INCOME APPROACH OCD

by George Hawkins, ASA, CFA

Introduction

In another article in this issue of Fair Value, Michael Paschall provides a parable related to the fixation of some individuals to always favor the income valuation approach. This predisposition persists despite circumstances where the market evidence of real world, sold company transactions (called the “guideline transaction method” under the market approach) provides compelling information that the income approach results in the wrong valuation conclusion! Let’s explore the actual pros and cons of both approaches and dispel some myths in making a decision as to whether the findings of one approach or the other might be preferred.

First, some ground rules:

1. There is no universal answer as to whether the income or market approach is always better.

2. The facts and circumstances in every company and industry are always unique and the factors that drive or dictate value can and do vary.

3. The quantity and quality of data available in a particular circumstance may play an important role in the decision of one method versus the other.

4. Given the above, the business valuator must undertake the appropriate diligence and analysis to determine the right approach(es).

Reasons Income Approach is Favored

In the legal realm is not unusual to find judges, mediators and attorneys who believe the income approach is the be-all and end-all of valuation, even in circumstances where substantial market evidence says otherwise. The possible reasons for this predisposition are straightforward:

- **Ease of understanding** - The income approach, and particularly the capitalization method, is easy to understand.

- **Seemingly simple to calculate a value** - To value a business using the capitalization method all one has to do is take the annual income stream (e.g., earnings, net cash flow), divide it by a rate of return required by a buyer (called a capitalization rate, e.g., 0.20, or 20%), and one has the value. $1,000,000 in annual net cash flow divided by a 0.20 capitalization rate gives a value for the business of $5,000,000. The capitalization rate captures future expected growth, risk, and the time value of money to give the present value, at the valuation date, of an expected future stream of earnings or cash flow.
INCOME APPROACH OCD (continued)

- **Intuitive** - It makes sense that a buyer ought to be compensated for risk, which the capitalization rate takes into account.

- **Implies a payback** - Assuming future earnings or net cash flows are expected to grow at a constant annual rate, the inverse of a capitalization rate is simply a multiple or “payback” period. For example, the inverse of a 20% cap rate (0.20) is 5. In other words, if a buyer paid $5,000,000 to buy a business with annual net cash flow of $1,000,000 and desired a 20% annual rate of return, he or she expects to recoup the purchase price of $5,000,000 through cash flow generated by the business in 5 years. This leads to the next item on the list, the so-called “sanity check.”

- **“Sanity check” connotes reasonableness and fairness** - There is a belief among some that the cash flows generated from a purchased business ought to pay back (or return) to the buyer the purchase price in five to seven years - a “sanity check.” Any time period longer than this and the business is “overvalued.” To the judge faced with making a tough decision in a hotly contested equitable distribution case, this acid test seems to keep things “fair” and is in keeping with “fair market value” - or is it? More on this later.

- **Underpinning of modern valuation theory** - Pick up any business valuation textbook (including ours) and it will say, in theory (emphasis added), that the worth (or value) of any business or asset is the present value of its anticipated future cash flows. Voila. Game, set and match for the income approach.

Given the above, why would anyone ever use or rely upon anything other than the income valuation approach?

**Theory vs. Reality**

The income approach is a perfectly good methodology and should certainly be used where and when it is appropriate. But, make no mistake, it is a partially theoretical methodology, and as such, ought to be tested, where possible, against market reality about how real world buyers and sellers in a particular industry act and what is actually being paid as evidenced by real transaction data. An example will be provided of what can happen when valuators (and those who review their reports to make decisions, like judges, mediators and attorneys) choose to focus solely on one methodology, the income approach, and always choose to exclude, ignore or rationalize away the market approach.

**Fair Market Value and Fair Market Value**

The judge, who has the tough, thankless job of dividing assets in a soured marriage, wants to be fair. This is entirely appropriate. However, “fairness” has no place in the ‘fair market value’ standard and it would eliminate confusion if the term were shortened to ‘market value.’ The valuator must be fair and unbiased in arriving at an opinion of fair market value. However, fair market value has nothing to do with fairness. An asset is worth what it is worth, not what I, the buyer or a seller, or the court wants it to be worth.

