

Matrimonial Business Valuations Can Now Be Improved

By J.L. Pierson

Except perhaps in cases involving large dollar amounts and where both parties understand the benefits of using experts, the valuation of private business interests in the various states' family courts could certainly be improved upon. Specifically, the spouse with the business ownership and thus the most to "lose" in an equitable distribution action will hire an attorney to negotiate a lower value, and he/she in turn will hire an appraiser to validate that low value. Conversely, the attorney working for the other spouse will hire a business appraiser who will validate a high value. Is there such a causal relationship? Aren't appraisers supposed to tell it like it is from a financial point of view?¹

This article outlines a too commonly used technique to fit the appraisal to the client's wishes; it also explains that advances in valuation research and practice now make that technique obsolete.

It is not true that matrimonial valuations always come up short when the moneyed spouse hires the appraiser and too high when the other spouse does. Based on our observations, however, it still appears too easy to enter a low or a high valuation into the record. After all, the valuation standards applied in family court are purposely vague, partially because the statutes allow a good deal of latitude to the trier of facts. A typical "gimmick" is to use an income or cash flow discount or capitalization rate as high or low as possible, and fail to justify, or gloss over the justification of the rate.

As an example, an appraiser hired by the non-owner/manager's attorney valued a decidedly mid-sized \$9.7 million revenues industrial distributorship by capitalizing cash flow at a capitalization rate based on a discount rate of 20.4% while the writer argued the discount rate should be 24.2%. Who is right? How is a trier of facts to know?

First, some basic theory. What is a discount rate? It is the rate which is used to convert earnings, cash flow or any proxy thereof, either historical or prospective, into value. Corporate management typically prepares a projection of earnings, which can then be "normalized." Using the projected data, the appraiser present-values the projected benefits into today's money through a common discounted cash flow analysis.

What is a capitalization rate? Say the business is too small, or too unstable to appropriately prepare reliable projections more than a year out. A potential buyer could and typically would estimate next year's earnings reliably enough, perhaps based on the previous year's results or next year's anticipated results. In order to translate this into value, the appraiser uses a capitaliza-

tion rate. The capitalization rate is always equal to the discount rate, less a long-term growth rate.

The less the discount or capitalization rates, the higher the value with the same base of earnings or cash flow; conversely, the higher the rate, the lower the value.

The Business Valuation body of knowledge, however, has recently expanded to include a tool which removes any excuse for not justifying the discount rate, assuming your appraiser keeps current, and his client is knowledgeable. This is important and must be understood by all attorneys who represent clients with interests in closely held businesses in family court.

Historically, many discount rates used for matrimonial valuations have been derived by the "build-up" method where the discount rate is calculated as the sum of (a) the "risk-free" rate, typically a proxy of the 20-year U.S. Treasury bond rate equivalent² and (b) the equity premium calculated by Ibbotson Associates, which itself presents the excess of the aggregate return from investments in large traded stock investments, over the corresponding "risk free" rate³ and (c) a measure of size, on the theory that smaller businesses are riskier than larger ones since they have less financial options, and (d) a premium for risks specific to the subject. In other words, 4.92% plus 7.20%, or 12.12% is the discount rate applicable to the very largest of publicly held multinational firms, say the common stock of General Electric, while smaller firms have a considerably higher discount rate.

The size premium add-on to the discount rate relevant to large public firms, designed to account for the smaller size, and thus higher risks involved in a given firm, has historically been determined empirically, based on research reported by Ibbotson.⁴ Business appraisers have also added points to account for the specific risks of a private company over the sized-adjusted discount rate relevant to an average financial risk profile. The practice has gone on for years, and is logical enough, but clearly opens the appraisal to criticism that the size and the specific risk premia are, generally, highly subjective. After all, there were no studies correlating the premium to actual company characteristics. Well, until now.

