HOW TO READ A FINANCIAL REPORT

WORKBOOK



Wringing Vital Signs Out of the Numbers

In Tribute to John "TOP" Tracy

Tage C. Tracy

WILEY

HOW TO READ A FINANCIAL REPORT WORKBOOK

HOW TO READ A FINANCIAL

WRINGING VITAL SIGNS OUT OF

WILEY

REPORT WORKBOOK

THE NUMBERS

TAGE C. TRACY

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PREFACE

The first question to ask is why write this book now or maybe more appropriately, what took so long?. To be quite honest, this book had been staring us in the face for years. It lies in the simple concept of setting our keyboards aside, taking a step back, and listening more attentively to what additional accounting and financial concepts our customers would like to understand. The purpose of this book is to extend and expand your knowledge of accounting and financial concepts, topics, and subject matter, keeping within our primary mission of helping you, the reader, digest relatively complex financial content by presenting it in easy-to-absorb, bite-sized pieces.

Since 1980, when *How to Read a Financial Report* (now in its 10th edition) was first released, the book's content and concepts have been well received by the business community and our readers alike, which span the far reaches of the globe. The feedback we've received has been extremely rewarding and enlightening. We appreciate the thousands of compliments received over the past 40 years and have enjoyed learning what topics readers consider to be most valuable. Through all this, one constant has always been present as we continue to see a robust demand for the Excel workbook file, which includes all the financial exhibits presented in the book.

Sometimes it takes a while for an accounting concept or opportunity to sink in, and this book was no different. After having further discussions with my publisher and various third parties, it dawned on me that I must provide more context, insight, and actual examples of financial exhibits to help our readers digest and understand the concepts presented in *How to Read a Financial Report*. Providing the Excel workbook files will offer the in-depth information readers want to gain confidence. As such, the first edition of *How to Read a Financial Report Workbook* has been produced with the following key objectives being kept in mind:

- ✓ First, the content offered in this book is designed to complement *How to Read a Financial Report*, 10th Edition, by presenting different perspectives on core concepts (to improve your knowledge of the content). For example, financial statement connections are covered in both books, but in the workbook, the financial statement connections are evaluated from the perspective of understanding critical business operating cycles (e.g., the sales or purchasing cycle).
- ✓ Second, this book offers a much more thorough business financial case study comparing our example company operating under three different business management scenarios or styles, including a base case, a simple case, and an aggressive case. We have provided additional exhibits, calculations, and number crunching, which offer invaluable insights into how the same example business can generate such widely varying financial statements and operating results.
- ✓ Third, a deeper dive aims to help readers understand trending accounting topics related to recognizing sales and the impact on accounts receivables and deferred revenue, managing inventory levels and establishing values, properly accounting for long-term capital assets, the importance of intangible assets, and insight into just how often accounting estimates are utilized when preparing financial statements and reports.
- ✓ Fourth, bonus material covers extremely important financial and accounting topics related to how a company raises and manages equity. Critical topics involving the cap table (i.e., the ownership summary of the business) and the cap stack (i.e., ownership rights to the assets of a business) are introduced with real-world financial exhibits provided.
- ✓ Fifth and finally, the cash flow cycle is completed with expanded material, tips, tidbits, advice, and insight provided as to how companies utilize different strategies to manufacture cash from the balance sheet along with providing a clearer picture to help you determine if net profits are actually real or imaginary.

This book has been structured to enhance and expand your knowledge of financial reports and financial statements as presented in *How to Read a Financial Report*. It provides additional financial exhibits, case studies, and financial what-ifs and it presents key concepts in bullet-point formats. I explain important concepts by providing important written overviews, but the general idea is to allow you, as a reader, to dig into the numbers in more depth to see a complete link between financial numbers and concepts.

The first part of this book (Chapters 1 through 4) will act as a refresher course with key financial and accounting concepts, including understanding the critical importance of cash flow (Chapters 1 and 3), revisiting the big three financial statements (Chapter 2), providing a summary of financial statement connections in Chapter 4 (but from the perspective of understanding business cycles).

Part Two starts by laying the foundation for our case study of our fictitious business example, but under three different management styles (or strategies). It then proceeds by taking a deep dive into our three management styles for our fictitious business example case study by focusing on four significant balance sheet accounts and how, within our three management styles, the same business can produce such different results. The four significant balance sheet accounts include trade accounts receivables, inventory, long-term assets, and other current liabilities (including accrued liabilities and deferred revenue, a hot topic). I take a balance sheet approach to these concepts and topics to explain the reference I make in previous books as to why the balance sheet is where losses go to hide, cash goes to die, and the BS goes to lie. Part two closes by providing a comprehensive financial analysis for our fictitious business example case study companies.

