



**The Institute of
Chartered Accountants
in Australia**

BV6 - Discounts and premiums in the context of the valuation of SME's and interests therein

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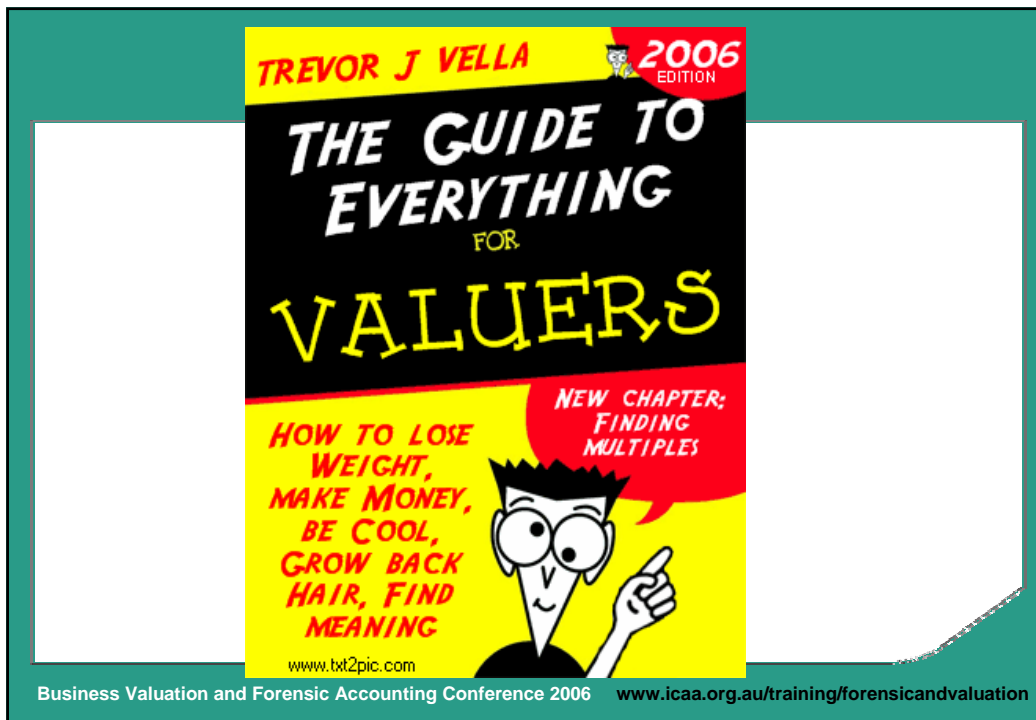
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The Chartered Accountants National Business Valuation and Forensic Accounting Conference

Discounts and Premiums in the context of SME's and interests therein



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CREDIBILITY

- What do I have?
- What do I want?
- How are they different?
- How do I get from one to the other? - premiums and discounts

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VALUATION OF WHOLE SME'S

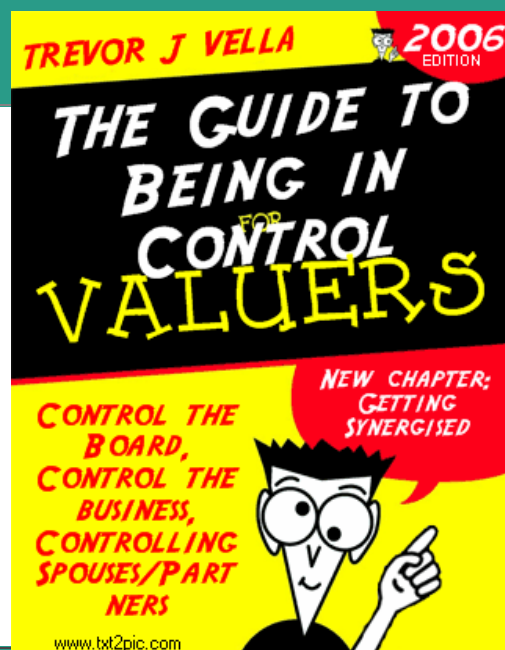
- Standard of value = fair market value / "fair value"
(accounting standards)
- Generally a market exists
- Use of multiples common

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PREMIUM FOR CONTROL

“the additional value inherent in the control interest that reflect the power of control, as contrasted to a minority interest”. [IVSC]

- Vs **“Acquisition premium”** = excess of price paid over ruling price pre announcement



ADVANTAGES OF CONTROL?

- Control the composition of the Board and management, and their compensation
- Determine and control the implementation of future strategies, including acquisition and disposal of assets
- Determine with whom the company will deal – suppliers, customers, etc
- Declare dividends

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WHAT DO “ACQUISITION” / “CONTROL” PREMIUMS REPRESENT?

