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ROUTE TO:

DARRELL V. ARNE, CPA, ASA, CBA, CBI
E-Mail: Darne@Arne-Co.com
www.businessval.com

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5424 Arabian Drive, NW
Albuquerque, New Mexico 87120
Telephone: (505) 898-2514 Telecopier: (505) 899-4476

The Source of Control Premium Data and What It Doesn't Tell You

Business appraisers frequently employ the term *control premium* when valuing a whole company, a pro rata interest in the total value of an enterprise, or an equity interest with majority voting power. The concept arises from the observation that merger and acquisition transactions involving whole public companies (or majority ownership positions) tend to occur at premiums to pre-merger share prices paid in the public exchanges for minority blocks of the stock of the acquired companies.

The Premise of Value Concept. Control premiums reflect the quantitative difference between transactions occurring under (and valuations prepared under) different *premises of value*. The first premise, *controlling interest or enterprise value*, represents the price per share paid for all of the equity of an acquired company (or a majority interest in the equity of that company). The second premise, *marketable minority interest value*, represents the value attached to minority interests in the equity of companies actively traded on the public exchanges. Because the comparison is between pricing of the acquired company's equity in the merger and acquisitions market and pricing of the same company's equity in the *public stock exchanges*, the issue of lack of marketability of a subject interest does not arise. The difference in price lies solely in how the markets value a whole company versus a fractional interest in that company, or a majority interest versus a minority interest.

In valuing closely held companies, control premiums are especially useful in developing indications of value under the controlling interest premise of value where there is very limited or no available pricing data on acquisition transactions in the subject company's industry group. In such circumstances, appraisers often look to the public *minority equity markets* to develop pricing multiples and costs of capital. Applying a control premium has the effect of raising an indicated value initially obtained using data consistent with the *marketable minority interest premise of value* to an indicated value consistent with the *controlling interest or total enterprise premise of value*.

Similarly, in valuing a minority interest in a closely held company, if a reliable indication of value can be developed from pricing

Base Control Value (CV)	\$140.00	per share
Apply Minority Interest Discount (see below)	(\$40.00)	per share
Equals Marketable Minority Value (MMV)	\$100.00	per share

$$\text{MID} = [1 - 1 / (1 + \text{CP})] \%$$
$$= [1 - 1 / (1 + 40\%)] \%$$
$$= 28.6\%$$

(Continued on Page 2, Column 1)

Court Requires Well-Reasoned, Persuasive Appraisal Report

A Tax Court decision (*Estate of Alice Friedlander Kaufman v. Commissioner*, T.C. Memo. 1999-119; No. 17050-97 (April, 1999)) once again emphasizes the necessity of an appraisal document that is thorough, well-reasoned and well-supported. *Kaufman* points out a number of issues that appraisers and users of appraisal reports should consider.

As the Tax Court has noted more recently, a cookie cutter approach to valuation is not acceptable. Each valuation case must be analyzed based on its own merits and the supporting documentation. Expert testimony must provide the Court with enough information to make informed and well-reasoned judgments.

Burden of Proof. The burden of proof is on the taxpayer. This is an important consideration noted by the Court

(Continued on Page 3, Column 3)

IN THIS ISSUE

The Source of Control Premium Data and What It Doesn't Tell You	1
Court Requires Well-Reasoned, Persuasive Appraisal Report	1

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ing data on acquisition transactions in the subject company's industry, that controlling interest value can be reduced to an indication of value under the marketable minority interest premise of value by application of a *minority interest discount*. The minority interest discount corresponding to a given control premium is derived by the formula illustrated in Table 1.

Mergerstat Review. The source of control premium statistics most commonly used by business appraisers is the annual *Mergerstat Review*, currently published by Houlihan Lokey Howard & Zukin of Los Angeles. *Mergerstat* compiles data on publicly announced mergers, acquisitions, and divestitures involving operating entities, where the transfer involves at least 10% of the subject company's equity, the purchase price is at least \$1 million, and where at least one of the parties to the transaction is a U.S. entity. The current edition, *Mergerstat Review 1999*, represents the 17th annual hardcover volume.

Mergerstat Review defines the control premium as the difference between the public market price of a minority interest in the stock of a subsequently acquired company five days prior to a buyout announcement and the actual buyout price. According to *Mergerstat Review 1999*, the all-industry average and median control premiums paid in transactions involving 512 reporting companies in 1998 were 40.7% and 30.1%, respectively. The range of average annual premiums from 1974 to 1998 is from a low of 35.1% in 1991 to high of 50.1% in 1974. *Mergerstat Review* also provides average control premiums by industry group and by sector as well as premiums for individual transactions, but it does not provide any detailed or higher level statistical analysis of the observed premiums in any given year.