Consider a case before the court involving Doofusgram, the social networking company owned by the wife. It is unprofitable and is unable to show how it will ever make a positive profit. By the income approach it would have no value. However, the husband’s valuator, using the market approach, shows there is a very active market of larger acquirors wanting to gain a position in the social networking segment and there are a number of transactions of other similarly unprofitable companies selling for an average of seven times annual revenues. With $10 million in annual revenues this would suggest Doofusgram is worth $70 million.

The judge may not believe that it is fair or rational that a business with no earnings (and therefore no value by the income approach) ought to be worth $70 million dollars. However, that’s what the market value is were it to be sold. Its market value, as an asset of the marital estate, would be $70 million, not $0.

Obviously, this is an extreme example only to make several points: (1) theory does not always equal reality; (2) the concept of sanity and fairness are non-issues, and (3) theory, via the income approach, results in the wrong answer in this instance. That’s why there is something called the market approach.

**Arguments Against the Market Approach**

The guideline transaction method (within the market approach) uses data on the prices paid in the sale of companies in the same or similar line of business to derive valuation multiples (price to earnings, price to EBITDA,
price to revenues, etc.) that can then be used to value the private company. Despite its seeming simplicity, however, the method is not without its shortcomings. Those faults have led to its criticism by some business appraisers and judges and to the method sometimes becoming a subject for cross-examination in litigated valuation cases.

To understand the attacks leveled at the guideline transaction method it helps to understand what kind of data is available to business appraisers in its use. Although it is generally difficult to find detailed information on merged and acquired company transactions, there nonetheless are several good sources of data available to the valuator. These include online and subscription databases, as well as the old-fashioned method of using hard work, ingenuity and perspiration to seek out and find transaction data in a particular industry.

**Transaction Data Resources**

There are various sources of transaction data available that have varying degrees of information on sales of entire companies. Several are summarized below:

- **Pratt’s Stats** - Pratt’s Stats contains information on thousands of transactions, searchable by industry grouping. Information contained in Pratt’s Stats includes data on the Standard Industrial Classification (SIC) code of the seller, the location of the acquired company, the sale date, whether the sale was a stock or asset purchase, the sale price, and various balance sheet and income statement measures. Also, Pratt’s Stats contains a variety of statistics about the acquired company that are often valuable in determining the broad similarity of the acquired companies. Sometimes, the acquirer is a public company and is named, potentially allowing the appraiser to search public company SEC filings to find out even more details about the transaction and the acquired company.

- **BIZCOMPS** - While this database suffers from a lack of detail beyond basic information, it can and should be considered as it sometimes provides a substantial number of transactions in a specific industry that shows a clustering of multiples.

- **Goodwill Registry** - The Goodwill Registry, published by The Health Care Group, contains information on thousands of medical and dental practice transactions. The Goodwill Registry classifies information by specialty and provides details on transactions such as the date, the state, whether the practice is urban, suburban or rural, the reason (purchase/sale, buy-in to ownership, etc.), the valuation method used, practice gross revenues, overhead percentage and earnings available to the owners (only in The Goodwill Registry Toolkit, including items beyond those in the print publication), the price paid, the amount of purchase price for goodwill, and the goodwill amount as a percentage of gross revenues.

- **Mining the SEC filings of Public Companies** - A sometimes useful source of data is information on acquisitions made by public companies as reported in their filings with the U.S. Securities and Exchange Commission (SEC). These filings, which are available on the Internet and can be searched by SIC Code, industry, or company, sometimes enable the valuator to find filings that contain detailed financial information on acquisitions. By analyzing the price and financial information on the acquired company (such as revenues, income, cash flow, EBITDA, book value, etc.), the valuator can determine the multiples at which a company was acquired.

"The Market Approach is Less Reliable Than the Income Approach" Position

The market approach skeptic states that the “income approach is much more reliable than the market approach,” thus rationalizing why he or she gives the market approach no weight in arriving at a finding of fair market value, instead using the more “trustworthy” findings of the income approach. The reasoning typically stated for this conclusion is something like the following:

The limited amount of data available on the operations and dealings of the company that was sold “proves” that the guideline transaction method is not reliable (or less reliable), and instead suggests that some other methodology, such as the income approach (e.g., capitalization of earnings), is more reliable and ought to be accepted by the court.

