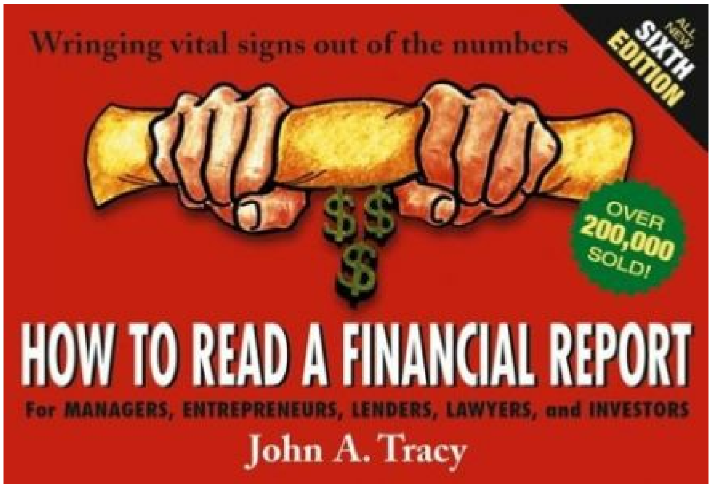

Book How to Read a Financial Report

Wringing Vital Signs out of the Numbers

John A. Tracy
Wiley, 2004
First Edition:1980

Recommendation

Taking the time to learn the basics of reading corporate financial statements can help you become more informed about your investments, your job and your business decisions. John A. Tracy provides a clearly written guide to core financial reports. He shows you how they fit together and why they matter. You will gain confidence as you work through the concepts he explains and begin to use what you learn to dig into the financials of familiar companies. In the hands of a lesser teacher than Tracy, these concepts could be confusing. In fact, the whole discussion could become a powerful soporific that descends on your mind like a fog. Instead, this book makes it interesting and clear. Everyone needs some financial awareness. *BooksInShort* believes that this valuable introduction is a good starting point for learning to read real business data. New managers may find that Tracy opens a door and invites you to come into a room that was previously locked.

Take-Aways

- A company's core financials reports are its balance sheet, and its income and cash flow statements.
- These reports interconnect to provide a clear view of a company's performance.
- Accrual accounting matches revenues and expenses within the correct time period.
- To see a company's profitability, look at its income statement, not its cash flow.
- The balance sheet is a snapshot of the company's assets, liabilities and equity.
- Footnotes illuminate the choices and assumptions of the reports' preparer.
- Ratios, such as price to earnings or earnings per share, can help you understand the financial figures better.
- The law requires U.S. companies that publicly trade debt and stock to have full independent audits.
- Companies can choose among accounting methods, but must stick with a consistent choice.
- Get information from other sources to supplement your use of financial reports.

Summary

Core Financial Reports

Managers often have a feel for how their businesses are doing, but sometimes their impressions are off the mark. When you learn to decode well-prepared financial reports, you will be much better equipped to understand the realities of a business's position, what it has been doing correctly and where it faces challenges. Reading financial reports with an understanding of how the accountant prepared them will give you an even clearer picture. When you compare reports from several companies in an industry, you will know their conditions and how they rank among their competitors.

> "Financial statements are the primary and only direct source of information for the profit performance of a business, and for its financial condition."

The statement of cash flows shows exact cash inflows and outflows to present a firm's cash needs. The report shows the cash received from customers and other sources, and how it was used. Most managers focus on this report. However, you cannot use it to determine profitability or financial condition. Profitability is reported on the income statement, which begins with total revenue from sales and then steps through a series of deductions: cost of goods, operating expenses, depreciation, taxes and other business costs. This report also lists certain key numbers, such as gross margin, earnings before taxes and net income. Gross margin shows if the company can sell (and buy) products with sufficient margin to cover its business expenses and still remain profitable. Net income is the bottom line profit and tells shareholders what their investment is earning.

> "The three basic financial statements fit together like tongue-in-groove woodwork. The income statement, balance sheet, and cash flows statement...interlock."

The balance sheet lists the firm's assets, balanced against its liabilities and the owner's equity. They must balance to zero. This is easy, because the owner's equity is simply the difference between assets and liabilities. It can be a positive (you hope) or negative number. The balance sheet does not show cash flows or profits. It presents a static snapshot of the business at a specific moment. To sum up the big three: the balance sheet shows assets and liabilities; the income statement shows profitability; and the cash flow statement lists how much cash a business is creating or consuming. The next step is to understand how these reports interconnect.