- Post-acquisition synergies
- Not every listed company is routinely taken over
- Some takeovers are “failures”
- Variation in control premiums paid is enormous

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Source: Bloomberg

SUMMARY OF CONTROL PREMIUM AVERAGES

Financial Year	Financial Year	No. of financial years	Including Negatives		Excluding Negatives	
			Average	Median	Average	Median
			%	%	%	%
2,005	2,006	1	29	25	41	32
2,004	2,006	2	21	17	28	21
2,003	2,006	3	20	16	28	18
2,002	2,006	4	19	16	27	18
2,001	2,006	5	21	16	28	20
2,000	2,006	6	21	16	28	20
1,999	2,006	7	20	16	27	20
1,998	2,006	8	20	17	27	20

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WHAT DO “ACQUISITION” / “CONTROL” PREMIUMS REPRESENT?

- Company underperforming
- Studies may ignore “negative” premiums
- Information is not available to the market

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DO LISTED COMPANY MULTIPLES IN FACT REFLECT FULL CONTROL VALUE?

- Does controlling shareholder demand a lower rate of return than the minority investor?
- Does the “control premium” relate to the buyer’s perception of increased prospective earnings and have little to do with “control” per se?

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COMPLICATIONS WITH CONTROL PREMIUMS AND CAPITAL STRUCTURE

		Alpha	Alpha	Beta	Beta
Earnings before interest and tax	A	100	100	100	100
Interest at 8%		16		40	
		84		60	
Tax		25		18	
Earnings		59		42	
Multiple		9		9	
Equity value		531		378	
Debt		200		500	
Enterprise value	B	731	731	878	
Implied EBIT multiple	B/A		7.31		7.31
Implied equity control premium		28.57%			
Enterprise value					731
Implied enterprise control premium		19.25%		10.58%	
Debt					500
Equity value					231

DISCOUNTS IN VALUING WHOLE SME'S

Example 3: Virtuous Valuers have effected a valuation of Joe' corner store as follows:

Earnings (profit after tax and interest)after fair salary			80,000
Multiple			
Average of Woolworths, Coles, various others		8	
Premium for control	30%	2.4	
		10.4	
Discounts:			
Size and unlisted	30%		
Dependence on key personnel (Joe)	20%		
Other factors	30%	8	
Multiple applied			2.1
Value of equity			\$168,000

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ISSUES IN VALUING WHOLE SME'S

- Is the SME “comparable” to a listed company?
- Marketability discounts for 100% interests? – discount compared to what?
- Premium for control = [some things previously discussed] less marketability discount?

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VALUATION OF INTERESTS IN SME'S: WHAT IS DEGREE OF CONTROL? IMPORTANCE OF CONTEXT

- Controlling interests vs minority interests – simplistic?

Company ->	A	B	C	D	E	F	G
Shareholders							
V	99	70	55	50	45	33	20
W	1	30	40	50	45	33	20
X			5		5	33	20
Y							20
Z							20

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VALUATION OF (“COMPLETELY”) CONTROLLING INTERESTS

- A discount should be applied?
- A premium (different from normal “premium for control” – because added to pro rata) should be applied?

It depends on the circumstances!

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VALUATION OF OTHER INTERESTS IN SME'S: STANDARD OF VALUE

- Fair market value
- Fair value = “equitable”
- Value to the owner

Example 4: Lottie Lonely holds a “dividend access” share (no voting rights or rights on winding up, dividends discretionary, redeemable at \$1 at the option of the company) in Blueblood Holdings Pty limited which is controlled by her father in law. Dividends have been paid at the rate of \$20,000 per annum since Lottie’s child, Lucretia, was born. Lottie is now separated from her former husband. She is reasonably confident that the dividends will continue for a further 10 years till Lucretia turns 18. What is the “value” of the shares?

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DISCOUNTED RATEABLE VALUE APPROACH

Earnings	A	120,000		120,000
Multiple	B	4		6
Sum of freely tradeable non-controlling values	A * B	480,000		720,000
Control premium	c	25%		25%
		600,000		900,000
Adjustment factors	Para 9.4	0		33.3.%
Company value		600,000		600,000
Pro rata value of valued parcel	V_p	200,000		200,000
Minority discount	m	20%		20%
	$V_m = V_p (1-m)$	160,000		160,000
Marketability discount	Para 10	30%		30%
Value of interest		\$112,000		\$112,000
Minority discount	$m = 1 - (1 / (c+1))$	20%		20%
Control premium	$c = (1 / (1-m)) - 1$	25%		25%