In establishing that correlation, Standard & Poor's Corporation Corporate Valuation Consulting (S&P CVC) group has accomplished the following: (a) Scrubbed the database used by researchers to investigate the relationship between discount rate and risk, removing many public firms with obvious signs of financial stress and (b) determined a series of annually revised regression formulas which can be used to translate any of 8 measures of size into an objective add-on to the "risk-free" rate in

order to calculate a justifiable discount rate for a given firm. The eight (8) measures of "size" are:

- (a) Market Value of Equity
- (b) Book Value of Equity
- (c) 5 year Average Net Income
- (d) Market Value of Invested Capital
- (e) Total Assets
- (f) 5 year Average EBITDA⁵
- (g) Size of Sales Revenues
- (h) Number of Employees

Typical S&P CVC formulas, incorporating the current U.S. bond rate, would read:

Discount rate = 14.285% + 4.92% - 2.960% * log (average income)

Discount rate = 15.836% + 4.92% - 2.938% * log (average EBITDA)

Discount rate = 16.434% + 4.92% - 2.286% * log (Sales)

Discount rate = 17.453% + 4.92% - 3.171% * log (book equity)

Discount rate = 17.057% + 4.92% - 2.082% * log (number of employees)

Discount rate = 18.039% + 4.92% - 2.870% * log (total assets)⁶

Since the S&P CVC regression formulas are based on data which does not include financially stressed firms, the regression formulas are a welcome improvement over the one-rate-fits-all approach used by prior practice. The data has also been limited to 1963 and later, eliminating another reason why the old Ibbotson data is too diffused to be utilized. The regressions may be used to derive an objective, or at the very least a much less subjective measure of the discount rate applicable to a given firm. The most useful measures of size in small company valuations are the average net income, average EBITDA, total assets and book value of equity or invested capital because these measures are available for most valuations. Generally Accepted Accounting Principles provide, for the most part, some measure of consistency in these measures across industries.

Now back to the industrial distributor. Using its book net worth of \$0.3 million, sales of \$9.7 million, total assets of \$2 million, and average EBITDA of, say, \$0.3 million, the S&P equations return discount rates of 24.8%; 19.9%, 23.7% and 23.1%, respectively (using the bond rate at the time). From these rates, the writer would conclude that the appropriate discount is in the

area of 23%. Clearly, the rates justified using S&P's research appear more reliable because they are derived from empirical data, not from unsubstantiated best guesses. Had the research been available at the time, a good deal of grief would have been avoided all around.

Business appraisers acknowledge that Business Valuation is not an exact science. But it is important to have the "ball park" discount rate correct in an income-based valuation, or risk being contra-indicative of probable range. It does not impact value much if the discount rate used is either 20% or 21%, but using a very different 15% or 25% would be incorrect. The moral of the story for users of valuation services is to insist that the business appraiser *justifies* his/her discount rates, perhaps through the use of the S&P CVC data. I know this business appraiser does.

Endnotes

1. Appraisers who are members of the American Society of Appraisers or of the Institute of Business Appraisers must follow the Uniform Standards of Professional Appraisal Practice, which are promulgated by the quasi-public Appraisal Foundation as required by FIRREA. USPAP requires that appraisers state that "analyses, opinions and conclusions are only limited by the reported assumptions and limited conditions and are (my) personal, impartial and unbiased professional analyses, opinions and conclusions." Appraisers who are members of the AICPA have, as of this writing, no obligation to follow USPAP; a draft version of the AICPA Business Valuation Standards was circulated in November 2004 for comments by members. CVAs do not have the obligation to follow USPAP but their accrediting organization, NACVA, has its own standards, which include independence requirements.
2. As of early November 2004, the 20-year U.S. Treasury bond rate equivalent is 4.92%.
3. The 2004 equity risk premium calculated by Ibbotson Associates is 7.2%.
4. For example, the add-on corresponding to the second half of the 10th decile of public companies is 9.8% according to Ibbotson. The companies' capitalizations range from \$0.3 million to \$96.9 million. See *Stocks, Bonds, Bills and Inflation 2004 Yearbook Valuation Edition*.
5. Earnings Before Interest, Taxes, Depreciation and Amortization.
6. Standard & Poor's Corporate Value Consulting *Risk Premium Report 2004* Chicago, IL: Ibbotson Associates. Research articles by Roger Grabowski, ASA and David King, CFA leading to the development of this resource were published in *Business Valuation Review* between June 1995 and March 2000.

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