

Business Valuation Review

Kick the Habit: The Excess Earnings Method Must Go!

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*Habit with him was all the test of truth,
'It must be right: I've done it from my youth.'*
- George Crabbe (1754-1832)

Let's Kick the Habit! Unquestionably, the single worst “habit” of business appraisers and the courts is the continued use and acceptance of the excess earnings method. The method is almost as old as George Crabbe yet continues to enjoy widespread use, particularly in the equitable distribution context. This use continues despite the fact that the IRS, which promulgated the method, now roundly denounces it, and no competent business appraiser ever gives this method serious thought unless he or she is forced to use it because it is the only method a court will consider. This article will expose the many problems with the excess earnings method as well as the large amount of criticism of the method that has come from all corners of the business valuation industry, including the very creator of the method. Business appraisers who continue to use the excess earnings method are perpetuating a great disservice to their clients, the courts, and the business valuation profession in general.



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Basic Rationale of the Method. The excess earnings method (also called the “formula” method) basically values a company in two pieces – the tangible value and the intangible (or “goodwill”) value. The tangible value of the company is simply calculated as the value of the company’s tangible net worth (its tangible assets less its liabilities). The intangible value of the company is calculated by capitalizing those earnings that are calculated to be in “excess” of what a reasonable amount of earnings would be on the company’s tangible net worth. Adding the tangible and intangible values of the company together results in the value of the entire company. This simple concept is illustrated with the following example.

A Simplified Example of the Method. Assume a company has a \$1,000,000 in tangible equity (or net worth) and net profits of \$160,000 per year. This company’s return on tangible equity is calculated at 16% (profits of \$160,000 divided by tangible equity of \$1,000,000). Now assume that a “normal” company in this business earns only a 10% return on tangible equity. Our company, with a tangible net worth of \$1,000,000, should therefore be expected to earn a net profit of \$100,000 (10% “normal” return on \$1,000,000 in tangible equity). But our company has earnings of \$160,000, or \$60,000 in excess of what a normal company would be expected to earn. Our company therefore has “excess earnings” of \$60,000.

Calculating the Intangible Value under the Method. We know that the value of the tangible equity of the company is \$1,000,000. However, as calculated above, this company has “excess earnings” of \$60,000. Under the excess earnings method, these excess earnings indicate the existence of intangible value at the company. Therefore, we need to capture the value that the \$60,000 in excess earnings represents. To do this, we need to capitalize this \$60,000 in excess earnings by a capitalization rate for intangible assets. Although there is no market data to support such a rate (an issue that will be discussed later), assume for purposes of this illustration that a 30% capitalization rate is used. Dividing the \$60,000 in excess earnings by the 30% rate gives us a figure of \$200,000 for the intangible value of the company. Adding the tangible value of \$1,000,000 to the intangible value of \$200,000 gives us the total value of the company of \$1,200,000.

The Lure of the Method. So at the end of the day, under the excess earnings method, we have calculated a total equity value of our company of \$1,200,000, with \$1,000,000 of the value attributable to a tangible component and \$200,000 attributable to an intangible component. Sounds easy, doesn’t it? The reason it sounds easy is because it *is* easy. The most seductive aspect of the excess earnings method is that it is very easy to understand. But easy doesn’t mean accurate.

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Remember, we used to believe that the earth was flat and fixed in space because that was easier to comprehend than a spherical earth that revolved around the sun. Let's now look at some of the serious flaws of this approach.

Too Many Subjective Variables. The key problem with the excess earnings method is that there are too many subjective variables for the appraiser to estimate. Business valuation is inherently subjective, however, the less subjectivity and more objectivity an appraiser can bring to a situation, the better and more accurate the result is going to be. No other method in business valuation can match the high level of subjectivity inherent in the excess earnings method. The key subjective variables of the method include: (1) estimating the "normalized" income of the company, (2) estimating the "normal" tangible assets of the company, (3) estimating what the "normal" return on tangible assets for the company should be, and (4) estimating what the capitalization rate for the excess earnings component of the company should be. These issues are discussed as follows.