Sales, Accounts Receivable, Cost of Goods and Inventory

To see interconnections, trace the way processes described by the numbers on one report drive the numbers on another. For example, sales revenue on the income statement directly relates to accounts receivable on the balance sheet. Cash deals will show in the cash account, but selling on credit increases the accounts receivable. Accounts receivable shows an average collection period. If it rises without a matching growth in sales, that may reveal a collection problem. The costs of goods sold, shown on the income statement, drive the balance sheet's inventory total since the goods you buy are inventory until you sell them. If the report shows rising inventory but dropping sales, you may need to cut purchasing. Check to see if this is a problem in spots or a general inventory issue.

> "Financial condition is communicated in an accounting report called the balance sheet, and profit performance is presented in an accounting report called the income statement."

Holding inventory ties up cash which is costly. If you borrow to buy inventory, you must pay interest. If you use cash, you're spending money you could invest. Try to maintain the lowest level of inventory possible without losing sales or breaking delivery commitments. Determine the length of your average inventory holding period. If your annual cost of goods sold is $32 million and your inventory on hand is $8 million, you turn inventory over about four times a year, so you are holding it 13 weeks. Figure out the optimal period. Check competitors' reports to see if your inventory management leads or lags.

Operating Expenses, Depreciation, Interest and Taxes

Most business expenses are recorded and paid within a single accounting period. However, some are paid later or in a series of payments. The goal in accrual accounting is to match and realize revenue and expenses. When you incur an expense, you create a liability. If you don't pay expenses immediately, they become part of accounts payable. When you pay an expense in advance, say for insurance or taxes, create a holding account that you decrease each month as you "use" the insurance or taxes. Match the expense to the time period and revenue that aligns with its consumption. Companies accrue certain liabilities (product warranty costs, accumulated employee sick days) in expense payable accounts, but not in accounts payable. They also track and register interest expenses because of their tax implications.

> "Sellers that extend credit set...prices slightly higher to compensate for the delay in receiving cash...a small but hidden interest charge is built into the cost paid by the purchaser."

Use depreciation and amortization to show the costs of assets with extended useful lives, such as buildings or cars. The asset depreciation that the U.S. federal income tax schedules use for tax purposes may not match your experience with the useful life of equipment or property. Most companies also use these schedules for their financial statements. Some firms use accelerated depreciation schedules to front-load the expensing of these assets and to realize greater tax savings in the early years. Maintain a depreciation schedule for each relevant asset. Don't lump them together. Most firms use a companion account for each asset to show its accumulated depreciation and decrease its net value on the books. Likewise, you can manage most business taxes, but you must account for them. A firm that earns no taxable income pays no corporate income tax. With planning, you can reduce and postpone taxable income. Use "earnings before taxes" to calculate how much tax you owe.

Net Income and Retained Earnings

Net income is your profit after expenses. If your firm retains the net income, add it to the owner's equity, as shown in two accounts on your balance sheet: 1) invested capital and 2) earnings retained by the firm while it is operating. A going concern puts retained earnings on its balance sheet. Paying dividends reduces these earnings. To derive earnings per share (EPS), divide net income by the number of issued shares. A company with a million outstanding shares and a net income of $5 million has an EPS of $5. If the business closed, it would sell its assets, pay its debts and distribute any surplus to shareholders.

Cash Flows

Many people wonder why cash flow and profits are not the same. Imagine if you sold $1 bills for 90 cents each, you would have an immense cash flow as long as you supplied the dollar bills. But, you would lose 10 cents per dollar sold, so you would not earn any profit. The income statement and the statement of cash flows thus tell you different things. You must earn a profit and turn that profit into cash to realize its maximum value. If it sits in accounts receivable, it loses value daily because of the time value of money.

> "Business managers have a double duty – first to earn profit, and second to convert the profit into cash as soon as possible."

Profit is generated from internal cash flows. A firm may invest some cash or put it in an interest-bearing account until it needs money to fund the business. The earnings you make from interest and investments are accountable cash flows, but not profit. A rapidly growing business may have a negative cash flow, even if it is profitable, just as a shrinking firm that is unprofitable might show positive cash flow. People use the term "cash flow" loosely. Do not be deceived by managers who try to hide profitability issues by pointing to their high cash flow.

Using Footnotes

Footnotes are an important but overlooked part of every report. Almost always poorly written and hard to parse, they hold crucial data that can affect how you interpret the numbers in the financial statements. As an ordinary investor, you don't need to be as concerned about the notes as a securities analyst must be. First, you are unlikely to unravel some fancy management misdeed. Second, the pros will read the report so closely you can usually ride their analytical coattails. Do read the footnotes and try to get them, but you don't have to read all that small print over and over again.