Is this true? The answer defies simplicity because, as always, it depends on the facts and circumstances in the matter at hand. For example, consider the following merger and acquisition transaction data:

1. Two transactions are identified in the company’s industry.
INCOME APPROACH OCD (continued)

2. One transaction occurred ten years ago and the other last year.

3. One transaction involved the sale of a company’s stock at a price equal to 5 times its annual earnings, while the other sold for 10 times its annual earnings.

The valuator averages the multiples and applies the 7.5 times earnings multiple to the company. The judge rightly questions the validity of the method’s findings, given the limited number of transactions, one of which is very dated, and with no clear pattern of central tendency in the multiples paid. In this instance, the judge correctly concludes that the method is less reliable than the income approach and that the average 7.5 times multiple used is nothing more than a recipe for a guess.

What is a Jurist to Do?

Conversely, suppose instead that the valuator had 15 transactions in the same industry, many which were recent, and which showed a clear pattern of multiples over time, clustering around multiples paid of 8 times earnings. By contrast, the capitalization method, based on a 20% cap rate, gave a much lower value equal to five times earnings. What’s the judge to do? In all fairness to judges, they are not valuators and some may have limited training or awareness of the pros and cons of various methods, plus they are on the firing line of making difficult decisions with imperfect facts, knowing one party or the other (or both) will be unhappy with whatever their finding may be.

Some, who understand and are more comfortable with the income approach may always give the market approach findings little or no weight. After all: (1) the income approach is theoretically the soundest, (2) he or she understands it, (3) little is known about the acquired companies, (4) it is sane because the payback is five years, and, (5) because it can allow one party in the failed marriage to buy the other out in five years, it is a “fair” value.

Let’s quickly dispense with several of the above arguments:

- **“The income approach is theoretically the soundest”**- Regardless of whether the income approach is theoretically the soundest, in this instance the market reality is that buyers and sellers are transacting purchases and sales of companies in the industry of prices and multiples that deviate from the theory of an income approach. A willing seller would not sell his or her company at five times earnings (based on a 20% cap rate by the income approach) when data in the industry suggests companies are clearly selling for 8 times earnings, a 60% higher price. It could also be the reverse, with transaction data indicating that companies in the industry sell for around 3 times earnings, regardless of what the theory says. In this instance, the market is what the market is despite what the reader of the valuation report or the theorist thinks it ought to be.

- **“The value by the market approach is not sane”**- Just because the prices paid and the resultant multiples do not fit one person’s definition of the price that rational (therefore sane) buyers and sellers ought to follow is
irrelevant. Market prices vary greatly over time and by industry. Industries perceived as “hot” and with great potential (rightly or wrongly) might see high valuation multiples, whereas companies in industries seen as mundane or having poor future potential (rightly or wrongly) might see low valuation multiples. Markets ebb and flow and can also reach high and low extremes that might persist for long periods of time. Also, market prices can sometimes fall nicely in line with the income approach. If so, all the better. But remember, fair market value is as of a given valuation date and that values and market conditions change over time. Do not fall into the trap of ignoring market data just because it fails to meet an arbitrary sanity check. For a detailed explanation of the major flaws with this type of rule of thumb, see “Is the Justification of Purchase Test Always Justified” (*CCH Business Valuation Alert, February 2000*), authored by Banister professionals and available on the Business Valuation Articles page of our website.

- **“The value by the market approach is not fair”**- The judge is required to be fair, as is the valuator. However, fairness has no place in the market value of any asset, including a business. That said, we are utterly sympathetic to the judge’s real world problem, which is not the province of the valuator. That is, how does one party satisfy the equitable distribution obligation to the other when the market value is at a mismatch to the ability to pay it based on the company’s cash flows?

## The “We Know Little About” Argument

Purposefully absent from the above is one of the common arguments made to rationalize why no weight is placed on the guideline transaction method within the market approach: “we know too little about the acquired companies to determine if they are reasonably similar to the company being valued, and we don't know all of the terms of the transaction.” It can in fact be true that there are so few transactions, no clear trend in transaction pricing, and the detail so sparse that a valuator finds it difficult or impossible to rely upon the guideline transaction method. That’s perfectly acceptable and involves the business appraiser doing his or her job with the specific facts at hand, without blinders on.