Finally, I close out the book in Part Three by incorporating bonus material related to understanding such critical concepts as using ratio analysis to evaluate the financial performance of our case study companies, how to manufacture cash from the balance sheet, gaining further knowledge on whether net profits are real or imaginary, and then providing more insight as to ownership structures of businesses and the all-important cap stack.

I present countless financial statements and related financial exhibits in this book as Excel spreadsheets. If you would like a copy of the Excel workbook of the exhibits, please contact me at my email address: tagetracy@cox.net.

I cannot thank my late father and John Wiley & Sons enough for providing me the opportunity to author this book that takes *How to Read a Financial Report* to the next level. Like all the books I've written, this workbook emphasizes that accounting is just as much an art form as it is a science. The funny thing about accounting is that it is really centered on simple algebra logic and equations (e.g., A - B = C, sales revenue minus costs of sales revenue equals gross profit). So, while the math is relatively simple, clearly defining what comprises A (i.e., sales revenue) and B (costs of sales revenue) to produce C (gross profit) takes on a life of its own. To repeat one of the oldest jokes in the accounting profession, when you ask an accountant what 2+2 equals, the proper response is: *What do you need it to be?*

I sincerely hope you enjoy this book and expand your knowledge of the profession, art, and technical aspects of accounting, and reading, writing, and understanding financial reports and statements.

TAGE C. TRACY

Anthem, Arizona June 2024

Part One

A REFRESHER COURSE IN THE BASICS

1

STARTING WITH THE LANGUAGE OF FINANCE AND CASH FLOWS

Chapter 1 dives headfirst into two critical topics that will be on full display throughout this book. First, I provide a crash course on the language of accounting and finance. Simply put, in order to master reading (covered in my book *How to Read a Financial Report*), writing (covered in my book *How to Write a Financial Report*), and understanding financial statements and reports, it is essential that you learn the basic jargon.

Second, understanding how businesses generate and consume cash is a topic that is of critical importance and always on full display. As such, the second half of Chapter 1 dives right into the importance of cash flow, which is expanded upon further in Chapter 3, with even more insight provided in Chapters 12 and 15. True to our primary mission of translating complex accounting and financial concepts into simple and easy-to-understand tools and ideas, cash flows, the lifeblood of every business, is positioned with added reverence throughout this book to ensure that you remember the golden rule of operating a business: Never, ever run out of cash!

A Crash Course in the Language of Accounting and Finance

If you're heading to France or Italy, it goes without saying that you should brush up on the basics of French or Italian because being able to communicate in the local dialect can improve your travel experience. The same goes for accounting and finance. If you can at least master some basic terminology, it will be less of a struggle to understand financial statements. This section of the chapter covers two buckets of terminology, basic and advanced.

Basic Terminology

Basic terminology is primarily associated with communicating the results of financial statements (from an accounting perspective), with a heavy weighting toward the income statement. Below, I've provided a sampling of the most commonly used basic accounting and financial terminology:

- Top line: A company's net sales revenue generated over a period of time (e.g., for a 12-month period).
- COGS or COS: Pronounced like it is spelled; stands for costs of goods sold (for a service-based business or company that sells both products and services) and costs of sales (for a service-based business). COGS or COS tend to vary directly (or in a linear fashion) with the top-line sales revenue.

- Gross profit and margin: Sometimes used interchangeably, gross profit equals your top line less your COGS or COS. The gross margin (a percentage calculation) is determined by dividing your gross profit by the top line.
- Op Ex: A broad term that is short for operating expenses, which may include selling, general, administrative, corporate overhead, and other related expenses. Unlike COGS or COS, Op Ex tends to be fixed in nature and will not vary directly with the top-line sales revenue.
- SG&A: Selling, general, and administrative expenses. Companies may distinguish between Op Ex and SG&A to assist parties with understanding the expense structure of its operations in more detail.
- Bottom line: A company's net profit or loss after all expenses have been deducted from net sales revenue. Being *in the black* indicates that a net profit is present and being *in the red* indicates that a net loss was generated.
- Breakeven: The operating level where a company generates zero in profit or loss. It can also be used to identify the amount of sales revenue that needs to be generated to cover all COGS/ COS and Op Ex.

