Kick the Habit!

The Excess Earnings Method Must Go!

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Illustration of the Method

Tangible Equity: $1,000,000
Net Income: $160,000

1. Normal Return on Tangible Equity = $1,000,000 x 10% = $100,000
This is the portion of net income due to the Company's tangible value.

2. Excess Earnings = $160,000 - $100,000 = $60,000
This is the portion of net income due to the Company's intangible value.

3. Intangible Value = $60,000 ÷ 30% = $200,000
This represents the Company's intangible value.

4. Total Company Value = $1,000,000 + $200,000 = $1,200,000

History of the Excess Earnings Method

- Originally developed as ARM 34 in 1920.
- Originally developed by the U.S. Treasury Department to determine the intangible value of distilleries to compensate brewers for their losses during prohibition.
- Evolved into Revenue Rulings 65-192 and 68-609 but has essentially remained the same over time.
- Also known as the "formula method."

Too Many Subjective Variables

1. Estimating the "Normal" Income of the Company

2. Estimating the "Normal" Tangible Equity of the Company

3. Estimating the "Normal" Return on the "Normal" Tangible Equity

4. Estimating the Capitalization Rate for Excess Earnings

1. Estimating the "Normal" Income of the Company

- Removing one-time or non-recurring instances of revenue or expense.
- "Control-level" adjustments available to a majority owner of the business.
- These are necessary adjustments under any income or market valuation approach, therefore, as concerns this issue, the excess earnings method is no more subjective than any other income or market approach.

2. Estimating the "Normal" Tangible Equity of the Company

Donald Trump, CPA	Warren Buffett, CPA
Tangible Equity: \$10,000,000 Net Income: \$160,000	Tangible Equity: \$1,000 Net Income: \$160,000
Normal Return on Tangible Equity \$10,000,000 x 10% = \$1,000,000	Normal Return on Tangible Equity \$1,000 x 10% = \$100
Excess Earnings \$160,000 - \$1,000,000 = \$0	Excess Earnings \$160,000 - \$100 = \$159,900
Intangible Value \$0 ÷ 30% = \$0	Intangible Value \$159,900 ÷ 30% = \$533,000
Total Value: \$10,000,000	Total Value: \$534,000

3. Estimating the "Normal" Return on Tangible Equity

- There is no empirical data available to calculate this return.
- All return data is based on both the tangible and intangible value of a business.
- There is no way to segregate a company's return between its tangible and intangible equity.
- This concept works only for savings accounts and T-bills, not for private companies and professional practices.

4. Estimating the Capitalization Rate for Excess Earnings I

Coca-Cola Market Capitalization: $151 billion

Coca-Cola Tangible Equity: $9 billion

Coca-Cola Intangible Value = $151 billion - $9 billion = $142 billion

Normal Return on Tangible Equity = $9 billion x 10% = $900 million

Actual Coca-Cola Net Income: $2.2 billion

Coca-Cola Excess Earnings = $2.2 billion - $900 million = $1.3 billion

Capitalized Excess Earnings = $1.3 billion ÷ 30% = $4.3 billion

Calculated Company Value = $9 billion + $4.3 billion = $13.3 billion

Actual Cap Rate for Excess Earnings = $1.3 billion ÷ 0.9% = $142 billion

4. Estimating the Capitalization Rate for Excess Earnings II

3M Market Capitalization: \$46.2 billion

3M Tangible Equity: \$4.9 billion

3M Intangible Value = \$46.2 billion - \$4.9 billion = \$41.3 billion

Normal Return on Tangible Equity = \$4.9 billion x 10% = \$490 million

Actual 3M Net Income: \$1.43 billion

3M Excess Earnings = \$1.43 billion - \$490 million = \$940 million

Capitalized Excess Earnings = \$940 million ÷ 30% = \$3.1 billion

Calculated Company Value = \$4.9 billion + \$3.1 billion = \$8.0 billion

Actual Cap Rate for Excess Earnings = \$940 million ÷ 2.3% = \$41.3 billion

Criticism by the IRS (part I)

"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."

Revenue Ruling 68-609

Criticism by the IRS (part II)

"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."

1978 *IRS Appellate Conferee Valuation Training Program*

Criticism by the IRS (part III)

"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."

1978 *IRS Appellate Conferee Valuation Training Program*

Criticism by the IRS (part IV)

"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."

1980 *IRS Appeal Officer Valuation Training Coursebook*

Summary of IRS Criticism

- The excess earnings method should be used only as a last resort.
- The use of the method has resulted in many improper appraisals.
- The use of the method requires the possession of a higher degree of clairvoyance than is humanly possible.
- It is impossible to derive two fairly accurate rates to use in the method.
- The best you can hope for is to get a good answer based on two bad guesses.

Other Criticism (part I)

"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."

Business Valuation Review, Vol. 1, No. 1

James H. Schilt, ASA, CFA

Other Criticism (part II)

"As you probably realize, the foregoing discussion was extremely critical of the excess earnings method. I would have also liked to highlight a positive side of this method, but I could not think of one. The excess earnings method should be used only if all else fails. You can use this method when you know that you are going in front of a judge who will throw your report out of court if you do not use it. Whatever you do, do not use this method only. Use other methods that may be applicable to the assignment at hand, so that you can have a feeling of comfort about the estimate of value that you came up with."

Understanding Business Valuation
Gary Trugman, CPA, ASA

Other Criticism (part III)

"The intent of this article was to alert the tax professional about the significant weaknesses and limited use of the excess earnings/formula method as applied to closely held business valuations. Any appraiser relying heavily on this valuation method should be cognizant of the number of criticisms which can be raised to discredit it. The most obvious flaws relate to the arbitrarily fair rates of return and the unclear industry standard for fair rate of return. The fact that the IRS has sharp criticism for its own revenue ruling is another key breakdown in the credibility of this method. The only apparent virtue of the excess earnings/formula method is as a 'last resort,' when the courts have thrown up their hands in frustration at the lack of evidence offered in a closely held business valuation case."

TAXES (November 1982)
Jeffrey D. Fox, ASA, CFA

Other Criticism (part IV)

"Conceptually, this method simply does not make economic sense. One cannot go to a store and purchase x units of goodwill. The goodwill is not a separate asset that can be valued apart from valuing the entire business. Investors purchase one stream of earnings, not two. The many conceptual problems with this approach have been well explored. Even if this approach had any merit, there are many flaws in its application. It is hard enough to estimate the appropriate discount rate for the earnings of a business. Attempting to estimate two is impossible. No matter how ingenious the scheme to build up a rate for goodwill, one can rely only on subjective factors, premiums, and weights for those factors. While business valuations may involve some esoteric beliefs, voodoo should not be one of them."

Business Valuations – Advanced Topics

Larry Kasper, CPA

Method is Not Used in the Real World

- 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 Hewlett-Packard were running excess earnings models in conjunction with their bid for Compaq?

Summary (part I)

1. The returns on tangible and intangible assets cannot be realistically separated:

   a. It is very difficult 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.

Summary (part II)

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.

Excess Earnings