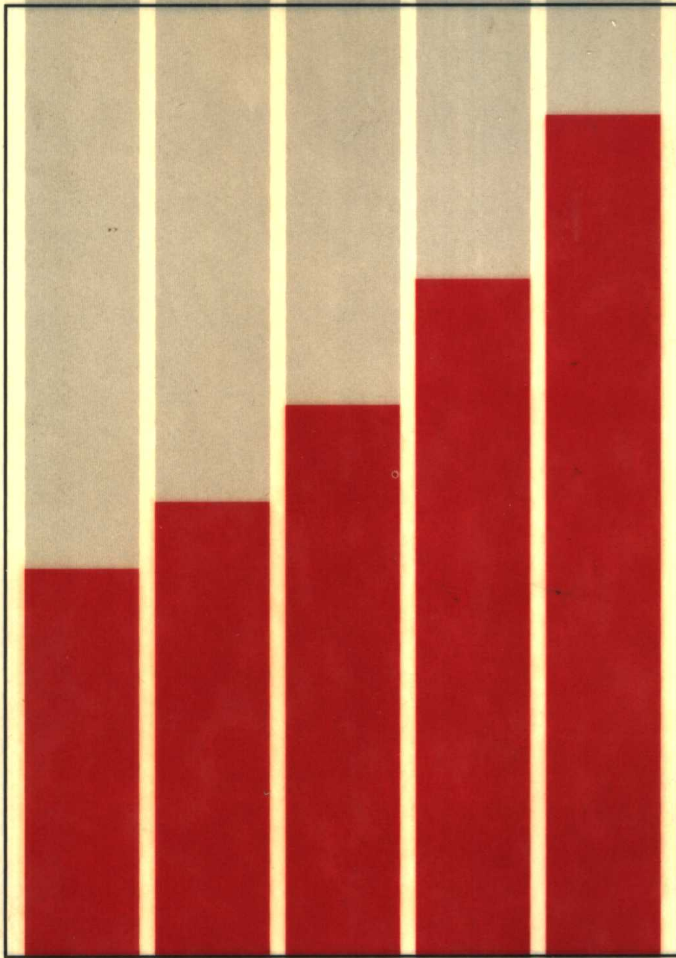
# Profit Dynamics



## Achieving Consistent Bottom Line Results

John A. Tracy

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**Dow Jones-Irwin**
**Homewood, Illinois 60430**

*For*
*Big Jack*

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# PREFACE

## BIRD'S EYE VIEW OF BOOK

Today's business environment is more dynamic than ever before. Managers face constant change, both of their own making and in response to the competition, the economy, and the unexpected. The key factors that drive profit are in constant flux. Managers should know how to estimate the *profit impact* of these changes. Timely analysis is critical. Quick calculations have to be made. Managers need a sure-handed grip on profit.

Good decisions start with good analysis. At decision time the manager needs methods that get right to the answer without sifting through a lot of irrelevant detail. The last few digits of profit depend on a multitude of details. But the *significant* digits depend on a relatively few crucial factors. Even a small change in one factor may cause a huge difference in profit or a swing from profit to loss.

The first part of the book demonstrates how to use certain basic profit analysis techniques. These are the most useful ones for the everyday profit decisions managers have to make. Managers have to crank some numbers, but at the same time should avoid what has been called "analysis paralysis." Calculations should be fast and to the point, although somewhat approximate. Precision is not the objective. Practical examples illustrate each technique without getting too bogged down in detail.

Next, the book moves on to *assets* and *liabilities*. It would be convenient to look only at profit which is reported in the

Income Statement, and not worry about the Balance Sheet which summarizes assets and liabilities. Profit is revenue less expenses, as you undoubtedly know. But, as Paul Harvey says, "the rest of the story" is just as interesting and just as important.

Revenue can be an increase in Cash, an increase in Receivables, an increase in some other asset, or even a decrease in a liability. Expenses are more diverse; expenses decrease four or more different assets and increase three or more different liabilities, depending on which particular expense you're talking about. In summary, revenue and expenses set financial condition in perpetual motion.

Cash is the master clearing account; everything moves through cash sooner or later. It's the "sooner or later" that causes the problems. Cash flow from profit depends on the ebb and flow of the several assets and liabilities driven by profit-making operations. When profit moves in one direction, cash flow usually moves in the *opposite* direction! This fundamental point is critical to financial decision making and control.

Assets less operating liabilities must be balanced with an equal amount of capital. Raising capital boils down to decisions between debt and equity, and the risks and benefits of financial leverage. The time value of money—either as the cost of capital or the return on capital—is the key factor in financial decisions. Managers should be sure-footed on this terrain.

