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Editor's Column - Quantifying Discounts for 50% Interests

Paul R. Hyde, EA, MCBA, ASA, BVAL

Lots of articles and texts deal with the subject of minority interest discounts (more correctly referred to as discounts for non-controlling interests); however, little has been written about appraising a fifty percent interest (assuming a non-super majority state) in either an operating company or in some type of holding company entity. A good start on this topic was supplied by Shawn M. Hyde, CBA in his article, "Dealing with a 50% Interest: Should an Adjustment for Control Apply?" Published in *Business Appraisal Practice*, Winter 2004-2005, p. 47 – 53. I suggest that the reader refer to this article for background and comments on the topic.

The purpose of this article is to suggest a specific methodology for dealing with a fifty percent interest. Recently, our office encountered a holding company (ABC Holding Co., LLC) owning an income producing real property asset that was leased to another related operating company (XYZ Operating Co, Inc.) owned by the same two individuals. ABC Holding Co., LLC had an executed operating agreement clearly spelling out the rights and responsibilities of each fifty percent partner, restrictions on transfer, etc. Our assignment was to value a 50% interest in the holding company. For purposes of this example, we will assume that the underlying commercial property (Property) was appraised at two million dollars as of our appraisal effective date. The property had been for many years and currently was leased to XYZ Operating Co., Inc. at an above market rent.

What discounts, if any, should apply to a fifty percent interest in ABC Holding Co., LLC owning the underlying property with a good, long-term income stream was the question that needed to be addressed. For simplicity, we will assume that we are going to use only the adjusted book value method in our business appraisal of this entity.

I believe that both a discount for lack of control and a discount for lack of marketability apply when using the adjusted book value method to value a fifty percent interest in a holding company. The problem is to identify the magnitude of each discount. Clearly the discounts should be less than if appraising a minority interest less than fifty percent. But, how much less should they be?

In this example, we started by developing and selecting a baseline discount for lack of control. Using Mergerstat Review data, the implied discounts for lack of control (DLOC) over the last 15 years have varied between approximately 21% and 38%. The median implied DLOC over the last fifteen years was 25%. However, most appraisers agree that the Mergerstat Review data includes the results of synergies. Thus, we can conclude that the baseline discount must be less than 25%. Trugman Valuation Associates, Inc. performed a study of Mergerstat data from 1998 to 2001 taking into consideration both negative premiums and positive premiums paid. As a result of the survey, they determined that the median premiums were between 17% and 25%.¹

¹ Gary Trugman, *Understanding Business Valuation: A Practical Guide to Valuing Small to Medium-Sized Businesses*. Second Edition. (New York: American Institute of Certified Public Accountants, Inc., 2002), p. 369-370.

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Closed end funds are also often used to help support a baseline discount for lack of control. Typical discounts for closed end funds range between five and ten percent. A noncontrolling interest in a private company logically should have a higher discount for lack of control than a closed end fund. Therefore, the baseline discount should be higher than five to ten percent, but less than seventeen to twenty-five percent. A baseline discount of fifteen percent would be selected if we were valuing a true minority interest. However, since we are valuing a fifty percent interest, I believe that this baseline discount should be lower. I suggest that fifty percent of the initial baseline discount be used to account for the fact that we are valuing a fifty percent interest which does not have actual control, but yet has veto power as well. This results in a 7.5% baseline discount for lack of control.

In order to determine a specific discount for lack of control for the subject company, we start with a selected baseline discount and make adjustments, either up or down as warranted, based on a review of the following criteria:

Discount for Lack of Control Factors

Category	Factor	Rating of (-1)	Rating of (0)	Rating of +1
Power	Are voting rights proportionate?	Favor minority	Pro rata to all owners	Favor control
	Is control ownership concentrated?	No	Uncertain	Yes
	Is there minority governance representation?	Yes	For major decisions	No
	Is a change of control likely?	Yes	Uncertain	No
	Does the interest have swing or some control value?	Yes	Uncertain or N/A	No
	Are there undue management restrictions?	Yes	Uncertain or N/A	No
	Can the entity agreement be amended easily?	Yes	Maybe (majority in interest)	No
	Can management be changed easily?	Yes	Maybe (majority)	No
	Is there control over accounting?	Yes	Uncertain or N/A	No
	Are there special protective laws/provisions?	Yes	Uncertain or N/A	No
	Are there anti-dilutive / pre-emptive rights?	Yes	Uncertain or N/A	No
	Is the period of lack of control limited?	Short term	Medium term	Long-term
	Economic	Are distributions proportionate	More to minority	Pro rata to all owners
Can management compensation be controlled?		Yes	Uncertain or N/A	No
Is there a probability of cash calls?		No	Uncertain or N/A	Yes
Are there discretionary expenses?		No	Uncertain or N/A	Yes
Are there non-operating assets?		Yes	Uncertain or N/A	No
Is income growing rapidly?		No	Uncertain or N/A	Yes
Is the entity stable?		Yes	Uncertain or N/A	No
Is it in good financial position?		Yes	Uncertain or N/A	No
Are industry conditions favorable?	Yes	Uncertain or N/A	No	

