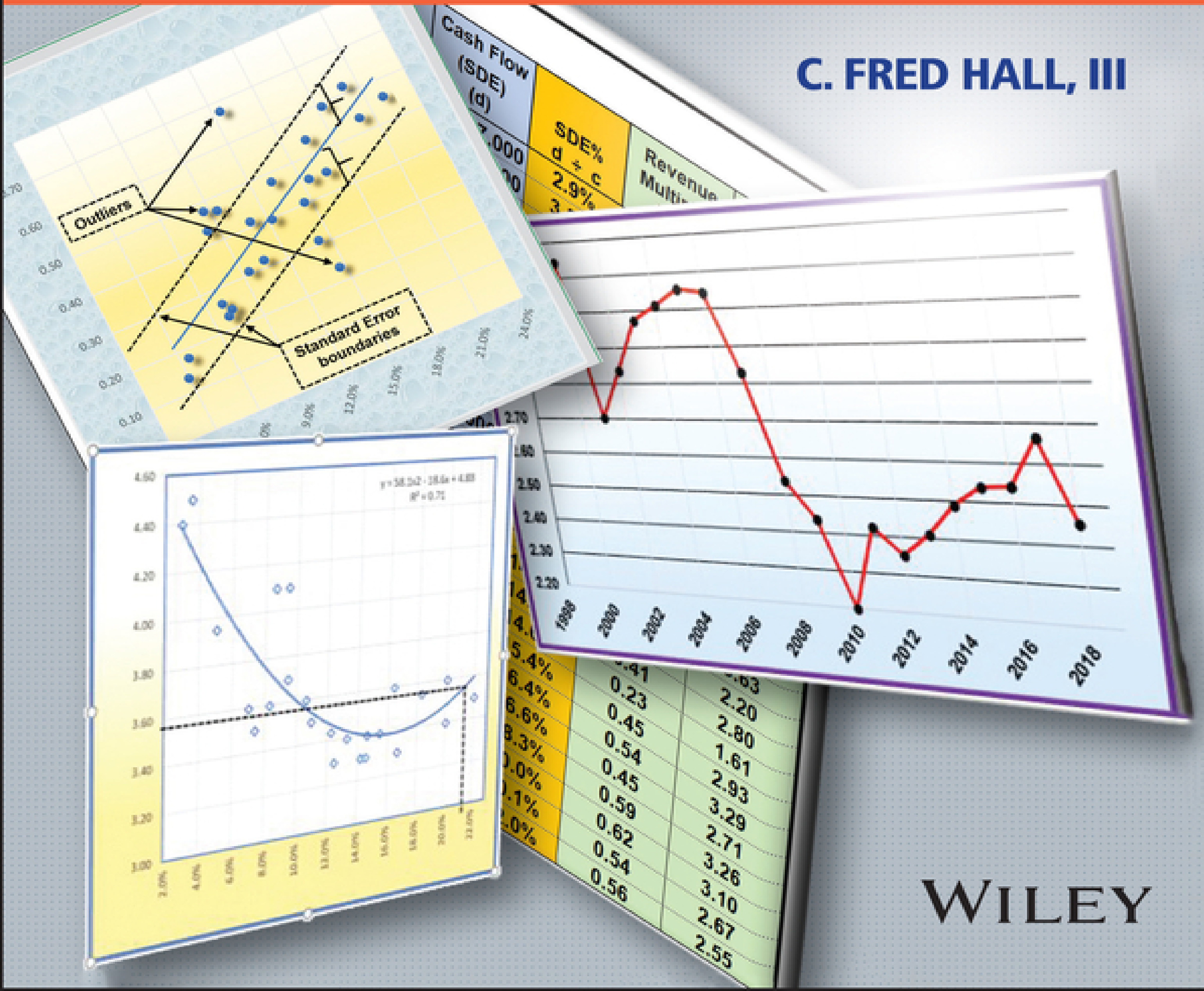
VALUING BUSINESSES USING REGRESSION ANALYSIS

A QUANTITATIVE APPROACH TO THE GUIDELINE COMPANY TRANSACTION METHOD



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Valuing Businesses Using Regression Analysis

A Quantitative Approach to the Guideline Company Transaction Method

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To the two great ladies in my life; my bride of nearly 50 years, Joanie, who has proofread every one of my 800 valuations and is still talking to me. She probably knows more about valuations than most of the professionals in the industry. Due to her great life experiences of having worked with many CPAs and attorneys, she has a gift of being able to read complicated text and then help me to rewrite it in plain English. She has made me look a whole lot better than I am.