- Contribution margin: You may hear companies reference the term *contribution margin*. What this generally refers to is the profit generated by a specific operating unit or division of a company (but not for the company as a whole). Most larger companies have multiple operating units or divisions, so the profit (or loss) of each operating unit or division is calculated to determine how much that specific unit or division contributed to the overall performance of the entire company.
- Cap Ex: Cap Ex stands for capital expenditures and is a calculation of how much a company invested in tangible or intangible assets during a given period (e.g., for equipment, machinery, new buildings, investments in intangible assets, etc.).
- YTD, QTD, MTD: These are simple and stand for *year to date*, *quarter to date*, or *month to date*. For example, a flash report may present QTD sales for the period of 10/1/24 through 11/15/24 (so management can evaluate sales levels through the middle of a quarter).
- FYE and QE: These two items stand for fiscal year-end and quarter-end. Most companies utilize a fiscal year-end that is consistent with a calendar year-end of 12/31/xx (which would make their quarter-ends 3/31/xx, 6/30/xx, 9/30/xx, and 12/31/xx). Please note that several companies utilize FYEs that do not follow a calendar year-end to match their business cycle with that of a specific industry. For example, companies that cater to the education industry may use a FYE of 6/30/xx to coincide with the typical operating year for schools or colleges (which tend to run from 7/1/xx through 6/30/xx).

Advanced Terminology

Advanced terminology tends to be centered in references to financial concepts that are focused on cash flows, forecasts, projections, and financing topics (i.e., raising capital such as securing loans or selling equity in a company). With that said, here's a summary listing of advanced terminology to reference.

- EBITDA: This is one of the most used (and abused) terms in finance today and stands for *earnings before interest, taxes, depreciation, and amortization*. A shorter version that is also used frequently is EBIT or *earnings before interest and taxes*. The reason for EBITDA's popularity is that capital sources want to clearly understand just how much earning a company can generate in the form of operating cash on a periodic basis. EBITDA strips out interest, taxes, and depreciation and amortization expense (both noncash expenses) to calculate what is perceived to be a company's ability to generate internal positive cash flow (which is widely used when evaluating the value of a company and its ability to service debt).
- Free cash flow: FCF is closely related to EBITDA but takes into consideration numerous other factors or adjustments such as the need for a company to invest in equipment or intangible assets on a periodic basis (to remain competitive), the required or set debt service the company is obligated to pay each year (for interest and principal payments), any guaranteed returns on preferred equity, and other similar adjustments. FCF can be a highly subjective calculation based on the estimates and definitions used by different parties.

- YOY: YOY stands for a year-over-year change in financial performance (e.g., sales change for the current 12-month period compared to the prior 12-month period).
- CAGR: This stands for compounded annual growth rate and represents a financial calculation that evaluates a financial performance over a number of periods (e.g., sales increased at a CAGR of 15.5 percent for the five-year period of 2019 through 2024).
- Sustainable growth rate: This calculation estimates a company's maximum achievable growth rate by using internal operating capital (i.e., positive cash flow) only. When a company exceeds its sustainable growth rate, external capital such as loans or equity from new investors may need to be secured to support ongoing operations.
- Debt service: Total debt service includes both required loan interest and principal payments due over a period of time.
- B2B and B2C: A company that sells primarily to other businesses is B2B (business to business), whereas a company that sells primarily to consumers is B2C (business to consumer).
- Burn rate: A burn rate is generally used for newer businesses or start-ups that have not achieved profitability and are "burning" a large amount of cash. The burn rate calculates the amount of cash burn a company is incurring over a specific period, such as a month or a quarter. If a company has a burn rate of \$250,000 a month (before generating any sales), then an investor could quickly calculate that this company would need \$3 million of capital to support it for one year.

- Runway: The runway calculates how much time a company has before it runs out of cash. In our example, if the company has \$1 million of cash left and is burning \$250,000 per month, it has a remaining runway of four months.
- TTM and FTM: TTM stands for *trailing twelve months* and FTM stands for *forward twelve months*. These figures are often used by parties to help understand a company's annual operating results that are not in sync with its FYE (e.g., how much sales revenue was generated for the period of the QE 9/30/19 through the QE 6/30/20, 12 months of operating history). TTM and FTM can be especially useful when evaluating companies that are growing rapidly or have experienced a recent significant change in business.
- C-suite: The C-suite represents the group of company executive management team members whose titles include the word *chief*. This would include the chief executive officer (CEO), chief operating officer (COO), chief financial officer (CFO), chief technology officer (CTO), chief marketing officer (CMO), chief investment officer (CIO), and other designated chief executive management positions as determined by a company.

Throughout the remainder of this book, I will reference these concepts frequently, so you may want to bookmark this section to help refresh your memory as needed. There's no harm in returning to these lists when you're swimming with the financial sharks out in the open water. There's nothing worse than looking overmatched because you can't even understand basic accounting and financial terminology.