However, it is also untrue that one necessarily knows a great deal more about the findings for companies included the data used to develop the discount and capitalization rate used in the income approach. In fact, the valuator or judge may know materially less about those companies and their similarity to the company being valued. Consequently, the data used in the income approach may in fact incorporate much more subjectivity and “leaps of faith” than is the case with the market approach. To understand why, the following section explains how the all-critical capitalization rate is developed and from where the data is derived.

The “build-up method” version of the “Capital Asset Pricing Model” (CAPM) is commonly used in developing the capitalization rate that is central to the use of the capitalization method. The annual rate of return (discount rate) required by an investor for investing in a company’s common stock, which is a key part of the capitalization rate, is comprised of the sum of the following parts:

- **Risk-free return**- The “risk free” return from a “safe investment” (such as a U.S. Treasury Bond).

- **Equity risk premium**- This represents the additional average, annual return historically realized by the market (in dividends and capital appreciation) for the additional risk risks inherent in investing in publicly traded common stocks over and above that of a risk-free investment.

- **Company specific risk premium**- This represents the risk premium for any additional risks inherent to the specific company being valued.

In summary, the build-up method can be summarized by the following formula:

<table>
<thead>
<tr>
<th>Build-Up Version of the Capital Asset Pricing Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-Free Rate</td>
</tr>
<tr>
<td>+ Market Equity Risk Premium</td>
</tr>
<tr>
<td>+ Additional Specific Company Risk Premium</td>
</tr>
<tr>
<td>= Discount Rate (Annual Rate of Return for Risk)</td>
</tr>
<tr>
<td>- Annual Growth Rate in Earnings (Cash Flow)</td>
</tr>
<tr>
<td>= Capitalization Rate</td>
</tr>
</tbody>
</table>
The first result of the above is a “discount rate” that represents the annual investor-required rate of return (including dividends and capital appreciation) for investment in the common equity of the company being valued. Subtracting the annual, expected future growth rate in earnings/net cash flow (or other measure to be used) from the discount rate (cost of equity) results in a capitalization rate. When the earnings or cash flow measurement is divided by the capitalization rate this results in an estimate of value.

The risk-free rate (typically a U.S. Treasury Bond) and the market equity risk premium are referred to as being objective in nature, whereas the additional company specific risk premium, if appropriate, is based on subjective determination of the valuator given the specific facts of the company being valued. The market equity risk premium is objective in nature because it can be looked up, based on historic study data such as that published by Duff & Phelps, LLC in its Valuation Handbook, Guide to the Cost of Capital, published annually, and to which most business appraisers subscribe. The Duff & Phelps study reports the average annual rate of return (in dividends and capital appreciation) realized by investors in publicly traded stocks from the end of 1963 to the end of the latest year preceding the current issue of the study (e.g., the 2017 study covers the average return from end of 1963 to the end of 2016). In addition, the study also reports the “equity risk premium,” a figure that represents the additional annual rate of return realized by investors (in dividends and capital appreciation in share prices) for holding public company common stocks over and above that of investing in “risk free” U.S. Treasury Bonds. This equity risk premium can then be determined in an objective manner based on various metrics related to the public companies studied.

Finally comes the need, if any, for an additional company specific risk premium. While the astute valuator will undertake as much analysis of the company as possible to arrive at a reasoned adjustment, it is still subjective in nature.

Problems with Income Approach Data

If most of this data is objective why is it not necessarily more reliable than the findings by the guideline transaction method? First, it should be obvious that the guideline transaction method is also based on objective data. The next retort of the income approach adherent will be that the guideline transaction data in our example involved “only” 15 transactions in the company’s industry, whereas the study data for the income approach is based on annual rates of return for thousands of companies. But is this true? No!

Small and in the Same Industry?

Typically, in using the study data the valuator will select rate of return data for “small” companies that are most similar in size to the typically smaller private company being valued. For example, suppose the valuator selects annual revenues as the size measure. For example, by reviewing the 2016 Duff & Phelps study, he or she then selects the grouping of public companies with average annual revenues of $130 million, of which there were 303. Okay, so we’re down to 303, not thousands of companies, but surely that is still more reliable because it is still a much bigger sample than the 15 transactions from the market approach. Or is it?

