

2014

Review of *Financial Intelligence for Entrepreneurs: What You Really Need to Know about the Numbers* by Karen Berman and Joe Knight, with John Case.

H. L. Vacher
University of South Florida, vacher@usf.edu

Follow this and additional works at: <http://scholarcommons.usf.edu/numeracy>

 Part of the [Accounting Commons](#), and the [Entrepreneurial and Small Business Operations Commons](#)

Recommended Citation

Vacher, H. L. (2014) "Review of *Financial Intelligence for Entrepreneurs: What You Really Need to Know about the Numbers* by Karen Berman and Joe Knight, with John Case.," *Numeracy*: Vol. 7 : Iss. 1 , Article 8.

DOI: <http://dx.doi.org/10.5038/1936-4660.7.1.8>

Available at: <http://scholarcommons.usf.edu/numeracy/vol7/iss1/art8>

Review of *Financial Intelligence for Entrepreneurs: What You Really Need to Know about the Numbers* by Karen Berman and Joe Knight, with John Case.

Abstract

Berman, Karen and Knight, Joe, with John Case. *Financial Intelligence for Entrepreneurs: What You Really Need to Know about the Numbers*, (Boston MA: Harvard Business Press, 2008). 285 pp. ISBN 978-1-4221-1915-0.

From “The art of finance (and why it matters)” (Part One) through “Creating a financially intelligent company” (Part Eight), *Financial Intelligence for Entrepreneurs* is an engaging explanation and appreciation of financial statements and financial ratios. Short, easily digested chapters; just-in-time boxes to introduce terminology; easy, direct, in-text calculations from bare-bones, hypothetical financial statements to illustrate concepts; a 44-page appendix of crafted exercises on the income statement, balance sheet, cash-flow statement, and financial ratios from two public companies for deeper understanding; a detailed 19-page index for quick, after-you’ve-read-it navigation – all make for an efficient learning opportunity for readers who want a painless way to know about the numbers used in the world of business. Two quantitative literacy principles emerge as themes. The first is the “art of finance” (social construction): that is, the numbers are not totally objective; to varying extents, they reflect decisions, assumptions, and estimates in the accounting. The second is that ratios provide a window into the story that financial statements are able to tell. Written for entrepreneurs and company owners, the book ends with OBM (open-book management)—a management philosophy based on financial literacy. The vision of this book is businesses in which all employees are financially literate and managers and owners are financially intelligent.

Keywords

financial literacy, financial statements, financial ratios, quantitative literacy

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial 4.0 License](https://creativecommons.org/licenses/by-nc/4.0/)

Cover Page Footnote

Len Vacher is a professor of geology at USF's new School of Geosciences, where he teaches two QR courses: Computational Geology for undergraduate students and Math Concepts for Professional Geologists for graduate students. He served on the charter board of the NNN and currently co-edits this journal.

Warm Up Question

Suppose you have \$10,000 in cash and a great idea to start a business. In the first three months, your sales are \$20,000, \$30,000, and \$45,000, showing good growth in revenue. Your costs directly associated with sales are 60% of the sales, and your monthly general operating expenses are \$10,000/month. From this it follows that your net profit grows from a \$2,000 loss in the first month, to a \$2,000 gain in the second, and an \$8,000 gain in the third. So, your business shows nice growth in profit. Should you feel good about the whole thing?

Financial Intelligence tells us in Chapter 14, there is more to this story (which in the book concerns a hypothetical business aptly named “Sweet Dreams Bakery”). Actually, in the first month what you have is \$20,000 in *accounts receivable* from your buyers who agree to pay in 60 days. Meanwhile, you have to pay your suppliers (*accounts payable*) in 30 days for the costs associated with that \$20,000 of sales. So, running the numbers, your \$10,000 is gone after that first month. Then you go in the hole by \$22,000 after the second month, and at the end of the third you are at minus \$30,000. Thus, the title of Chapter 14 is “Profit \neq Cash (and You Need Both).” The inequality gets at why so many small businesses fail in their first few years.¹ Chapter 13 (“Cash is a Reality Check”) starts with a quotation from a *Fortune* 2002 article: “Companies hit the skids for all sorts of reasons, but it’s one thing that ultimately kills them: they run out of cash” (p. 99). Four pages later, the chapter ends with “And you can’t pay for all these things with profits because profits aren’t real money. Cash is.”