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Is business risk high?	No	Uncertain or N/A	Yes
Is financial risk high?	No	Uncertain or N/A	Yes
Are government regulations pervasive?	No	Uncertain or N/A	Yes
Is there extraordinary litigation exposure?	No	Uncertain or N/A	Yes
Is management of good quality, reputation and integrity?	Yes	Uncertain or N/A	No
... Is it deep?	Yes	Uncertain or N/A	No
... Is it dependent on key people?	No	Uncertain or N/A	Yes
Are owners deeply involved?	Yes	Uncertain or N/A	No
Are there major uninsured risks?	No	Uncertain or N/A	Yes

Source of Chart: Rand M. Curtiss, Developing and Defending Fractional Interest Valuation Premiums and Discounts. (Workbook for course #1007, The Institute of Business Appraisers, Inc., 2003), p. 42.

Each of the factors in the above chart influences the magnitude of the applicable Discount for Lack of Control.

Analysis of Discount for Lack of Control

Category	Factor	Rating	Reason
Power	Are voting rights proportionate?	0	Equal Shares
	Is control ownership concentrated?	-1	No
	Is there minority governance representation?	-1	Yes. each Owner has a say
	Is a change of control likely?	1	No
	Does the interest have swing or some control value?	1	No
	Are there undue management restrictions?	1	No
	Can the entity agreement be amended easily?	-1	Yes
	Can management be changed easily?	1	No
	Is there control over accounting?	-1	Yes. one owner is in charge per Agreement
	Are there special protective laws/provisions?	0	Not Applicable
Economic	Are there anti-dilutive / pre-emptive rights?	0	Not Applicable
	Is the period of lack of control limited?	1	No
	Are distributions proportionate	0	Pro rata to each owner
	Can management compensation be controlled?	-1	Yes
	Is there a probability of cash calls?	0	Not Applicable
	Are there discretionary expenses?	-1	There do not appear to be any
	Are there non-operating assets?	0	Not Applicable
	Is income growing rapidly?	-1	No
	Is the entity stable?	-1	Yes
	Is it in good financial position?	-1	Yes

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	Are industry conditions favorable?	-1	Yes
	Are merger/acquisition trends favorable?	0	Not applicable
	Is business risk high?	-1	No
	Is financial risk high?	-1	No
	Are government regulations pervasive?	-1	No
	Is there extraordinary litigation exposure?	-1	No
	Is management of good quality, reputation and integrity?	-1	Yes
	...Is it deep?	0	Not applicable
	...Is it dependent on key people?	0	Not applicable
	Are owners deeply involved?	-1	Yes
	Are there major uninsured risks?	-1	No
Summary	Sum of the Ratings	-12	The sum of the -1 / 0 / +1 ratings above
	Number of Factors Rated	31	The number of factors rated above
	Net Factors	19	The sum of the preceding two numbers
	Net Factors / Factors Rated	61%	The quotient of the preceding two numbers
	Baseline Discount	7.5%	As described in the report text
Conclusion	Subject Discount	4.6%	The product of the preceding two numbers
	Subject Discount Rounded	5.0%	

The following chart illustrates the application of the rating system listed above in order to select the specific discount for lack of control applicable to this interest. Each rating point is accompanied by the reason or comment as to why it was selected.

The summary section of this chart takes the results of the factors and adjusts the baseline discount of 7.5% up or down depending on the result of the analysis of the factors. In this case, more factors were indicative of a need for a decrease in the discount thus, the Discount for Lack of Control selected for use where applicable in the valuation of ABC Holding Co., LLC is 5%.

Next, we examine and discuss the numerous studies available relating to the discount for lack of marketability (DLOM). Much of this has been omitted due to space limitations and the fact that most business appraisers are very familiar with these studies. I suggest that you discuss them at length in your reports. In summary, according to Gary Trugman in his book, Understanding Business Valuation, the average marketability discount ranges between 25% and

² Gary Trugman, Understanding Business Valuation: A Practical Guide to Valuing Small to Medium-Sized Businesses. (New York: American Institute of Certified Public Accountants, Inc., 1988), p. 373.