Suppose the valuation is of a beer distributor with $25 million in annual revenues. How many of those 303 public companies distribute beer- or are even distributors of anything? It is not possible to know as the underlying detail from the data is the proprietary property of the Center for Research in Security Prices at the University of Chicago and not available. In fact, the public company sample likely includes many types of businesses, in segments as diverse as software, manufacturing, social networking, and many others that bear little or no resemblance to the factors affecting the industry of the beer distributor being valued. Consequently, the data used from the study is just an average of equity risk premiums across a whole host of industries and companies and says nothing about what is being demanded as a rate of return for the industry of the particular company being valued.

In addition, the average annual revenues of the “small” public companies are $130 million, still much larger than the $25 million company at issue. Furthermore, the rates of return from the studies are averages over a long period of time, from the end of 1963 to the present study. Markets and prices of companies and industries have changed greatly over that time frame, as have tax rates, the economy and intervening wars and other factors.

Finally, don’t forget that additional item noted earlier, the need for and size of any specific company risk premium adjustment that might be made by the valuator. There is no way around admitting that despite a valuator’s
INCOME APPROACH OCD (continued)

best efforts and analysis, this is an inherently subjective adjustment. It is not at all uncommon that a specific company risk premium could be a very significant portion of the overall capitalization rate and have a major impact on the resulting value by the income approach.

The Bottom Line

The valuator making use of the rate of return study data cannot tell the court how many of those public companies were in the same industry as the company being valued, were of similar size (other than perhaps in a range), offered similar products, had similar territories, suppliers, competitors, had reliance on key employees, experienced similar financial performance and trends, and so on. In fact, the data contains companies from many industries, sizes and types, many in segments as different as night and day from the subject company being valued.

At least in the market approach the business appraiser can narrow the data to a same or similar market segment or industry, and often knows the broad financial results, size and location of the acquired companies. By comparison, these are factors that the appraiser never knows about the universe of companies that comprise the average rate of return data used in the income approach. All the appraiser can tell the court is that “the investor in an average public company of X size in revenues realized annual returns of X% over the last X years.” Therefore, which method is more reliable and provides more useful information- 1) the income approach, which is vague as to returns for a particular industry and is very long-term in nature, or 2) 15 clustering and reasonably current transactions of similarly sized companies in the same industry?

It is sometimes possible to obtain data on industry specific average rate of return adjustments to the above equity risk premium data. However, the ways industries are defined is often very general and cannot be isolated down to the many different segments within that industry. In our historic use of such references, it may be the case that there are only two or three public companies in a broad industry category, not a large sample from which to draw conclusions, and the ones included may be in totally different sectors of the industry or of a markedly different size.

Based on the foregoing, one might conclude that the data used in developing a capitalization rate is itself too fraught with problems to ever be reliable. That is not the intended message of this article. It is the best data available on the historic rates of return that have been realized for investing in the shares of public companies in general. Furthermore, the Duff & Phelps study is an outstanding resource that valuators frequently use and rely upon. However, the income approach is not without its limitations and one should not be seduced into the conclusion that it is necessarily more reliable or objective than are the transaction findings in the market approach.

In fact, every company situation is unique and the appraiser will need to use judgment to determine which method(s) are appropriate. For example, suppose the company being valued is rapidly growing and has high profit margins that are well above the averages of peers in its industry. Therefore, it may be the case that the income approach best captures the extra value creating benefit of this high degree of profitability and rapid expected future growth. Also, the appraiser may decide that the acquired company data is not useful for other reasons. For example, the only transaction data identified might be from a different time in the acquisition environment which is no longer present. In any event, the quality valuation will articulate the logic used by the business appraiser as to why the particular method(s) were used and why certain ones were not. Another article (“The Top 10 Errors Made in Using the Merged and Acquired Companies Method,” Fair Value, Summer 2004) provides insight into some of the mistakes appraisers should avoid in using the guideline transaction method.

