marketing plan, 5
 Markup, 21
 Massaging the numbers, 174
 Maturity, debt financing, 52
 Medicare tax, 125–126, 136
 Moderate growth, 28–29

 Negative cash flow, 24, 26–27, 58, 116
 Net assets, 193
 Net income, 106, 115–117
 Net operating loss, 212
 New customers/clients, credit risk flags, 146–148
 New employees, background checks, 144
 Nexus compliance, 134
 Nonprofit cash flows, 23–24
 Nut, defined, 12

 Operating activities, 25, 42, 105–107, 109, 113
 Operating assets, 108, 116, 172–173
 Operating earnings, 75
 Operating expenses, 26, 37
 Operating leverage, 7, 98
 Operating liabilities, 114–115, 172–173
 Operating profit, 75, 95–96
 Ownership, 52

 Partnerships, 60–61
 Pass-through entities, 121–122
 Payroll taxes, 125–128, 136
 Permanent differences, income tax, 123
 Personal expenses, 188
 Personal guarantees, 208
 Personnel resources, business termination plan, 204
 Positive cash flow, 58
 Preference, equity financing, 54

Preferred stock, 54, 209
 Prepaid expenses, 26, 30, 37, 39, 41, 206
 Price earnings multiple, business valuation, 186–187
 Priority creditors, 207
 Private capital sources, 56
 Product warranty liability, 163–164
 Profit, generally:
 analysis, 77–78
 benchmarks, 102
 case illustration, 89–92
 defined, 76
 formula, 97
 Profitability, 64
 Profit accounting:
 accounting fraud, 174–177
 assets, influential factors, 172–173
 bad debts, 163
 case illustration, 169–171
 expense timing, 165–166, 176
 inventory shrinkage, 163
 liabilities, influential factors, 172–173
 managerial controls, 167–169
 methodology, 161–162, 176
 nature of, 159–160, 176
 product warranty liability, 163–164
 uniformity in, 43
 Profit-and-loss (P&L) report, 9–10, 14, 19, 21–22, 25–26, 112–113, 142
 Profit centers, 76
 Profit model, 8–11, 83–84
 Profit plan, 4–5, 14
 Profit report, 72–80, 82–84, 160
 Property and casualty insurance, 211
 Property, plant, and equipment, 45, 113, 206
 Property tax, 12, 130
 Public capital sources, 57–58
 Publicly traded companies, 187
 Quick financial analysis, 64
 Receivables, 144
 Recordkeeping guidelines, 134, 144, 150–151, 164, 212
 Reporting standards, 43
 Restrictive agreement, 192
 Retained earnings, 106
 Return on capital ratios, 68
 Revenue-driven expenses, 80, 94, 97, 100
 Risk/reward relationship, 67
 Sales, generally:
 capacity, 12–13
 revenues, 79–80
 tax, 129–130, 211–212
 variable assets and liabilities and, 114
 volume, 79, 85, 97, 101, 102
 Sarbanes-Oxley Act (2002), 123, 152
 SBA loan programs, 56
 Secured creditors, 207
 Securities and Exchange Commission (SEC), 122, 175
 Security, debt financing, 53
 Security measures, 145
 Self-insurance, 184
 Separation of duties, 143
 Sin taxes, 131
 Small businesses, security measures, 145
 Social Security tax, 125–126, 136
 Sole proprietorship, 60–61
 Start-up phase:
 assets, 18–45
 capital-raising, 47–68
 cash flow, 15–30
 profit, 3–14
 Start-up year, cash flow in, 25–27
 Statement of financial condition, 43

State taxes, 125–127, 130–133, 135–136
Steady-state businesses, 109–111, 116
Stock deals, business acquisitions, 191–192
Stock options, 183
Stock sales, 199
Straight-line depreciation, 40
Strategic planning, 134
Subchapter S corporation, 61, 121–122
Subordinated creditors, 207–208
Surplus cash, 108

Tangible assets, 53, 184, 205–206
Tax/taxation, *see specific types of taxes*
 business termination process, 211–212
 credits, 131
 government-mandated costs, 132–135
 management of, 134–135
 significance of, 120
Term life insurance, 185
Terminating a business:
 asset liquidations, 205–206
 bankruptcy protection, 201–202
 business termination plan, 203–204
 debt repayment, 207–209
 defined, 198
 operational issues, 210–212
 voluntary *vs.* involuntary, 199–200

Timing differences, impact of, 123, 161–162, 165–166
Turnover ratio, 40

Unclaimed property tax, 130
Unemployment taxes, 125–127
Uniform Commercial Code (UCC), 53
Unpaid expenses, 37, 39, 41
Unsecured creditors, 53, 207
Unsecured financing, 58
Use tax, 129–130

Valuation, *see* Business valuation
Variable acquisition control, 192
Variable assets (and liabilities), 114
Variable expenses, 8–10
Variable operating costs, 83
Venture capitalists, 56
Volume-driven expenses, 80, 93–94, 97, 102
Voluntary termination process, 199–200

Warranties, 192
Warrants, 54
Whistle-blowing, 144, 173
White knights, as source of capital, 56
Withholding taxes, 125–128, 136
Workers' compensation insurance, 132–133, 210
Working cash balance, 45