Table 2 summarizes average and median annual control premiums compiled by *Mergerstat*

TABLE 2
Mergerstat Review 1999
Analysis of Control Premium Data

Year	# of Trans	Historical Control Premiums		Implied Minority Interest Discounts	
		Avg	Mediana	Avg	Mediana
1989	303	41.0%	29.0%	29%	22%
1990	175	42.0%	32.0%	30%	24%
1991	137	35.1%	29.4%	26%	23%
1992	142	41.0%	34.7%	29%	26%
1993	173	38.7%	33.0%	28%	25%
1994	260	41.9%	35.0%	30%	26%
1995	324	44.7%	29.2%	31%	23%
1996	381	36.6%	27.3%	27%	21%
1997	487	35.7%	27.5%	26%	22%
1998	512	40.7%	30.1%	29%	23%

Review for transactions occurring in 1989-1998 along with the minority interest discounts implied by the corresponding control premiums.

Applying Control Premiums and Minority Interest Discounts. The information contained in *Mergerstat Review* provides appraisers with guidance regarding the general level of control premiums and the corresponding minority interest discounts. A number of issues arise, however, in applying the averages or medians in preparing individual valuations.

Wide Variations in Observed Premiums. The premiums reported in *Mergerstat Review 1999* for individual control transactions were analyzed. *Mergerstat* provided details on individual transactions for which both the buyout price and the subject's recent net income had been disclosed. There are 560 transactions involving at least 50.1% equity interests for which *Mergerstat* reported a control premium or discount. Seventy-eight (78) acquisitions occurred at discounts to the market price and 482 occurred at premiums. For all 560 transactions, the

TABLE 3
Mergerstat Review 1999 - Statistical Summary of Premium Data

	All Premiums & Discounts		All Premiums 0% and 100%
	560	482	453
Number of Transactions	560	482	453
Arithmetic Mean	32.2%	40.4%	32.6%
Median	25.2%	30.3%	28.7%
Minimum	-84.5%	0.0%	0.0%
Maximum	423.5%	423.5%	100.0%
Standard Deviation	45.6%	43.4%	22.9%

median premium was 25.2% and the arithmetic mean was 32.2%. There was a wide variation in the observed premiums with a low of -64.5% and a high of 423.5%. The standard deviation was 45.6%. Table 3 provides a statistical summary of the premium data. Table 4 summarizes the distribution of the observed premiums and discounts.

With regard to the negative control premiums, one likely explanation is that a subject company may already be perceived to be "in play" and the buy-out price may already be captured in the market price of the stock.

With such a wide variation of observed control premiums, an average or median can hardly be considered to be definitive, and the appraiser must show care and informed judgement in applying discounts and premiums derived from the averages to a specific company.

TABLE 4
Mergerstat Review 1999
Distribution of Control Premiums

Range of Premiums	# of Observations
All Transactions	560
Discounts	78
All Premiums	482
Premiums of 0% to 15%	123
Premiums of 15% to 30%	113
Premiums of 30% to 45%	97
Premiums of 45% to 60%	57
Premiums of 60% to 75%	37
Premiums of 75% through 100%	26
Premiums of 0% through 100%	453
Premiums over 100%	29

Economics Underlying Control Premiums. *Mergerstat Review* measures and reports observed control premiums but does not explain them. There appear to be several factors driving the payment of a premium and determining the magnitude of the premium paid in a merger or acquisition.

Exchange trading on any given day usually involves only a small percentage of a public company's outstanding stock. Basic economic theory would indicate that a higher price would have to be offered to increase the supply of shares willingly offered to a buyer. That is, not all sharehold-

ers are willing to sell at the current market price; therefore, a premium must be offered to induce a sufficient number of shares to be tendered to allow a merger to be completed.

All else held constant, some buyers may be willing to pay a premium for a company simply for the basic perquisites of control: hiring and firing management, determining operating policies, setting dividend policy, determining debt levels, etc.

A buyer may identify potential efficiencies, such as lower executive compensation, reduced overhead, changes in marketing and production strategies, that lead the buyer to forecast higher post-acquisition profits, leading to a willingness to pay a premium over the public market price for a minority interest.

Finally, a buyer may perceive strategic benefits or synergistic effects of the acquisition where the subject company is merged into another concern such that the combined entity is expected to be noticeably more profitable than the stand alone businesses. Such benefits might include acquisition of a complementary product line, market territory, customer base, or technology base.