Accounting

Certified Public Accountants (CPAs) prepare financial reports according to "generally accepted accounting principles" (GAAP) and Financial Accounting Standards Board (FASB) rules. Auditing firms have independent accountants who test reports against company data. Their statements that reports are prepared correctly and represent a firm accurately are important because investors cannot look at company books themselves.

> "Profit is a vital source of cash inflow to every business. Profit is internal cash flow – money generated by the business itself without going...to external sources of capital."

Auditing is costly and time-consuming, but it finds honest mistakes so the company can fix them. Auditors uncover deliberately misleading data or fraud. Publicly traded corporations must audit their financial reports. Purchasers usually audit private firms before buying them so they understand their value. Learning to read an auditor's careful wording on these statements is subtle work, but worthwhile. CPAs aren't there to ferret out fraud, but they do offer qualified statements when they find things amiss. Notice what they emphasize. After public firms and their accountants were involved in huge abuses, the U.S. passed the Sarbanes-Oxley Act to stem such fraud. Still, dishonest people will find new ways to deceive. Invest cautiously; if you are worried, take action.

> "Most businesses follow the income tax methods in their financial statements."

Two talented, well-trained, honest CPAs can come up with slightly different financial reports for the same firm;just as two cooks with the same recipe create dishes that taste a bit different. CPAs choose how to follow the rules while presenting a clear picture of a firm's activities.

When firms can choose among accounting methods, they must pick one and stick with it. They can't change methods seeking better results. The IRS and investors frown on such "flip-flops." Follow a firm's reports over time. If it over- or underreports a matter in one period, it will compensate later (unless there is fraud).

Issues with Cost of Goods and Depreciation

As you make sales, you remove items from inventory and add new ones that you buy. But did you sell the items you bought a while back or your most recent purchases? This affects profitability. Most firms use the LIFO method ("Last In First Out"), because it usually lowers gross margins, reported profitability and taxes.

> "Creditors and investors frequently are stymied by poorly written footnotes. You really have only one option, and that's to plow through the underbrush of troublesome footnotes, more than once if necessary."

The other options are FIFO ("First In First Out" – as if all inventory has an expiration date) and the "weighted average cost" method. Select the one that matches how your company sets prices. Don't seek short-lived gains based on accounting peculiarities. When you liquidate a product from your stock using LIFO, if prices have gone up, "old" items cost less than current items, increasing profits. This effect is called "LIFO liquidation gains."

> "Business managers, lenders and investors, quite rightly, focus on cash flows. Cash inflows and outflows are the heartbeat of every business."

Depreciating a long-lasting asset is normal, but accounting theory says to add and depreciate certain costs, too. Yet, these costs are usually immediately expensed. Consider accelerated depreciation. Firms chose it reflexively, but over time it can fail to match costs with revenues.

Useful Ratios

Investors and lenders use financial reports to study your company's performance. Some numbers interest them more than others. Often, they will compare one balance sheet item to another as a ratio to check receivable collections or short-term solvency. Investors want to know debt versus stockholder equity, or return on sales. To get the return on sales, they divide net income (if it's a positive number) by sales revenue.

> "Many investors and managers don't seem...fully aware of the limitations of financial statements."

Investors also want to know the stocks' value and how many dollars they have to invest to get one dollar in earnings. Calculate this price to earnings (P/E) ratio by dividing the stock price by the EPS. A P/E of 20 means investors pay $20 for $1 in earnings. The list of useable ratios is endless.

Management Accounting

While financial accounting prepares reports for external use and tax accounting prepares statements for taxing agencies, management accounting provides data to internal customers. Its goal is to help decision makers make the right choices and help the company meet its goals. Management accounting is not regulated. While various consultants teach different approaches, you are free to develop the information standards and delivery methods you prefer. Focusing managers on strengthening the firm's profit position makes sense. Help them understand their contributions to overall profit. Tie that lesson to goals for managers and their departments (easier said than done).

> "Used intelligently, financial reports are the indispensable starting point for investment and lending decisions."

Most financial reports are reliable and prepared with integrity. Track certain key numbers, such as sales and gross margin, for several years. If you see drastic changes, get alarmed. Never take financial reports at face value. Use them as tools, but seek other sources of information so you can put financial reports into perspective and deepen your understanding of the company.

About the Author

John A. Tracy is emeritus professor of accounting at the University of Colorado at Boulder. He has written several books on accounting issues.