To my mother, Connie, who for the last five years has constantly given me encouragement to write this book. She was so happy to hear that the dream was going to become a reality. Unfortunately, she passed away at 99 years just before it was published.

Foreword

As an executive and entrepreneur for the last 30 years, I have been regularly involved in business development, marketing, business brokerage, and business valuations. Every new project, it seemed, started with a valuation of the business. For years I did my own valuations. However, I was continually frustrated with how the different multiplier methodologies produced widely divergent values. Convention had us average the different values, but I never had confidence in the resulting value. Needless to say, when presenting my findings to the owner of the business, he or she would notice that one or two of the methodologies produced a very high value compared to the other values. The question always arose as to why I was not using the higher value.

I also worked with many potential buyers of businesses. When I would show them my research on the estimate of value, they would, of course, focus on the lower values. Suffice to say, conventional methodologies often brought up more questions than answers and, as such, never satisfied anyone. Five years ago I was introduced to C. Fred Hall, III. He explained to me why the different methodologies produced such different values. It made sense. I decided to use him to value my clients' businesses rather than doing so myself. In the last five years we have collaborated on over 100 deals; more than 80 of them required valuations.

When taking a business to market, the asking price must be reasonable or potential buyers will never respond. The values produced by Fred's methodology were spot on. We had very few credible challenges on the asking prices by either buyers or sellers. Another aspect to Fred's approach is to ensure we are comparing like-kind businesses that are “performing at the same level as the sellers.” Sellers appreciate this type of comparison vs. using a typical average multiple for an industry. Fred's method can appear complicated, but the charts produced by the regressions to determine the appropriate multipliers for the company are so compelling that there is little one can argue about. Anyone involved in business valuations needs to adopt Fred's methodology. It works!

I should mention that as a result of the businesses being properly valued, I was able to close far more deals. In 2017 the International Business Brokers Association honored me with the Chairman's Circle Award as one of the top producing brokers in the United States. In 2018 and 2019 I was awarded “Outstanding Producer” honors as well. Fred's valuation methodology has been a big part of our success!

Randy Hendershot,
CEO of Evolution Advisors,
CBB

Preface

After finishing my MBA, I went to work for a major west coast bank. I chose the bank because it had one of the top management training programs in the industry. This was important to me because I felt that my MBA training left me clueless about businesses. I was right. The bank's management training program was an intense nine-month, 40-hours-a-week class, on analyzing businesses. It was equivalent to a second MBA degree. Upon completion of the training I was confident that I now understood businesses. I was wrong. It wasn't until I owned my own business (I must clarify that my wife and I owned it) that some of the lights went on. However, it wasn't until we sold that business after 27 years and I then went to work as a business broker for a major brokerage firm in northern California that I began to really understand businesses.

MBA education was largely theoretical in those days, and banking was the technical application of that theory. However, owning your own business teaches you many things you would never learn in school: that education is largely on the fly. As a sole proprietor, your skillset, for the most part, is self-taught, and class is in session 60 hours a week for the entire period of ownership. I thought all that knowledge was unique and original. However, after 18 years of being a business broker and business appraiser and having worked with over 800 business owners, I find that we all seemed to think alike. We made similar choices and similar mistakes.

When I was considering selling my business, my first choice of potential buyers was my general manager. He worked for me for over 20 years. He was very loyal and made me a lot of money. I thought I owed him the opportunity to buy my business. This was me being an incredibly generous person. Come to find out, every owner thinks like this. In actuality it was not an act of generosity or loyalty on my part. It was my desire to create the simplest exit strategy whereby I could get the price I wanted for the business without any negotiations.