The Book

Financial Intelligence is an engaging read composed of eight parts consisting of a total of 30 bite-sized chapters (roughly 6 pages per chapter). The eight parts cover: what the authors call the “art of finance”; the income statement; the balance sheet; cash; ratios; return on investment; working capital; and how to infuse financial literacy into your company. As exemplified by the book’s engaging style and short chapters, the authors mean for the book to be read, digested, and used. Everything about the book seems designed to help the reader acquire “three distinct skills sets” (p. 4): understanding the foundation (income statement, balance sheet, and cash flow statement); understanding the art of finance; and understanding financial analysis. Each part ends with a Tool Box to help implement the material in the preceding chapters. The index is user-friendly,

¹ “various sources ...over the past four decades have cited a failure rate to be as high as 50% during the first five years of operations” (Dahmen and Rodriguez 2014).

detailed (17 pages with about 980 referral items), and interesting in its own right (29 items under ratios; 23 under formulas and calculations; 12 under frauds and scandals). Exercises are an integral part of the book, but they are handled unobtrusively. The same is true for an extensive development of essential vocabulary.

The exercises are handled in three appendices (44 pages). The first is a set of bare-bones financial statements for a hypothetical small business; these basic financials are used in many of the chapters to illustrate the calculations. The second appendix consists of an income statement exercise, a balance sheet exercise, a cash flow statement exercise, and a ratio exercise. Each exercise consists of an exercise description, instructions, questions, calculation results, and answers to the questions. These exercises are based on the financial statements of Under Armour (as an example of a manufacturing company) and eBay (example of a service company). These financials make up the third appendix. Regarding these exercises, the authors make it clear in the beginning:

We're big believers in hands-on experience.... We hope you won't just read about finance; we hope you will roll up your sleeves and plunge in. That's the best way to learn.

The vocabulary is handled by means of just-in-time explanatory boxes within the text. They do not interfere with the flow at all, so the reader does not lose sight of the context nor get bogged down in terminology (in contrast to introductory textbooks in many fields). It is a long list including words that non-finance people have surely heard, but likely they would not be able to discuss with confidence, whether or not they owned a business (Table 1).

Table 1.
Some Explanatory Boxes.

Chap	Box
1.	What is Financial Intelligence
	Income statement
	Balance sheet
	Cash (and cash flow statement)
2.	A Primer on the Art of Finance
	Operating expenses
	Capital expenditures
	Depreciation
5.	Revenue
	Sales
	Earnings per share
6.	Costs and Expenses
	Cost of goods sold (COGS) and cost of services (COS)
	Operating expenses (again)
	Above the line, Below the line
	Noncash expense
7.	The Many Forms of Profit
	Profit
	Gross profit
	Operating profit (EBIT)
	Net profit
8.	Understanding Balance Sheet Basics
	Equity
	Fiscal year
9.	Assets: More Estimates and Assumptions (except for cash)
	Acquisitions
	Intangibles
10.	On the Other Side
	Capital
	Dividends
13.	Cash is a Reality Check
	Owner earnings
15.	The Language of Cash Flow
	Buying back stock
19.	Profitability Ratios
	Return on investment
23.	The Building Blocks of ROI
	Opportunity cost
	Cost of capital

Quantitative Literacy

Although the authors do not use the term “quantitative literacy” in the book, this is clearly a quantitative literacy book, and *Numeracy* readers will easily recognize

it as one in the first chapter. After a short section on each of the three skill sets of financial intelligence identified on page 4, there is a section called “Roadblocks to financial intelligence.” Here is how it starts:

... we have worked with enough people and companies to know that while everyone might want to increase his or her financial intelligence, it isn't always easy. In fact, we run into several predictable obstacles.