DISCOUNTED RATEABLE VALUE APPROACH

- Must be discount to something
- “levels of value” approach
 - - full control + synergy vs
 - - control value vs
 - - freely tradeable minority value vs
 - - illiquid minority value

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MARKETABILITY DISCOUNTS IN THE CONTEXT OF VALUATION OF NON – CONTROLLING MINORITY INTERESTS

- US Studies
 - Two types of analyses
 - > Pricing of “letter stocks”
 - > Pre-IPO transactions
 - Discounts of 40% to 63%?
- John Kania - “the discount for lack of marketability is around 14%”

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MARKETABILITY DISCOUNTS IN THE CONTEXT OF VALUATION OF NON – CONTROLLING MINORITY INTERESTS

- Trout:
 - LEAPS
 - DLOM of 24%
- Seaman:
 - LEAPS
 - DLOM at least 25%
- Glover:
 - Most popular discount level is 25%

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RATIONALE FOR MARKETABILITY DISCOUNT

- *“The reason a marketability discount exists at all is because a buyer of a security that lacks marketability (such as stock in a privately held company) is subject to a potential loss of equity during the time period when the stock cannot be sold.”Trout*

But why should an investor be able to predict a loss and yet be able to sell to some other investor who “does not see it coming”?

- Hatch – “efficient marketeers” vs market timers

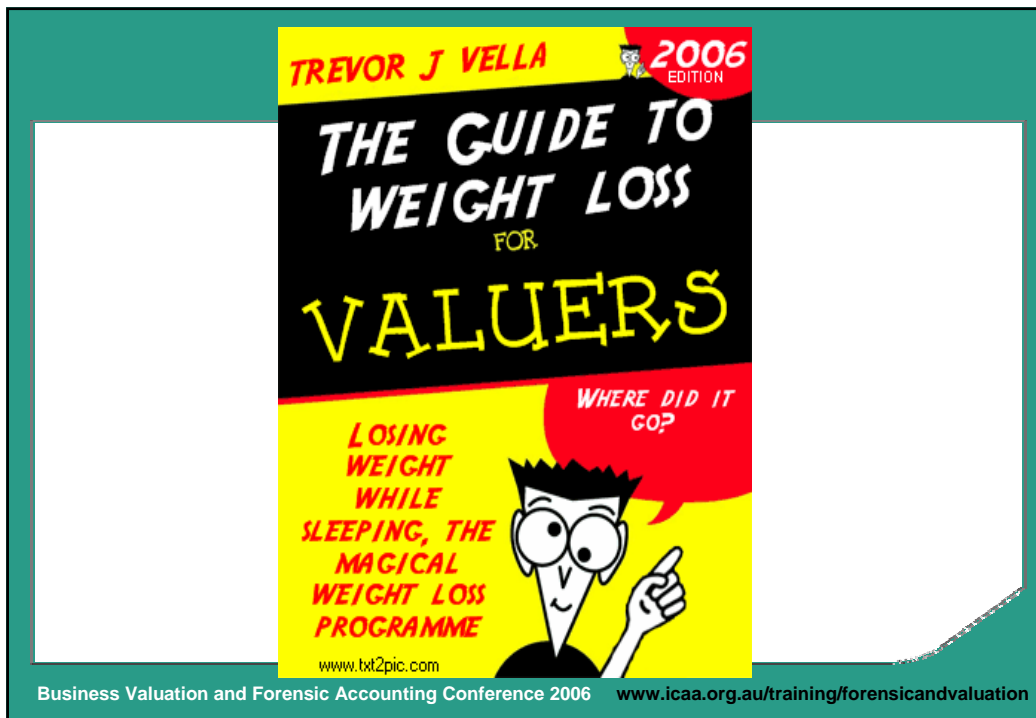
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IPEVCV GUIDELINES : MARKETABILITY

“A discount in the range of 10% to 30% (in steps of 5%) is generally used in practice, depending upon the particular circumstances”

- *“where a Realisation event is not foreseeable at all, perhaps because the Fund holds a minority equity stake and the majority shareholders are totally opposed to a Realisation, methodologies which involve an assessment of the value of the business as a whole may not be appropriate.”*

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PROBLEMS WITH DISCOUNTED RATEABLE VALUE APPROACH ?