³ Z. Christopher Mercer. Quantifying Marketability Discounts: Developing and Supporting Marketability Discounts in the Appraisal of Closely Held Business Interests. (Memphis, Tenn: Peabody Publishing, LP, 1997), p. 29.

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45%.² Chris Mercer in his book, *Quantifying Marketability Discounts*, states that "marketability discounts can range from very small (in the range of 5% to 10%) to quite large (60% to 80% or more)."³

There are a number of factors to be reviewed in deciding what level of marketability discount is warranted in appraising an interest in a company. The "average" marketability discount is 35%; however, a business that distributes income to its shareholders would be more

SELECTION OF A BASELINE DISCOUNT FOR LACK OF MARKETABILITY (DLOM)		
Proposed Baseline Discounts	Investment Characteristics	Expected Holding Period
20%	Liquid Assets	Likely Short Holding Period
25%	Liquid and Real Estate Assets	Likely Short to Medium Holding Period
30%	Income Producing Real Estate with Strong Cash Distributions	Likely Medium Holding Period
35%	Income Producing Real Estate with Some Cash Distributions	Likely Medium Holding Period
40%	Illiquid Assets with Infrequent, Small Cash Distributions	Likely Long Holding Period
45%	Illiquid Assets with No Cash Distributions Expected	Likely Very Long Holding Period

desirable than a business with no income distributions at all. Another factor that must be considered is the expected holding period. Typically, the longer the expected holding period, the larger the applicable discount. We use the following chart to select the applicable baseline discount when valuing a true minority interest.⁴

For the valuation of a true minority interest in a company that owns income producing real estate that is distributing its income to its shareholders, the appropriate baseline discount based on this chart would be 30%. However, the subject of this appraisal is a fifty percent interest in a company that is distributing its income to its shareholders. A fifty percent interest is a more desirable investment than any other smaller percentage. Therefore, the selected discount for lack of marketability should be smaller than that selected for other "true" minority interests. There is no empirical evidence stating what the difference should be. It is up to the appraiser to use his judgment to decide what is reasonable. Again, I propose that a fifty percent downward adjustment from the 30% baseline discount be made based on the circumstances in this case, resulting in a selected baseline discount of 15% for valuing a fifty percent interest in

⁴ Hyde, Paul R. "Suggestions for the Selection of a Baseline Marketability Discount for Holding Companies" *Business Appraisal Practice* published by The Institute of Business Appraisers, Inc., Winter 2004-2005 Issue, p. 2 - 5.

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Discount for Lack of Marketability Factors

Category	Factor	Rating of (-1)	Rating of (0)	Rating of +1
Income	Are cash distributions material?	Yes	Income taxes only	Control discretion
	... Certain?	Yes	Uncertain or N/A	Control discretion
	... Frequent?	Yes	Uncertain or N/A	Control discretion
Appreciation	Is the entity diversified?	Yes	Uncertain or N/A	No
	Is the economic risk high?	No	Uncertain or N/A	Yes
	... Interest rate risk (considering both assets and liabilities)?	No	Uncertain or N/A	Yes
	... Stock market/asset price risk?	No	Uncertain or N/A	Yes
	... Business risk?	No	Uncertain or N/A	Yes
	... Financial risk?	No	Uncertain or N/A	Yes
	Are unrealized tax liabilities large?	No	Uncertain or N/A	Yes
	Are growth prospects good?	Yes	Uncertain or N/A	No
Liquidity	Are there rights to liquidation?	Yes	Uncertain or N/A	No
	... Withdrawal/return of capital?	Yes	Uncertain or N/A	No
	... Assignee admission?	Yes	Uncertain or N/A	No
	Have there been sales of interests?	Yes	Uncertain or N/A	No
	Are there transfer restrictions?	No	Uncertain or N/A	Yes
	Are there insider-trading restrictions?	No	Uncertain or N/A	Yes
	Is there a right of first refusal?	No	Uncertain or N/A	Yes
	Is there an active secondary market?	Yes	Uncertain or N/A	No
	Is the holding period long?	No	Uncertain or N/A	Yes
	Is there a clear exit strategy?	Yes	Uncertain or N/A	No
	Are many potential buyers present?	Yes	Uncertain or N/A	No
	Is there a buy-sell agreement?	Yes	Uncertain or N/A	No
	Is there put/call protection?	Yes	Uncertain or N/A	No
	Is there a blockage effect?	No	Uncertain or N/A	Yes
	Financial	Is there bankruptcy risk?	No	Uncertain or N/A
Are current liquid assets material?		Yes	Uncertain or N/A	No
Are capital calls mandatory and probable?		No	Uncertain or N/A	Yes
Is there unused debt capacity?		Yes	Uncertain or N/A	No
Are there outside financing sources?		Yes	Uncertain or N/A	No
Is cash flow strong?		Yes	Uncertain or N/A	No
... stable?		Yes	Uncertain or N/A	No
Can the entity change easily?		Yes	Uncertain or N/A	No
Power	Is information available / reliable?	Yes	Uncertain or N/A	No
	Are owners harmonious?	Yes	Uncertain or N/A	No

Each of the factors in the above chart influences the magnitude of the applicable Discount for Lack of Marketability (DLOM).