The last chapter discusses management control. Decisions start things in motion, but control brings things to a successful conclusion. Good decisions with bad control may be as disastrous as making bad decisions in the first place. The theme of the last chapter is that control has to be coordinated with decision making. Conventional accounting reports do not necessarily resonate with the analysis techniques used by managers in making decisions. Managers may have to insist on better control reports.

Making profit, of course, is not simply a matter of good analysis and good control. Any business manager will tell you there are many dimensions of success. The manager needs many skills, to be sure. This book concentrates on one essential skill—mastering the basic analytic techniques needed in making profit and financial decisions.

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## WHOM THE BOOK IS FOR

This book does not require an MBA in Finance. You don't have to be a CPA to understand the book. Just the opposite! The book assumes you have little or no background in accounting and finance. You may have some experience with financial reports and accounting statements. If so, you may have developed a bad attitude toward accountants, and make the wrong assumption that you'll see more of the same in this book. You won't.

This a *not* a book on financial statement analysis, *nor* how to interpret accounting reports. I'm a CPA and have written a successful book on understanding financial reports.[1] I appreciate the problems managers have in dealing with accounting information and the general inability of accountants to communicate clearly and concisely. Accountants are very reluctant to abandon their forbidding technical jargon in reporting to managers, or to anyone else for that matter.

Don't confuse *decision* information and how you analyze this information with the information in accounting statements and how you read such information. Frankly, conventional accounting is not all that relevant for decision making. Accounting provides the historical point of departure for decision information and not much more.

Accounting is *post-decision* oriented. The accounting system accumulates and reports the results of transactions already completed. Keep in mind that the transactions are the end results of decisions made sometime ago. Accounting control information is absolutely essential, of course. Managers must compare the actual results of their decisions against the results originally intended when the decisions were made. You have to know how you're doing and compare this against some benchmark of performance. And managers certainly need to know what's happening that wasn't anticipated. The role of accounting in management control certainly deserves a chapter in the book. But control is not decision making.

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[1]*How To Read A Financial Report,* 2d ed. John A. Tracy, (New York: John Wiley & Sons, 1983).

To re-emphasize: *At decision time* managers should restrict their attention to the truly important factors which are relatively few, and know how to analyze the main effects of changes in these factors. If analysis mistakes are made at decision time, the final results won't be good. Managers have to get off on the right analytical foot, which is the main thrust of this book.

## THE PROFIT MOTIVE

In this book the economic role of profit is taken for granted. Profit stimulates innovation; it's the reward for taking risks; it's the return on equity capital invested in business; it's compensation for hard work and long hours; it motivates efficiency; it weeds out products and services no longer in demand. In short, the profit system delivers the highest standard of living in the world. Despite this, many have a deep-seated bias against profit or are ignorant of the purposes of the profit motive.

But it would be naive to ignore the misuse and failings of the profit motive and the profit-at-any-cost attitude: dishonest advertising, selling unsafe products, cheating employees out of their pensions, unsafe working conditions, and the deliberate violation of laws and regulations and other illegal activities. No wonder profit is a dirty word to so many and why business gets some bad press. Higher ethical standards are a worthy goal never to lose sight of.

## DO YOU USE A SPREADSHEET?

You may use a spreadsheet program such as LOTUS 1–2–3 or Excel. If so, you'll find the book especially useful. Most of the examples throughout the chapters are presented in a spreadsheet format. Several places in the book, I mention that I used a spreadsheet to structure and do the computations for the example. I found spreadsheets to be very helpful, and I know you will, too.

Of course, you don't need to know the first thing about spreadsheets to follow the examples. But, if you're a regular user

of a spreadsheet, you can easily duplicate the example in your own spreadsheet. It will take only a little time to enter the data. It's not important that you format the output in exactly the same manner as shown in the book. Once you set up your own spreadsheet for an example, you can then easily adapt the example to fit your particular decision situation. As you go through the book, you can build up a collection of those spreadsheets most helpful to you.

# ACKNOWLEDGMENTS

An author should never get all the credit for a book. I sincerely thank my editor, Jim Childs, for his very helpful suggestions and contributions. The book is much better for his attention and encouragement. Also, I would like to thank Brad Fishburne very much for his indispensable role in "sponsoring" this book and recommending it to Dow Jones-Irwin. Brad, I owe you one. Last, I would also like to thank all those professionals with Dow Jones-Irwin, from copyediting through final production and promotion, for a top quality effort.

My only regret is that my father, "Big Jack," is not alive to read the book. A long-time business owner and manager, he would have liked the book I think.

