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Why Are "Forensic Business Valuations" Needed & How Are They Calculated?

by Chris Hamilton, CPA, CFE, CVA, DABFA

Business valuation is a highly invasive process. Under the best of circumstances the process of having a business appraised is time consuming and involves providing a total stranger (the appraiser) all of the intimate financial, management, and competitive information for the firm. It is certainly a disruptive experience even when it is authorized and appreciated.

However, if the owner and/or senior management of the business choose to not participate in the procedures or, worse, chooses to impede or disrupt the process, it becomes unpleasant for everyone involved. An appraisal usually depends on the assistance of management and the supply of accurate and reliable information. In certain circumstances that assistance and/or information is not available. When this is the case, the appraiser is forced to take a forensic approach. This article will discuss how to accomplish the appraisal engagement in spite of the lack of readily available information and assistance on behalf of the business being appraised.

Common Situations

There are three situations that generally describe most "forensic" valuations. The first, and most prevalent, is in a contentious marital dissolution. In a marital dissolution there is usually a spouse who has all the information or access to the needed information, and one spouse who is on the outside looking in. If the "insider" spouse chooses to play "hide the ball," the process of valuing the business can completely stall. Depending on the laws in the appraiser's state, and/or the willingness of the judge to force cooperation, these can be the most difficult engagements.

The second example of a situation requiring forensic valuation is after a disaster of some kind. For example, if fire has destroyed the premises including all the financial records, then any assistance management can willingly provide will be insufficient to accomplish the appraisal. The raw data simply no longer exists in the form most readily used by an appraiser. This circumstance is an example of the classic definition of forensic valuation which is determining the value of a business immediately before a disastrous event and comparing it with the value immediately after the disastrous event.

The third example of a situation requiring forensic valuation is in a litigated matter where all the data is available but management refuses to assist, or is barred from assisting, in the interpretation of the data or providing anything beyond the bare necessities.

The three examples of forensic situations provide all the possible combinations of obstacles:

- The relevant data exists but there is no assistance or cooperation from management
- Complete cooperation of management but no reliable financial data
- No data and no cooperation from management

Adding to the difficult obstacles described above is the factor of time. Often the appraiser is under severe time constraints and document requests take a much longer time. The time constraint adds to the pressure of the forensic engagement and will test the ability of the appraiser. The appraiser must bring together the skills of a financial analyst, accountant, economist, and in the context of situations described above, a detective.

Variables in Valuations

The foundation formula for valuing a business is as follows:

Value = Income ÷ Capitalization Rate

There are several methods of arriving at the value of a business but most use as their derivative the above formula. The methodologies and guidance provided in this article will focus on the two variables in the formula: Income and Capitalization Rate.

Income

This is by far the more difficult of the two variables to determine when there is a lack of cooperation, a lack of information, or both. Determining the amount of income to be capitalized is, obviously, a critical exercise and must be based on some rational method of estimation.

The first source to look for is recent transactions involving ownership interests in the subject company. Depending on the time horizon this may not provide enough to rely upon but it can start the process of building a defensible conclusion. A historical transaction provides three critical pieces of information: the income that was capitalized, the capitalization rate, and the value. However, the practitioner knows that if circumstances place the engagement in the "forensic" category, all those factors may not be disclosed or available. Typically, only the transaction price is available. If income upon which the recent transaction was based is unavailable, the basic valuation formula (Value = Income ÷ Capitalization Rate) can be highly useful, if modified. Using algebra, the basic valuation formula can be restated as follows:
Income = Capitalization Rate x Value

The appraiser must determine as best as possible an appropriate capitalization rate or an informed guess at the rate that was used in the transaction. The work done to determine that rate will be covered below. If the appraiser can get a sense from the participants in the transaction what the capitalization rate was the analysis is reduced to simple mathematics. If that cannot be obtained, the forensic appraiser must determine an appropriate capitalization rate. In theory, anyone can determine the appropriate capitalization rate since the appropriate rate is based on the investment not the investor. The capitalization rate times the deal price ("Value") will result in the amount of income upon which the transaction was based. Depending on the delay from the time of the transaction to the time of the forensic valuation date, this information can range from highly useful to marginally helpful or just "interesting."

The next step for the forensic appraiser is to obtain current information about actual income. This can be used to buttress the analysis of previous transactions or supersede it if the previous analysis is unreliable or unavailable. In the context of litigation, several documents should be requested and, depending on the appraiser's jurisdiction, will be compelled by the court if necessary. The following list of suggested documents is not a comprehensive list. Often in a forensic engagement comprehensive lists are useless as opposing counsel declares the requests "burdensome" and their client often responds that the data does not exist.

The following is a list of essential, and sometimes forgotten, documents that can be obtained from a third party that is either required to retain copies or most likely will have retained copies:

- *Tax returns* – usually prepared by an outside firm that retains copies of the tax returns and work-papers. If not, copies should be obtained directly from the IRS. This may be difficult to do in a litigation setting, but in a setting where management is cooperating this source should not be overlooked.
- *Financial statements* prepared by an outside accounting firm. – The outside firm certainly retains copies in their files and even if client records are unavailable or were destroyed, the outside firm should be able to provide copies of the statements as well as supporting work papers.
- *Bank statements* for at least three years – available directly from the bank.
- *Loan applications* – also available directly from the lending institution.
- *Corporate minutes* - usually maintained at attorney's office.