Sadly, once the excitement of buying my company wore off, my manager realized he didn't have the money or the intestinal fortitude to run an $8 million business with 30 employees. He subsequently declined my offer, and a few months later he quit because he felt that he had failed in my eyes. I was more disappointed in this decision than he was; I lost the best employee I ever had.

Over the last 18 years I have worked with hundreds of business owners wanting to sell their businesses. I found that the majority of them approached their managers first. Not only were few owners successful, but amazingly, most reported that their manager subsequently quit as well. In many of those cases where the owner and manager actually reached an agreement, the bank appraisal for the acquisition loan came in significantly lower than the seller wanted, thus killing the deal. The owner never considered getting an appraisal for the business. The asking price was based on the amount needed for retirement, not what the business was worth.

The second mistake sellers frequently make when selling their businesses may appear to have little to do with the value of the businesses. However, I mention it because owners should approach this choice with extreme caution. After I was unsuccessful selling my business to my manager, I felt that one of my competitors was the next most logical suitor. In retrospect, it was my desire to create the easiest exit strategy and maximize my selling price. The competitor would certainly be aware of the many strengths of my business. In addition, there would not be a need for training, thus, providing me with a quick exit. The owner would also want my business so badly, he or she would pay any amount that I asked, and, of course, the owner had the deep pockets to pay that price. Again, the actual value of the business did not enter into my decision.

The result of my decision to approach my competitor turned out to be textbook—I've seen it happen many times over the last 18 years. It never occurred to me that there are unscrupulous business owners out there. The manager of my competitor knew I took Mondays off. He came into the store on my day off and passed out business cards to all my employees. He told them that when I sold the store, the buyer would be so strapped with debt payments they would not get pay raises for years. Their best choice was to come work for him. The manager then sent his sales force out to all my customers and told them that I was leaving and he was now the best choice of suppliers. I lost employees and customers, which impacted the value of my business.

Just make sure that when you approach a competitor, have him or her sign a non-disclosure agreement that has significant penalties for talking to your employees, customers, suppliers, or other competitors.

In addition, no matter who the potential buyer may be, ask a price that is fair and reasonable. Buyers are not dumb. If they feel that the asking price is not reasonable, they will not try to negotiate. They will simply walk away. You will call, text, and email, but believe me, they will not respond. You will have no idea that the reason they stopped communicating was that your price was too high. As a business broker, I have seen this happen hundreds of times.

Hence, one of the main concerns of all business owners should be, “What is my business worth?” As a business owner, I relied on business brokers and CPAs for information on the value of my business. As a business broker, the most common question I was asked was, “What is the multiplier for my business?” The assumption of most business owners is that a single multiplier exists for his or her type of business that can be applied to its level of profits in order to determine the value of the business. The assumption follows that as an appraiser, I can merely open a textbook on business multipliers and give the owner an answer in a few seconds. If business appraisals were that simple, we would all be out of work and Wall Street would be nonexistent.

After many years of research on the subject, I find that every business is unique and will have its own set of multipliers. Those multipliers are derived from the company's level of profitability and revenue. Hence, I am incredulous to find business brokers and business consultants who offer up multipliers to their clients without even knowing what the company's level of revenue and profits are and how they compare to the competition.

Unfortunately, there are a few industry textbooks on rules of thumb, which are collections of thousands of brokers' opinions of the multipliers for hundreds of business classifications. These “rules of thumb” books are used extensively by brokers to estimate the value of their client's business. The textbooks, however, should not be used as a substitute for a quantitative business analysis and valuation. To do so would quite possibly over- or undervalue a business 10 to 20%. For a million-dollar business, 20% is a significant sum of money. If the business is overvalued, it may result in an unsuccessful attempt to sell the business.