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# PART 1

# BASICS OF MAKING PROFIT

# CHAPTER 1

# PATHWAY TO PROFIT

How does Coke do it? How does Coca-Cola or any successful business make a profit? The answer is not just making sales, but turning sales revenue into *operating profit.* Over many years Coke's operating profit has stayed very close to 15 percent of its sales revenue. The long-run success of any business is built on the ability of its managers to maintain the operating profit yield, when sales are growing, as well as during downturns. Without doubt, operating profit is the wellspring of a business.

Operating profit is not net income or bottom line profit. Operating profit is profit before deductions for interest and income tax expenses, and before any other unusual (extraordinary) gains and losses during the period. Interest depends how much debt capital is used to finance assets. Sizable amounts of assets are needed to carry on profit-making activity. Before getting into the financial side of the business, managers need a clear picture of operating profit. No part of the picture should be out of focus.

The first several chapters analyze operating profit from the manager's *decision-making* viewpoint. Managers should concentrate first and foremost on making operating profit. Managers must know the pathway to operating profit and avoid detours along the way.

## PATHWAY TO OPERATING PROFIT

Operating profit depends on three primary factors: *profit margin, sales volume,* and *fixed expenses*. Managers need a sure-handed grip on these factors. In particular, they must understand the

impact of changes in these factors on operating profit. The basic pathway to operating profit is as follows:

**Basic Pathway to Operating Profit**

| | | | | |
|---|---|---|---|---|
| Sales Price | | | | |
| (Product Cost) | | | | |
| (Variable Expenses) | | | | |
| **Profit Margin** | × | **Sales Volume** | = | Total Profit Margin |
| | | | | **(Fixed Expenses)** |
| | | | | Operating Profit |

Profit margin is sales price less product cost and less variable expenses. The first step is setting sales price and controlling product cost and variable expenses, which determine the profit margin per unit. The second step is making sales and achieving sales-volume goals. Profit margin multiplied times sales volume produces the total profit margin needed to overcome fixed expenses and yield operating profit. Tough decisions have to be made every step of the way.

We start with a basic example that walks through the pathway. This walk-through lays the foundation for the essential analysis techniques managers need to reach their profit goals. These basic analysis methods are also a defensive measure, to prevent the mistake of making decisions that may look good until you stop and analyze the profit consequences.

## A DELICIOUS EXAMPLE

Everyone likes ice cream, so let's start with an ice cream shop example. Suppose you are thinking of buying an established store that has been in business in a good location for several years. The present owner wants to retire and move to Sun City. He provides the following information for the most recent year. (See Table 1–1).

Selling only single dip cones would not yield $45.00 revenue per gallon. A single dip cone sells for under a dollar and there are 30 scoops per gallon. The basic marketing strategy is to entice customers to "trade up" to sundaes and shakes, which sell for much more than a dollar per scoop.

The purchase cost of the product (ice cream) averages $12.50 per gallon. In addition there are other variable expenses in-

**TABLE 1–1**
**Data For Example**

| | |
|---|---|
| Total sales volume | 5,400 gallons |
| Average sales revenue per gallon | $45.00 |
| Purchase cost per gallon | $12.50 |
| Variable expenses per gallon sold | $2.50 |
| Total fixed expenses for year | $94,500 |

cluding the cost of cones and cups, plus the toppings, straws, plastic spoons, and napkins. There are a few other variable expenses as well. For example, bad-checks expense varies with the number of sales. The $2.50 per gallon figure includes all the variable expenses.

In contrast to product cost and other variable expenses of making sales, all other operating expenses are *fixed for the year* and do not depend on sales activity. Fixed expenses include a wide variety of costs that the business is committed to for the year. Some are not flexible at all, such as the monthly rent, liability insurance, and depreciation on the store's equipment, furniture, and fixtures. You can see why fixed expenses often are called "overhead."

Some expenses are fixed for the most part, though a bit flexible on the edge. Consider wages expense. The store's employees are paid hourly rates; they are hired either as full-time or half-time employees. So, each employee is paid a fixed wage per week. However, the business could shift to more part-time employees if sales volume dropped off substantially. Conversely, overtime hours could be worked if sales volume surged unexpectedly. For another example, extending the hours the business is open would push the utility bill up some.

To sum up, total fixed expenses were $94,500 last year. This amount would have been much the same even if sales volume had been quite a bit lower or higher.

We'll assume the numbers provided by the seller of the business are reliable and accurate, although you can't be too careful. Before making a final decision to buy the business, you should verify these figures. However, verification might not be too easy. Apply some common sense tests, such as looking at the posted sales prices. Ask to see recent purchase invoices to check the

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