ISSUE ONE: Estimating the Normalized Income of the Company. Examples of adjustments to reported income may include "normalizing" adjustments that remove unusual or one-time instances of revenue or expense. Other adjustments to reported income may include "controlling-nature" adjustments that remove items that can be influenced by a majority shareholder who has the power to make such adjustments to company. Estimating the normalized income of a company is an exercise that an appraiser is going to have to do no matter what methodology is utilized. It needs to be done for any capitalization or discounted cash flow method under the income approach. Also, it needs to be done for any market approach that utilizes some multiple of income such as net profit, pre-tax profit, EBIT, EBITDA, etc. Therefore, as concerns the estimated normalized income of a company, the excess earnings method is no more subjective than any other valuation method.

ISSUE TWO: Estimating "Normal" Tangible Equity. Another key component to consider in the use of the excess earnings method is determining what "normal" tangible equity is. As is illustrated by the hypothetical case below, this component can have a significant impact on the intangible value of a company.

Donald Trump, CPA. Suppose that after years in the real estate and casino business, Donald Trump decides to go into business as an accountant. Donald Trump, CPA, operates from the 68th floor penthouse of the Trump Tower at 737 Fifth Ave. in midtown Manhattan. In order to attract and retain his high net worth clientele, Mr. Trump's offices are tastefully decorated

with museum-quality furniture and artwork. Donald Trump, CPA, has tangible assets of \$10 million, no liabilities, and therefore, a tangible net worth of \$10 million. Donald Trump, CPA's net profit after all expenses is \$160,000.

Warren Buffett, CPA. At the same time Mr. Trump is establishing his practice in New York City, Warren Buffett decides to leave the investment management business and go into business as an accountant. Warren Buffett, CPA, operates from his garage in a modest suburban neighborhood of Omaha. Mr. Buffett utilizes cement blocks and plywood for a desk, stacked milk cartons for a chair, and hangs old GEICO calendars on his walls for artwork. Mr. Buffett's frugal clients disdain any flash and sizzle and appreciate Mr. Buffett's modest and humble office. Warren Buffett, CPA, has tangible assets of \$1,000, no liabilities, and therefore, a tangible net worth of \$1,000. Warren Buffett, CPA's net profit after all expenses is also \$160,000.

Calculating the Intangible Value. The intangible value of the two accounting practices are calculated as follows under the excess earnings method (Table A):

	<u>Trump</u>	<u>Buffett</u>
Value of Tangible Equity	\$10,000,000	\$1,000
Times: 10% "Normal" Return	10%	10%
Equals: "Normal" Earnings	\$1,000,000	\$100
Actual Earnings	\$160,000	\$160,000
Less: "Normal" Earnings	(\$1,000,000)	(\$100)
Equals: "Excess Earnings"	none	\$159,900
"Excess Earnings"	NA	\$159,900
Divided by: Cap Rate for Intangibles	NA	30%
Equals: Intangible Value	NA	\$533,000
Tangible Equity Value	\$10,000,000	\$1,000
Plus: Intangible Equity Value	\$0	\$533,000
Equals: Total Equity Value	\$10,000,000	\$534,000

The above example exposes the key flaw with the assumption of a "normal" tangible equity base. We know that Trump has tangible value of \$10 million and Buffett has tangible value of \$1,000. Both practices earn an identical net profit of \$160,000, however, because Mr. Buffett earns that profit on a much smaller tangible equity base, the intangible value of his practice is \$533,000 whereas the intangible value of Mr. Trump's practice is zero.

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What is “Normal” Tangible Equity? While the above example illustrates this problem in the extreme, this example nonetheless highlights a key factor that is subject to manipulation and error under the excess earnings method. This is particularly true in the context of service businesses or other companies that do not have a significant capital investment component (companies that are often at the center of a divorce or other dispute). Who is to say what the “normal” tangible equity of such a business is? Some owners may leave cash in the company while others draw it all out, creating significant discrepancies in tangible equity. Other companies, like Mr. Trump’s and Mr. Buffett’s above, may have legitimate differences in their respective amounts of tangible equity. Unfortunately, these situations can create significant inaccuracies with the application of the excess earnings method or, worse, allow for manipulation by an unscrupulous business appraiser.