One obstacle might be that you hate math, fear math, and don't want to do math. You started a company—or you're thinking about starting one—because you had a new idea or because you wanted to be your own boss. You aren't necessarily a fan of numbers.

Well, join the club. It might surprise you to know that, for the most part, finance involves addition and subtraction. When finance people get really fancy, they multiply and divide. You will never have to take the second derivative of a function or determine the area under a curve (sorry, engineers). So have no fear: the math is easy, and calculators are cheap. You don't need to be a rocket scientist to be financially intelligent.

Compare that passage to this one, from *Mathematics and Democracy* (Steen 2001, 6):

... quantitative literacy involves mathematics acting in the world. Typical numeracy challenges involve real data and ... require primarily elementary mathematics.... The test of numeracy, as of any literacy, is whether a person naturally uses appropriate skills in many different contexts.

That last sentence prompts the question: does the reader of this book have the *habit of mind* that is noted in the definition of numeracy on the Web site of the National Numeracy Network? More specifically, does the reader have the inclination (or confidence) to look at the financial statements, or to discuss the financials with the accountant. Repeatedly, the authors remind the reader, “reading this book will enable you to ask intelligent questions and to decipher their answers” (p. 10). The “their,” of course, refers to accountants, bankers, and other financial advisors, and the authors repeatedly say that the “they” will be glad that the business owner asks (although “they” might be surprised at first).

Two core principles of QL appear as themes in the book: (1) social construction (e.g., Best 2008), and (2) the usefulness of ratios (e.g., Gaze 2014). The authors do not use the term “social construction,” but it is clear that a version of it is what they mean by “art of finance,” the subject of Part One of the book. Here is how the authors introduce the subject (p. 6)

In the preface we referred to it as the finance profession's little secret, but it isn't really a secret; it's a widely acknowledged truth that everyone who has studied finance knows. Trouble is, the rest of us tend to forget it. We think that if a number shows up on a financial statement or on your accountants' reports, it must accurately represent reality.

Of course, that can't always be true, if only because bookkeepers and accountants can't know everything. They can't know exactly what everyone in the company does every day, so they don't know exactly how to allocate costs. They can't know exactly how long a piece of equipment will last, so they don't know how much of its original cost

to record in any given year. The art of accounting and finance is the art of using limited data to come as close as possible to an accurate description of how well a company is performing. Accounting and finance are not reality; they are a reflection of reality, and the accuracy of that reflection depends on the ability of bookkeepers, accountants, and finance professionals to make reasonable *assumptions* and to calculate reasonable *estimates*. (Emphasis added.)

The variety of numbers that the art of finance affects is indicated in the index. The list of items under art of finance includes: analysis of capital expenditures, cash flow estimates, cash least affected by, depreciation, figuring future value, and valuation of companies.

The subject of Part Five of the book is “Ratios: Learning What the Numbers are Really Telling You.” Chapter 18, “The Power of Ratios,” starts with:

The eyes may or may not be a window into the soul, as Immanuel Kant suggested, but ratios are definitely a window into a company’s financial statements. They offer a quick shortcut to understanding what the financials are saying, no matter whether the company is a start-up, a small but growing company, a struggling midsize business, or a large, publicly held company. (p. 129)

After the “Power of Ratios,” there are four more chapters, each on a group of ratios: profitability ratios, leverage ratios, liquidity ratios, and efficiency ratios. *Profitability ratios* include the gross profit margin percentage, operating profit margin percentage, net profit margin percentage, return on assets, and return on equity. *Leverage ratios* are debt-to-equity and interest coverage. *Liquidity ratios* are the current ratio and the quick ratio.² *Efficiency ratios* are inventory days, inventory turnover, days sales outstanding, days payable outstanding, PPE (property, plant, and equipment) turnover, and total asset turnover.

The two QL themes—social construction and ratios—interact, of course. The numbers going into the ratios are constructed. For example, the following is on the first page of Chapter 19.