The Synergistic or Strategic Value is Not Fair Market Value Argument

Some appraisers and attorneys caution that the prices paid in acquisitions can incorporate synergistic elements of value unique to the transaction and the specific buyer and, therefore, violates the fair market value standard, which they say is based on a hypothetical buyer with no unique motivations. Therefore, under this argument, it is maintained that where the appropriate standard of value is fair market value, the transaction(s) are to be excluded or require an adjustment to the multiple to account for the difference between fair market value and strategic value. In equitable distribution matters, most states follow a standard of value that is equal to or very similar to fair market value. Therefore, in arguing the case or in cross-examining the valuation expert, attorneys will argue that since transaction data cannot be clearly shown to be fair market value (versus strategic or investment value to a specific buyer) that it violates the valuation standard and must be excluded.
INCOME APPROACH OCD (continued)

It is possible that an isolated transaction that is strategically motivated might result in an entirely different value than what a “hypothetical buyer” might pay under a fair market value standard. However, if there are a meaningful number of transactions occurring in an industry, this reasoning may be entirely flawed, wrong, and naïve regarding how real buyers and sellers operate in a competitive marketplace.

Synergistic and Investment Value Can be the Same as Fair Market Value

For example, when there are many buyers acquiring companies in a fragmented, but consolidating industry, even if the buyers are paying strategically or synergistically motivated prices, this becomes known and may well influence what all buyers have to pay to compete for and win a purchase— even financial buyers who do not benefit from synergies. This is particularly true in consolidating industries where large companies in the industry are growing in part through the acquisition of smaller, closely held counterparts. Large companies can often increase the profitability of the small company on a post-acquisition basis through the elimination of duplicate overhead and a realization of greater profit margins than the small company could through volume purchasing and other efficiencies. Since multiple larger companies with the same attributes are competing for the universe of sellers, this forces buyers to bid up their pricing to reflect the value of these synergies to win the purchase. In essence, fair market value rises to and becomes synonymous with synergistically motivated pricing.

It is great in theory to say that this is not fair market value. Try telling that to the seller. Why would the seller turn down a variety of higher, synergistically based offers in a consolidating industry to instead wait for the “hypothetical buyer” to come along and pay a non-strategically motivated, financial buyer price? Of course they would not. Supply and demand are at work in buying and selling businesses, just like in any product or service. Business values in consolidating industries are no different. Business appraisers must continually remind themselves that they not only operate in the theoretical world of valuation, but in the real world of how buyers and sellers really think, act and feel.

In a related vein, some appraisers argue that even if there are many transactions in an industry, each transaction involves the unique motivations of one specific buyer and one specific seller. Therefore, even if there are 15 transactions, this should give no comfort that they equal fair market value because each one is based on unique motivations and represents what is called investment value, or value to a particular party. This contrasts with fair market value, which assumes a hypothetical willing buyer and seller, not specific ones. This argument is nonsense. If there are 15 transactions and they tend to involve a similar range of pricing, regardless of the motivations of each buyer and seller, a pattern has emerged of how buyers and sellers in the industry price transactions that strongly points to the multiples as an indication of fair market value.

Summary

The income approach has its own faults, both in the nature of the data, and in how it can fail to capture the real value in circumstances where the prices paid in the market for an industry vary materially from values based on non-industry specific, long-term average rate of return data used in the income approach. The point of this article is not that the income approach is unreliable. The guideline transaction valuation method is also not without its faults and there are circumstances where the company, the quality or nature of the data, or other factors suggest it should not be used, or if used given lesser weight.

Instead, the central point of this article is that business appraisers and users of valuation work product must never develop the notion that one method is always preferred or more reliable than another, something that is unfortunately too common with respect to some who favor the income approach. Only through examining the full facts at hand and the data available is one able to reach the best, most reliable and reasoned opinion of fair market value.

George B. Hawkins is co-author of the book Business Valuation Guide and is a Managing Director of Banister Financial, Inc., a business valuation firm in Charlotte, North Carolina. He can be reached at (704)-499-9009 or by email at: ghawkins@businessvalue.com

This article is an abbreviated discussion of a complex topic and does not constitute advice to be applied to any specific situation. No valuation, tax or legal advice is provided herein. Readers of this article should seek the services of a skilled and trained professional.