The saddest case in which I was involved was a business where an unseasoned business broker had recommended a

$1 million listing price based on some rule of thumb. The owners were a couple in their 70s who wanted to retire. After wasting a year and a half waiting for an offer that never materialized, they called on me to value the business. I determined that their business was worth only $500,000. The couple was convinced (or should I say, hoped) the broker was right and refused to accept my opinion. They spent another year and a half trying to sell the business. During that time, the husband passed away and the wife ultimately sold the business for roughly what I had appraised it. The couple wasted over three years and never got to enjoy retirement together.

PEER REVIEWING THE REGRESSION METHODOLOGY

A question I frequently am asked when presenting my regression methodology is, “Will this procedure pass a Daubert challenge?” A Daubert challenge is a hearing in a court of law in which the validity and admissibility of expert testimony is challenged by opposing counsel. Even if the method used by the expert appears to be scientifically sound and reasonable, the fact that it has not been vetted by the industry peers may lead to it being thrown out of court.

I am not an attorney or a judge, but my response would be, “Yes, my methodology would survive a Daubert challenge.” During the last eight years, I have written over 400 appraisals using the regression methodology. Half those valuations were for partnership splits or divorces, many of which involved contentious partners and their attorneys. I have submitted over 100 appraisals to eight different banks in northern California for their SBA loans. I have also submitted a dozen valuations to the IRS for estate valuations or gifting purposes. Out of all those valuations, I have not received a single credible challenge. As you will see later in this book, the methodology is so compelling that it is difficult to find an issue to challenge.

More importantly, my regression methodology has been published in most of the industry's leading trade journals including:

> *IBA's (Institute of Business Appraisers) “Business Appraisal Practice,” second quarter 2012*
>
> *Business Valuation Resources – “Best of 2012—What's It Worth?”*
>
> *NACVA's (National Association of Certified Valuators and Analysts) “Value Examiner,” July 2016*
>
> *Thomson-Reuter's “Valuation Strategies,” July 2016*
>
> *NACVA's “Quick Read,” January 2018*

I have also presented the methodology at five NACVA national conferences: June 2016, December 2017, June 2018, June 2020, and August 2020.

Lastly, in January 2017 Jim Hitchner reviewed my methodology in his annual “Current Updates in Valuations” and gave it “two thumbs up.” Mr. Hitchner is one of the industry's leading educators.

WHY ISN'T EVERYONE USING THIS METHODOLOGY?

A very good question! Appraisers are slow to change their methodologies especially when the new ones are not an “easy sell.” For example, an expert can stand in front of a jury and state that he or she used the median revenue and cash flow multipliers to determine the value of the subject business. He or she would go on to say, “Median is the measure of central tendency that shows us where the market is.” Everyone has been exposed to the term “median” as it is used extensively in the real estate industry. Hence, the entire jury panel would be nodding their heads up and down in approval. However, if the expert were to stand in front of the jury and state that “Regression is the root-mean-square measure of dispersion about the…,” everyone would immediately fall asleep. Unfortunately, there are a few judges out there who consider regression as “voodoo statistics.”

Regression on the surface is a very complex statistical tool. When I was in my MBA program, I enrolled in an advanced forecasting economics class. (This was before personal computers and copy machines when dinosaurs roamed the earth.) On the first day of class the teacher walked in with a large binder under his arm and announced that we were all going to learn regression in his class. The chalkboard at the front of the classroom was 20 feet wide and the chalkboard on the side wall was also 20 feet wide. He proceeded to write the formula for linear regression on the chalkboard. It completely covered both chalkboards. I spent the next three months in the university's computer lab typing the formula on punched paper IBM cards.

Luckily, today we can accomplish the same task with a click of a button with Microsoft Excel's regression utility. In several chapters we will go through all the steps one must take to use Excel's regression in my methodology. More importantly, I will break down regression into its very simple components. I will produce charts that are so compelling that anyone looking at the chart will realize that medians are *not* the measure of central tendency of where the market is—regression is. Hence, if you are facing an opposing expert in court, you can easily discredit his or her methodology by showing these charts.