ISSUE THREE: Estimating a “Normal” Rate of Return on Tangible Equity. The next step in the excess earnings method is determining the “normal” rate of return on tangible equity. Revenue Ruling 68-609 (discussed later in this article) suggests a rate of 8% to 10% but notes that the rate of return “should be the percentage prevailing in the industry involved at the date of valuation.” Some practitioners suggest estimating the rate based on the amount of risk attributable to the asset and liability mix of the balance sheet. Other practitioners suggest estimating the rate based on the borrowing power of the company. Still others suggest the use of market returns, being careful to ensure that such returns are based on the fair market value of tangible equity and not the book value of tangible equity. These “experts” also warn that these market returns cannot contain any intangible component of return, lest the tangible component be “contaminated.” However, there is *absolutely no way* to isolate the return of a public company based strictly on its tangibles or intangibles (see the Coca-Cola example below).

One Company, Indivisible. The “return” figures reported in various databases (including RMA and others) are based on income measures for the entire company. How can you divide that income into the portion that was generated from the company’s tangible component and the portion that was generated from the company’s intangible component? Isn’t that income the product of the indivisible tangible and intangible components of that company? Can a company separately value and sell its intangible component and retain its tangible component or vice-versa? If it were possible for a company to sell its intangible component and retain its tangible component, would the company’s net income fall to a “normal” return on that tangible component? None of these concepts make sense, yet the excess

earnings method effectively states that the tangible and intangible components of a business can be valued independently.

ISSUE FOUR: Estimating the Capitalization Rate for Intangibles. If there is a “greatest flaw” with the excess earnings method, estimating the capitalization rate for intangibles is probably it. This is undoubtedly business valuation hocus-pocus at its best. The conventional wisdom is that the capitalization rate for intangibles should be sufficiently high in order to capture the greater risk of those intangible assets. Revenue Ruling 68-609 suggests an intangible rate of 15% to 20%. In the normal capitalization of earnings method, a capitalization rate can be “built-up” using an objective risk-free rate, an objective equity risk premium, and a subjective company-specific risk premium. Even the subjective company-specific risk premium can be somewhat objective through the consideration of various positives and negatives that are specific to the private company at issue. The excess earnings method, however, calls for an additional subjective risk premium for only the unidentifiable intangibles component of the income stream. One of many problems with this is that there is *no empirical market data on which to base such a rate*. Said another way, a business appraiser who divines the capitalization rate for intangibles is plucking it out of thin air. This is the business valuation equivalent of the Emperor’s new clothes – the only person who thinks the capitalization rate for intangibles is real is the person who picked it.

Have a Coke... Let’s look at a real world example that illustrates the flaws of both: (1) segregating the returns on the tangible and intangible component of a business (issue three above) as well as (2) estimating a capitalization rate for the intangible component of a business. Coca-Cola unquestionably has one of the greatest intangible values of any company in the world today – its world-wide name-brand recognition. At December 31, 2000, Coke had about \$9 billion in tangible equity. Coke’s market value as of December 31, 2000, was about \$151 billion. If Coke’s total market value is the sum of its tangible and intangible value, this means that Coke’s intangible value as of December 31, 2000, was \$142 billion (total market value of \$151 billion less \$9 billion of tangible equity value). Coke earned about \$2.2 billion in net income in 2000, or a 24% return on equity. Is this a “normal” return on Coke’s “normal” tangible equity? What part of the \$2.2 billion in net income is due to Coke’s tangible component? What part of the \$2.2 billion in net income is due to Coke’s intangible component?