Before we plunge in, however, do remember the artful aspects of what we’re looking at. Profitability is a measure of a company’s ability to generate sales and to control its expenses. None of these numbers is wholly objective. Sales are subject to rules about when the revenue can be recorded. Expenses are often a matter of estimation, if not guesswork. Assumptions are built into both sets of numbers. So profit as reported on the income statement is a product of the art of finance and any ratio based on those numbers will itself reflect all those estimates and assumptions. We don’t propose throwing out the baby with the bathwater—the ratios are still useful—only that you keep in mind that estimates and assumptions can always change.

In addition to the two QL themes, there are numerous QL favorites scattered through the book. For example, part-to-whole percentages and the distinction

² respectively $\frac{\text{current assets}}{\text{current liabilities}}$ and $\frac{\text{current assets}-\text{inventory}}{\text{current liabilities}}$, where “current” means within the year: convertible to cash within a year for assets, and must be paid within a year for liabilities.

between “percent of” calculations and “percent-change” calculations appear succinctly in the Tool Box of Part Two, about the income statement. The “fundamental principle of finance known as the *time value of money*” is addressed in Chapter 23 in the context of the Return on Investment. The concept of multiplying ratios together to get new, informative ratios is illustrated in the Tool Box of Part Five on ratios. Multiply net profit margin (net income/revenue) \times total asset turnover (revenue/assets) \times leverage (assets/equity), and you get ROE (return on equity, or income/equity). This is the sustainable growth rate if you retain all of your earnings (i.e., you do not pay shareholder dividends).

Financial Literacy

The book is titled *Financial Intelligence* and that term is used throughout. The term *financial literacy* first appears in the text on p. 203. What is the difference between the two, financial literacy vs. financial intelligence? The authors do not say explicitly, but a kind of hyponymy seems implied in how they use the terms.

The discussion of financial literacy occurs in Part Eight, “Creating a Financially Intelligent Company,” specifically in its first two chapters, “Financial Literacy, Transparency, and Your Business’s Performance” (28) and “Financial Literacy Strategies” (29). “Financial intelligence” is generally used when referring to the owners. For example at the beginning of Chapter 28:

We have written this book in hopes of increasing your financial intelligence and helping you become a more effective leader. We firmly believe that understanding the financial statements, the ratios, and everything else we have included in the book will make you more effective as the chief executive of your own company.... Knowing the rules—how profits are figured, why return on assets matters so much, and all the rest—lets you see your entrepreneurial endeavors in the big-picture context of business enterprise, which is simply people working together to achieve certain objectives. You’ll see more clearly how the company that you have started operates. You’ll be able to assess your business’s performance better than you could before because you can see which way the key numbers are moving and understand why they’re moving in one direction or the other. (p.199)

Then under the heading, “Better Companies,” “financially intelligent” is used in connection with managers:

Financially intelligent managers contribute to their companies’ health because they can make better decisions. They can use their knowledge to help the company succeed. They manage resources more wisely, use financial information more astutely, and thereby increase their company’s profitability and cash flow. They also understand more about why things happen and can lend their shoulder to the wheel instead of just carping about how misguided the owner or CEO is. (p. 200)

It is under the next heading, “Taking it to the troops” that “financial literacy” appears. Thus

There's a next step here as well. If it makes a difference for managers to understand finance, imagine how much more of a difference it would make if everybody in a company understood it.

...(P)eople in offices, in stores and warehouses, on shop floors, and at client sites can make smarter decisions if they know something about how their part of the business is measured and about the financial implications of what they do every day. Should they rework a damaged part or use a new one? Should they work fast to get as much done as possible or work more deliberately to ensure fewer mistakes? Should they spend their time developing new services or cultivating and serving existing customers? How important is it to have everything a customer might possibly need? (p.202)

....