The following chart illustrates the selection of the applicable Discount for Lack of Marketability for ABC Holding Co., LLC:

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Analysis of Discount for Lack of Marketability

Category	Factor	Rating	Reason	
Income	Are cash distributions material?	-1	Yes	
	... Certain?	-1	Yes	
	... Frequent?	-1	Yes	
Appreciation	Is the entity diversified?	0	Not Applicable	
	Is the economic risk high?	-1	No	
	... Interest rate risk (considering both assets and liabilities)?	1	Some interest rate risk	
	... Stock market/asset price risk?	0	Not Applicable	
	... Business risk?	-1	No	
	... Financial risk?	-1	No	
	Are unrealized tax liabilities large?	-1	No	
Liquidity	Are growth prospects good?	-1	Yes	
	Are there rights to liquidation?	0	Normal	
	... Withdrawal/return of capital?	1	No	
	... Assignee admission?	0	Yes, but requires written consent	
	Have there been sales of interests?	1	No	
	Are there transfer restrictions?	1	Yes	
	Are there insider-trading restrictions?	0	Not Applicable	
	Is there a right of first refusal?	-1	Yes	
	Is there an active secondary market?	1	No	
	Is the holding period long?	0	Medium Holding Period	
	Is there a clear exit strategy?	0	Not Applicable	
	Are many potential buyers present?	1	No	
	Is there a buy-sell agreement?	-1	Yes	
	Is there put/call protection?	0	Not Applicable	
	Is there a blockage effect?	0	Not Applicable	
	Financial	Is there bankruptcy risk?	-1	Not likely
		Are current liquid assets material?	0	Not Applicable
Are capital calls mandatory and probable?		-1	No	
Is there unused debt capacity?		-1	Yes	
Are there outside financing sources?		-1	Yes	
Is cash flow strong?		-1	Yes	
... stable?		-1	Yes	
Can the entity change easily?		-1	Yes	
Power	Is information available / reliable?	-1	Yes	
	Are owners harmonious?	-1	Yes	
Summary	Sum of the Ratings	-13	The sum of the -1/0/=1 ratings above	
	Number of Factors Rated	35	The number of factors rated above	
	Net Factors	22	The sum of the preceding two numbers	
	Net Factors / Factors Rated	63%	The quotient of the preceding two numbers	
	Baseline Discount	15.0%	As described in the report text	
Conclusion	Subject Discount	9.4%	The product of the preceding two numbers	
	Subject Discount - Rounded	9.0%		

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The selected Discount for Lack of Marketability for ABC Holding Co., LLC is 9%.

Using the selected discounts, the following chart illustrates the calculation of the estimate of value for a fifty percent interest in ABC Holding Co., LLC assuming the only asset held in the company is the property valued at \$2 million:

RECONCILIATION - Fifty Percent (50%) Interest				
Valuation Method:	Indicated Value	Discount/ Premium Rate	Confi- dence Level	Weighted Estimate
<u>Asset Approach</u>				
Adjusted Book Value Method:	2,000,000			
Less: Discount for Lack of Control	(100,000)	5.0%		
Non-Controlling Value	1,900,000			
Less: Discount for Lack of Marketability	(171,000)	9.0%		
Indicated Value	1,729,000		100%	1,729,000
VALUE CONCLUSION - 100% Discounted Interest in Company				1,729,000
Times: Percentage Valued				50%
VALUE CONCLUSION - 50% Interest in ABC Holding Co., LLC				864,500

Only one method was used for simplicity in the valuation of a 50.0% interest in ABC Holding Co., LLC. The combined discounts for lack of control and lack of marketability are 13.6%.

Each appraisal assignment is unique. The appraiser must make the determination in each case as to the magnitude of any applicable adjustments. Those I have used in this example are my selection based on the facts and circumstances of this specific company (many of which are not included for sake of brevity). Another company will likely require different rates and adjustments. The methodology used is what I suggest be considered applicable to the valuation of fifty percent interests.

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