...and a Smile? Assume that a 10% return is “normal” on Coke’s tangible equity (this is a guess as I

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have no idea what a “normal” return on tangible equity for Coke should be). Based on “normal” tangible equity of \$9 billion, this implies net income of about \$0.9 billion (calculated as \$9 billion of tangible equity times a 10% “normal” return). Therefore, \$1.3 billion of net income (\$2.2 billion less \$0.9 billion) is the “excess earnings” due to the intangible value of the company. Since we know the intangible value of the company is \$142 billion and the earnings on that intangible value is \$1.3 billion, this implies that the appropriate capitalization rate for the intangible assets of Coke is 0.9% (\$1.3 billion divided by 0.9% equals about \$142 billion). Or, in other words, the intangible component of Coke generated only a 0.9% return in 2000 (\$142 billion in intangible assets times 0.9% equals \$1.3 billion in earnings). But doesn't Revenue Ruling 68-609 suggest an intangible rate of 15% to 20%? And don't many proponents of the excess earnings method use rates far in excess of that (30% or 40%)? If we capitalized Coke's “excess earnings” of \$1.3 billion at an intangible cap rate of 30%, we get an intangible value for Coke of \$4.3 billion, a fraction of Coke's actual intangible value of \$142 billion. Under the excess earnings method, we get a total company value for Coke of \$13.3 billion (tangible value of \$9 billion plus intangible value of \$4.3 billion), an estimate that is less than 9% of Coke's actual market value of \$151 billion. If the excess earnings method is this far off in a real world example, why do people continue to use the method for private company valuations?

Subjectivity of the Method Makes it Ripe for Abuse. Because there are so many subjective components of the excess earnings method, this method is unusually ripe for abuse by unethical business appraisers. By manipulating “normal” equity, “normal” returns on equity, and the capitalization rate on excess earnings, a crafty business appraiser can manufacture nearly any value desired. Furthermore, because the method is so subjective, it is easier to defend in courts because there are no objective guidelines against which to measure the result. Judges do not have any benchmarks against which to measure an appraiser's testimony – the appraiser is free to establish whatever he thinks is “reasonable” in a particular case. This is an attractive feature for the advocate who wants to manufacture an unrealistically high or low value, however, for the reputable business appraiser who adheres to the *Uniform Standards of Professional Appraisal Practice*, the excess earnings method remains a frustrating method to combat in court due to its subjectivity and resulting opportunity for abuse.

Attacks on the Method by the IRS. The excess earnings method was originally developed by the U.S. Treasury Department as Appeals and Review

Memorandum (or ARM) 34 in 1920 as a way to determine the intangible value of distilleries to compensate brewers for their losses during prohibition. Over time, ARM 34 has evolved into Revenue Rulings 65-192 and 68-609, however, the excess earnings method exists today largely in the same form in which it was created in 1920. Ironically, perhaps the most vocal critic of the excess earnings method is its own creator: the IRS (a division of the U.S. Treasury Department). Criticism of the excess earnings method by the IRS has been prolific and sharp. A sampling of the Service's comments are cited below.

From Revenue Ruling 68-609: “The ‘formula’ approach may be used for determining the fair market value of intangible assets of a business only if there is no better basis therefor available.”

From the 1978 edition of the *IRS Appellate Conferee Valuation Training Program*: “ARM 34 has been applied indiscriminately by tax practitioners and by members of the Internal Revenue Service since it was published. On occasion the Tax Court has recognized ARM 34 as a means of arriving at a fair market value. The latest and most controlling decisions on valuation, however, relegate the use of a formula to a position of being a last resort. ARM was published in 1920 but since that time, it has continually appeared in the annals of tax valuation and resulted in many improper appraisals.”

Also from the 1978 *IRS Appellate Conferee Valuation Training Program*: “To attempt to segregate value based on earnings as between normal income and that induced by whatever goodwill or other intangible assets the business may possess, is to aspire to a higher degree of clairvoyance than has yet been demonstrated as obtainable by mere man.”