- *Valuation reports* previously prepared for the subject company – if the appraiser can determine who prepared the previous reports, a copy can likely be obtained directly from the issuer of the report.
- *Contracts and related correspondence for all prior sales of company stock* – if a business broker, attorney, and/or escrow company was used an independent trail of documentation will exist.
- *Copy of all stockholder and employment agreements with amendments* – also maintained in law firm's files in most cases.

In some cases, bank statements are all that can be obtained in a timely manner. This is especially true in cases where there has been a disaster of some kind or there is a claim that all financial records have been destroyed. While bank statements do not have everything an appraiser would like to see, the opportunity to have them should never be bypassed. A bank statement analysis should be performed by simply preparing a schedule summarizing the information on the monthly statements. If there are multiple bank accounts, all of them should be summarized and a combined summary prepared. To the extent transfers between the accounts can be identified, their effect should be eliminated on the combined summary. The result is a schedule which shows total cash flow and, if applicable, any seasonal patterns.

Bank statements are also helpful in other ways. For example, if the owner indicates there are no other accounts than those for which the statements were provided the appraiser should review the account statements very carefully. For example, all transfers should be traced. It is common to come across a transfer from a known account to an unknown account or from an unknown account to a known account. Most bank statements will actually provide the account number of the destination account. Attorneys love it when the forensic appraiser shows definitively that the "other side" is playing dirty. More importantly, it allows the engagement to move forward once more complete information is obtained based on the bank statement analysis.

If financial statements are obtained via discovery it is unlikely that the appraiser will have the ability to determine if they are complete or accurate. Forensic analysis methods will enable the appraiser to gain some confidence in the data. A profoundly easy way to obtain this information when all else has been destroyed or otherwise made unavailable is to obtain copies of recent loan applications. Most businesses have debt of some kind and many have a line of credit with a bank or other lending institution. Most lines of credit require annual financial updates (re-applications) to the lending institution. The forensic appraiser should obtain the file either voluntarily or via subpoena depending on the circumstances. The file is invaluable and should be considered reliable; loan applications are usually signed under penalty of perjury. Further, the representations on the application are reviewed carefully and verified by the lending institution. Therefore, all work papers and notes prepared by the bank in connection with the application should also be obtained. In a litigation context, conclusions based on this type of evidence is assailable only if the owner/management is willing to say they filed a false, incorrect, and misleading application. One can imagine this is not highly likely – or advisable.

Stockholder agreements can be useful since most have buy-out provisions and some even state the "value" of the firm as of the time the agreement was executed. Buy-out provisions also generally state valuation methodology and criteria that can provide guidance for the appraiser. If the agreement was recently signed and does state the value of the firm, the appraiser's job can be greatly simplified to a process of verifying the value and adjusting for subsequent events, if applicable.

In the course of litigation, questions can be advanced to the owners/managers in written (interrogatories) or oral (deposition) form. While both processes are contentious and somewhat tedious, there is often no better method to obtain relevant facts. The forensic appraiser should be prepared to participate by proposing good questions and evaluating the answers. Many attorneys do not think to request such assistance and the appraiser should offer to participate. Often, the result is less wasted time; the attorney and client almost always appreciate that.

2468 Tapo Canyon Road Simi Valley, CA 93063
Ph: 805.306.7890 Fx: 805.306.7891 www.arxisfinancial.com

The following are interrogatories that should be submitted, to the owners and/or senior management of the firm being appraised, or questions that should be asked in deposition. This is not a comprehensive listing. These highlight areas that should not be missed by the forensic appraiser, since the answers to the questions may provide significant direction and evidence:

- *What is your company worth? How do you calculate it?* These questions force the responder to "go on the record" with information that they might think is useless but actually may be quite valuable in piecing together an opinion of value. It is an obvious question that often goes unasked!
- *What is your total compensation including salary, benefits, and personal expenses paid by the business?* This is critical to valuing a stockholder-managed company since many business owners effectively pay dividends through some form of deductible disbursement. An obvious follow-up series of questions should establish the management role and function of the owner.
- *Have you sold, gifted, or otherwise disposed of any interests in the business?* This question sets the foundation for questions regarding dates, values, and valuation methodologies for prior transactions. It is also a question that should follow a series of questions about the responder's acquisition of the ownership interest.
- *List dates and amounts of any capital contributions made to the business in the last x years.* While this does not give direct evidence to the value of a business it can provide trails to significant time periods, circumstances surrounding a "capital call," and comparison with other stockholder records.
- *Have there been unusual transactions or events in the past x years that would affect the relevance or comparability of the financial statements?* The number of years to ask about is determined by the number of years of financial data available to the appraiser. For example, financial statements for a travel agency would be expected to show significant changes in operating results after September 11, 2001.