Given that these factors govern the control premiums paid in actual transactions, they must also be considered in preparing a valuation under the controlling interest or total enterprise premise of value.

Subject Closely Held Companies. Determining the appropriate control premium in valuing a specific closely held business should involve consideration of a number of questions:

- Does the subject company have an attractive franchise in the marketplace?
- Is the subject company of sufficient size to interest an aggressive bidder?
- Does the subject company have other attractive features?
- Is the subject industry consolidating?
- Are there known prospective synergistic or strategic buyers?
- Does the base valuation already reflect adjustments to the expense or revenue

streams which presume control (such as overhead cuts, normalization of management compensation, or sale/distribution of non-operating assets) such that elements of a control premium are already built in the preliminary value?

It is up to the appraiser to analyze the subject company in the context of a change of control transaction and then determine an appropriate magnitude of control premium. In some cases a minimal control premium relative to the marketable minority level of value may be indicated while in others a substantial premium may appear in order. ♦

Well-Reasoned, Persuasive Appraisal Report

(Continued from Page 1)

in its conclusion. Although the petitioner (in this case, the Estate) may furnish an expert, that expert's testimony and report may not provide the Court with information necessary to help it make an informed decision. As the Court noted, "The record must be built by the parties to include all data that is necessary to determine the value of property in dispute."

Importance Of A Thorough, Well-Documented Report. The respondent's report was not mentioned; therefore, it cannot be commented on here. Yet the Court pointed out what it perceived to be a number of problems with the report submitted by the expert for the Estate. The Estate's expert was an Accredited Senior Appraiser with the American Society of Appraisers and had been in the business valuation field for fourteen years and was recognized by the Court as a qualified expert. However, credentials and experience alone did not suffice in this case.

The Court did not believe the Estate demonstrated the merits of its claims by at least a preponderance of the evidence. Since the Court thought that the written report of the Estate's expert had fallen short, it indicated that it was left

to decide the case against the taxpayer (or the party with the burden of proof). Some of the criticisms noted by the Tax Court included:

- The Estate's expert repeatedly relied upon unconfirmed representations by management. The Estate owned Class A shares which represented about 19% of the total shares outstanding. The Estate's expert was criticized for relying upon management's representation that there were no differences in the features of the Class A and Class B shares without reviewing the company's certificate of incorporation or other corporate documents.

Appraisers frequently have to rely upon management for key information regarding an appraisal; however it is incumbent on the appraiser to make judgments about the credibility of management and its knowledge of the facts in question.

- The Estate's expert relied on faulty assumptions to arrive at the value. According to the record, the analysis of public companies similar in nature to the subject company were not described sufficiently to permit the Court to properly determine whether the group was appropriate. In addition, the written report did not explain the reasons for the choice of guide-

line companies. This was problematic to the Court because a number of the companies selected had revenues that were more than double the subject's revenues. In addition, the written report apparently did not provide the Court with what it deemed sufficient information to verify that the companies were similar in age, business, product line and gross receipts. The Estate's expert also assumed that a specific shareholder owned the largest block of the subject company's stock because it was in the family, when in fact, the Estate owned the largest block. The Court cited the well-settled rule of family attribution in this determination and was not persuaded by a number of arguments regarding a voting proxy.

It is incumbent upon appraisers not to rely on assumptions. Each report should be well-documented and the supporting material should be clear. Also, every appraisal report should contain enough detail to allow a reader to make an informed, independent decision.

- The Estate's expert neglected to analyze key indications of value by not explicitly making a determination of value using all three valuation methods including the market, income and asset value. Earnings capitalization (market approach) and dis-

counted cash flows (income approach) were determined and considered. While the expert indicated that net asset value had been considered, an explicit determination of net asset value was not made, and an adequate explanation of why the net asset value was eliminated was not presented in the report.

There is some question of the Court's understanding of the net asset value method, yet it is incumbent on appraisers to produce a valuation report that is thorough in its discussion of valuation methodologies.

- A final point was that the Estate's expert erroneously assumed that sales between two shareholders were at arm's length. This real world transaction was interpreted by the Court as more of a transaction that meets the hypothetical requirements of fair market value rather than a real world transaction that provides evidence of fair market value.

The important point is that an appraiser must assess a transaction and determine whether it provides valid information about the fair market value of the stock at the valuation date.

What is clear from *Kaufman* is that all written valuation reports be well-reasoned, well-documented and lead to reasonable valuation conclusions. ♦

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5424 Arabian Dr. NW

Albuquerque, NM 87120-2247