Just as increasing your financial intelligence can boost your business's performance, so can financial intelligence among the troops. The Center for Effective Organizations, for instance, conducted a study³ that looked at (among other things) many measures of employee involvement. Two measures in particular were "sharing information about business performance, plans and goals: and training employees in skills in understanding the business." Both of these were positively related to productivity, customer satisfaction, quality, speed, profitability, competitiveness, and employee satisfaction. The more that organizations trained their people in financial literacy, in other words, the better the organizations did. (p. 203)

So how do the authors propose that an entrepreneur infuse financial literacy through the company? In Chapter 29, they suggest (1) three, short, repeatable training sessions (income statement, cash flow and project management, and the balance sheet); (2) weekly "numbers" meetings, where the "numbers" are the two or three, most-important measures to watch; and (3) scoreboards and other visuals posting the key numbers "that remind people how the company makes money" (p. 207). In the Tool Box at the end of Part Eight and the main part of the text, the authors describe open-book management (OBM), "a management philosophy based on financial literacy" (p. 204). "OBM at its best creates an environment where employees feel that they are part of the success—and are at risk for the failure—of the business" (p. 218). It is a philosophy of "sharing the financials with the employees—and, of course helping them learn what the numbers mean" (p. 218)—and "managing with open books."

By financial intelligence, then, the authors seem to mean a set of abilities that ranges over a continuum. The minimum required level—required for the benefit of the company of all employees—is financial literacy, meaning a certain familiarity with the terms, concepts and numbers of the field. With more responsibility (management) there comes the desirability for deeper financial understanding and some financial skills and, with those qualities activated, one can be called "financially intelligent." At the higher levels (ownership and presumably upper management), more abilities and skills are of benefit because of the need and opportunity to interact with the CFO, accountants and bankers.

³ Lawler et al., 1995

These specialists are at the top of the scale of financial intelligence, the financial experts.

Concluding Remarks

The world is awash in numbers, says *Mathematics and Democracy* (Steen 2001, 1). Many of those numbers have dollar signs attached. Where do those numbers live? One habitat consists of bank statements, credit card statements, mortgage schedules, retirement plans and the like; this is the QL habitat of personal financial literacy. Another habitat consists of income statements, balance sheets, cash flow statements and financial ratios; this is the QL habitat of business financial literacy. *Financial Intelligence* gives us a great view of this habitat from an observation tower with telescopic viewpoints. The book is well worth a day of leisurely reading, whether you own a business, work at one, or simply want to see what goes on with numbers in that habitat.

Acknowledgments

I became aware of this book when I audited Pearl Dahmen's workshop on financial intelligence at the USF Small Business Development Center, and she used it as the textbook. I attended the workshop to see for myself the shape of financial literacy in a context other than personal finance (i.e., as reflected by numerous papers in *Numeracy*), and I thank her and Eileen Rodriguez for giving me the opportunity. I thank Mike Catalano, *Numeracy* Book Review Editor, and Eileen Rodriguez of the SBDC for their quick and helpful reviews of the paper.

References

- Best, J. 2008. Birds–Dead and deadly: Why numeracy needs to address social construction. *Numeracy* 1(1): Article 6. <http://dx.doi.org/10.5038/1936-4660.1.1.6> (accessed May 30, 2013).
- Dahmen, P. and E. Rodríguez. 2014. Financial literacy and the success of small businesses: An observation from a small business development center. *Numeracy* 7(1): Article 3. <http://dx.doi.org/10.5038/1936-4660.7.1.3>.
- Gaze, E. 2014. Teaching quantitative reasoning: A better context for algebra. *Numeracy* 7(1): Article 1. <http://dx.doi.org/10.5038/1936-4660.7.1.1>.
- Lawler, E. E., S. A. Mohrman, and G. E. Ledford. 1995. *Creating high performance organizations*. Los Angeles: Center for Effective Organizations, Marshall School of Business, University of Southern California.
- Steen, L. A. (Ed.) 2001. *Mathematics and democracy: The case for quantitative literacy*. Princeton, NJ: National Council on Education and the Disciplines, The Woodrow Wilson National Fellowship Foundation. <http://www.maa.org/ql/mathanddemocracy.html> (accessed Dec. 26, 2013).