Capitalization Rate

A capitalization rate is any divisor used to convert anticipated benefits into value. A capitalization rate is used to value historical income as a basis for expectations of future results. A discount rate adds on a component of expected growth and is used to place a value on income projections. As stated above, both methods use the basic valuation formula or a derivative of the formula. Often, the only measure of income available to the forensic appraiser is projections since reliable historic data is not available. In other cases the appraiser may only feel comfortable valuing historic income because reliable projections are not available or the future of the business is significantly altered due to disaster. In either case a capitalization rate must be developed.

The capitalization rate is effectively a measure of risk associated with the business being valued and is constructed based on the risks inherent in the general marketplace and the risk associated with the company being valued. Variables considered in the development of a capitalization/discount rate include depth of management, competition, stability of financial performance, and the general and local economic conditions. In a forensic valuation this is perhaps the easier of the two variables to determine. The capitalization rate is a "forward-looking" measurement of the cost of capital that is based on historical data. Most aspects of the development of the capitalization rate can be obtained independent of the business owner and independent of any knowledge of business operations. These include the study of general, local and industry economic conditions, and the competitive standing of the subject firm in its industry.

However, a critical element to building the capitalization rate is the company-specific risks. This is typically developed by interviewing management, reviewing management's assessment of risk, and comparing the financial results of the subject firm with the industry. In a forensic valuation none of these may be accomplished and the appraiser is left to either prepare a range of values based on a range of capitalization rates or to build the rate in another way.

To determine a company-specific measure of risk the forensic engagement may require unique approaches to obtaining information about the depth of management, financial performance, and competition. If stockholders and senior management are not able or willing to provide the information, the appraiser must either withdraw from the engagement or find another way to the answer. For those who specialize in appraisals in the litigation setting withdrawal is rarely acceptable.

Searching several sources, available to the public, usually yields a surprising amount of information:

- *Dun & Bradstreet* (D&B). Obtaining a report from D&B (www.dnb.com) costs money, but it is often well worth the investment. It is surprising how much information some people will provide to total strangers through a service such as D&B. The reports from D&B can provide historical financial information, history of management, credit history and rating, and other background information.
- *The subject company web site*. Again, it is astonishing how much proprietary and sensitive information some firms put up on the World Wide Web. Some firms will post financial data when you would not otherwise expect to see it. A good understanding of the services/products offered by the business as well as the markets it operates in can usually be obtained from the web site. Posted employment opportunities can provide clues regarding the firm's stability, comparative compensation rates for employees, growth, expansion or contraction, and employee turnover.
- *Public data base searches*. Subscription or pay-as-you-go services such as www.knowx.com will provide a public record search for liens, lawsuits, UCC filings, judgments, officers, office locations, etc. The state agency overseeing corporations usually maintains a web site with information available for every corporation authorized to do business.
- *Industry association web sites and publications*. A firm that is active or predominate in an industry association will leave a trail that can be followed. This is useful to see how the subject firm is viewed in the industry, whether they actively advertise and market their firm, what their ads and marketing say about the business, and identify key people in the company. Such publications could also identify unrelated individuals that, if contacted, might be willing to discuss the company, its reputation, its position in the industry, etc.
- *Public job postings and executive search firms*. As with the review of the firm's web site, access to public information regarding the types of job openings, number of job openings, and general salary ranges (when compared to industry) could be very valuable information.
- *Competitors*. Sometimes a competitor is very willing to tell what they know. Of course, information from a competitor should be carefully calibrated with information obtained from other sources. An entire conclusion of value cannot be based on interviews with competitors but significant leads can be obtained through such conversations.
- *Business brokers*. Brokers in the specific industry of the subject firm can be a great source of "reputation" information as well as identities of people (competitors) who might be willing to talk about the subject firm.
- *Google and other internet searches*. When performing a forensic valuation the appraiser should never skip this step. Using the incredibly powerful searching capabilities available via the internet is amazingly simple and provides detailed useful information almost every time.

In a forensic valuation all available information should be considered, weighed for its value and relevance, and incorporated into the basis for capitalization rate. The objectives of the analysis are fairly simple and should be kept in mind: What is the relative risk of an investment in the subject company compared to alternative uses for the money? The answer should be an appropriate capitalization rate.

Conclusion

A "normal" valuation requires a tremendous amount of time, concentration, and objectivity by the appraiser. In cases where there is little or no readily available information the engagement requires a forensic approach that must be accomplished without compromising the objectivity of the analysis. A forensic approach will also require more time both in the analysis and in supporting the conclusion of value. When all is said and done the goal of the appraiser in a forensic environment is to deliver a reasonable estimate of value based on relevant evidence and reliable information. The outcome, then, is the same as a normal appraisal engagement. It will simply take more creativity, drive, and effort to get there.

About the author:

Chris Hamilton is a partner with the CPA firm of Arxis Financial, Inc., in Simi Valley. He is a member of the California Society of Certified Public Accountants (Litigation Services Committee), and the American Institute of Certified Public Accountants. Mr. Hamilton is a Certified Public Accountant, a Certified Fraud Examiner, a Certified Valuation Analyst, and a Diplomate of the American Board of Forensic Accounting. He can be reached at ph. 805-306-7890 or chamilton@arxisgroup.com.