From the 1980 *IRS Appeal Officer Valuation Training Coursebook*: “All that can be said for ARM 34 or a similar formula method of capitalization using two rates of interest, is that you hope to get a good answer based on two bad guesses. It is difficult enough to get one reasonably accurate rate of capitalization using normal appraisal methods such as the comparison with market prices for publicly-held stocks. To get two fairly accurate rates, one for tangibles and another for intangibles, other than by the use of pure guesswork, is impossible.”

Recap of IRS Position. Therefore, hitting just the highlights, the IRS has said that (1) the excess earnings method should be used only as a last resort, (2) the use of the method has resulted in many improper appraisals, (3) the use of the method requires obtaining a
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higher degree of clairvoyance than is humanly possible, (4) it is impossible to derive two fairly accurate rates to use in the method, and (5) the best you can hope for is to get a good answer based on two bad guesses. Remember, these comments are not from disgruntled taxpayers or the general public, they are from the *creator of the method itself*. This is somewhat similar to an announcement from Bill Gates that Microsoft Office is a poor and outdated software package and consumers should look to other, more superior products.

Attacks on the Method from the Industry.

Unfortunately, space limits me from listing all of the criticisms of the excess earnings method that have come from practitioners in the business valuation field. The main article in the very first issue (1982) of *Business Valuation Review* recognized the flaws with this method: “The profits of a business enterprise are the joint product of the three major classes of resources – land, labor, and capital. To try to separate profits that originate from the tangible assets from profits that originate from the efforts of management and labor, for example, is not in accordance with common sense.” Since that first article, *BVR* has published a number of criticisms of the method and only one *BVR* article (published in 1984) clearly supported the method. The lack of proponents for the excess earnings method in the open forum atmosphere of *BVR* is illustrative of the disdain that most business appraisers have for the method.

Sophisticated Buyers Do Not Use the Method.

Despite its numerous flaws and widespread criticism, the excess earnings method still exists in various corners of the valuation world, primarily in the litigation context (such as equitable distribution) or with unsophisticated business brokers. Ever hear Merrill Lynch or Goldman Sachs comment that they priced an IPO using the excess earnings method? Ever have your broker explain to you that he thinks a stock is undervalued because the excess earnings method indicates a higher value than the current market value? Do you think that teams of analysts at General Electric were running excess earnings models in conjunction with their bid for Honeywell? Nowhere in the real world do sophisticated buyers and sellers use the excess earnings method, however, such accepted valuation techniques as the discounted cash flow method and comparable company method are used every day in the valuation of both public and private companies.

Summary. In medieval times, physicians trying to cure various illnesses used to cut patients open and “bleed” the sickness out of them. Fortunately for us, the medical profession has advanced and we are no longer subject to such crude and antiquated methods. The excess earnings method is the business valuation equivalent of blood letting. The criticisms and shortcomings of

this method are abundant, however, in case your eyes glazed over during this article and you have skipped to the end, here is a summary of the main problems with the excess earnings approach:

1. The returns on tangible and intangible assets cannot be realistically separated:
 - a. There is no way to reasonably estimate what “normal” tangible equity should be.
 - b. There is no way to reasonably estimate what a “normal” rate of return on “normal” tangible equity should be.
 - c. There is no way to reasonably estimate what the capitalization rate for intangibles should be. There is no empirical support for such a rate.
2. The method has been roundly and loudly denounced by its creator, the IRS.
3. The method has been widely and repeatedly criticized in the business valuation industry.
4. Sophisticated buyers and sellers in the real world do not use this method. In my firm’s many years of involvement with numerous actual private business transactions, we have yet to see the excess earnings method utilized by a sophisticated buyer or seller.

It is the desire of this author and many others in the business valuation field that the excess earnings method be eliminated as an acceptable valuation technique. The method is fraught with subjectivity and illogical assumptions and, as a result, can be easily manipulated to achieve almost any desired result. It is the opinion of this author that the continued and repeated use of this method casts serious doubt on the competence of a business appraiser and reflects an inability to embrace modern valuation techniques that are more reliable, more widely accepted and, ultimately, more accurate. ♦

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