Example 6 [Ignores tax] Three years ago Arthur Penhaligon set up a company with his two brothers, Lancelot and Percy. They each contributed \$200,000 as share capital. The company borrowed \$700,000 and bought a property for \$1.3 million which is now worth \$1.9 million. Arthur is rather pleased with himself telling his wife Guinevere that their investment has doubled in value. Sadly, Guinevere does not seem as happy as she might be. She tells Arthur she is leaving him for Percy. Arthur duly sees his solicitor who refers him to Merlin & Co, Business Valuers, to obtain a valuation of his shares. Merlin values the shares at \$160,000, calculated as the pro rata value of \$400,000 less a 60% minority and marketability discount. Arthur is a little puzzled that his investment is worth less than he outlaid, while the financial position of the investee company has dramatically improved.

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PROBLEMS WITH DISCOUNTED RATEABLE VALUE APPROACH ?

- He asks Merlin what his shares were worth on the day he bought them, to which Merlin replies they were worth \$80,000 (ie \$200,000 subscribed less 60%). Arthur asks whether it would have made any difference if he had lent the money to the company instead of subscribing for shares to which Merlin replies that he would value the loan now at \$200,000 and the shares at \$80,000 [(1-60%) of one third of the net worth of \$600,000], a total of \$280,000. Arthur is dismayed to think that he and his brothers have made such an unfortunate investment. What they thought was financial perspicacity was merely an illusion, although Arthur has a vague concern about what he perceives to be Merlin's seemingly magical ability to make assets disappear

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ALTERNATIVE VALUATION METHODOLOGIES FOR MINORITY INTERESTS IN SME'S

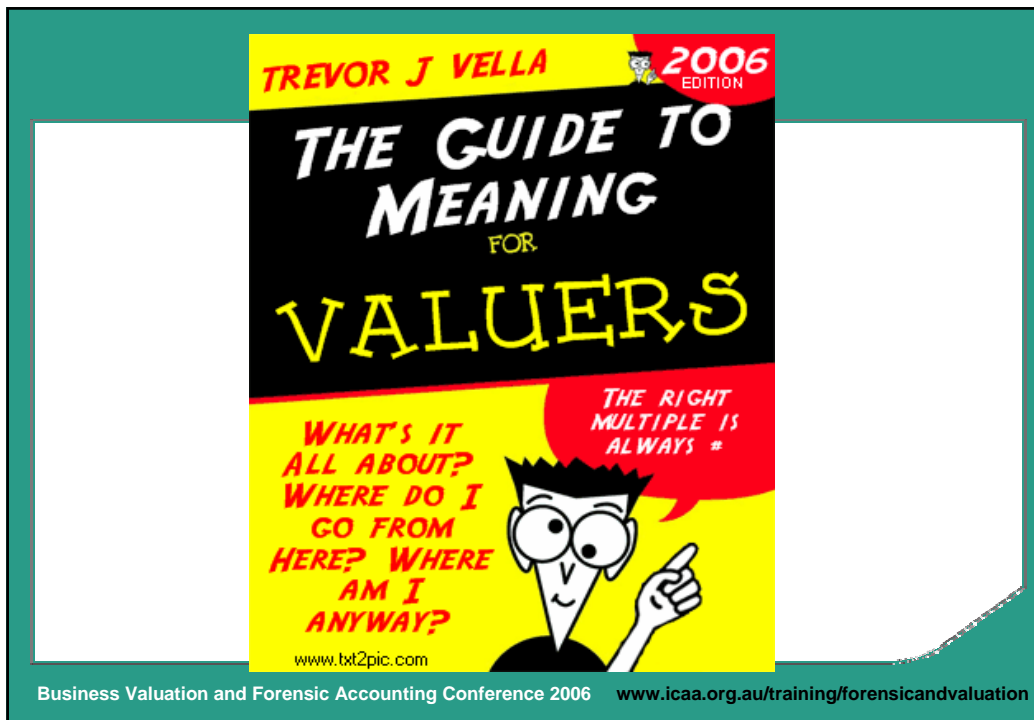
- Discounting of future dividend streams
- By reference to comparable dealings
- Really only one approach:
 - what are the likely foreseeable cash flows?

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PROSPECTIVE CASH FLOWS APPROACH

- Dividends
- The proceeds of a sale of the shares:
 - to an existing shareholder
 - to a non-shareholder acquiring only the holding of the shareholder
 - on the acquisition of the whole company, or a controlling interest (including the subject shares), by a third party
- Proceeds of winding up

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CONCLUDING REMARKS

- Is the discounted rateable approach appropriate?
- If so, process is: What do I have? What do I want? How are they different? How do I get from one to the other?
- D&P's must be based on comparison with something
- Must understand what causes apparent premiums and discounts - observed market data on premiums and discounts is the result of pricing – not the other way round
- Must understand nature of what is being valued and purpose of valuation

DISCOUNTS AND PREMIUMS IN THE CONTEXT OF VALUATION OF SMALL AND MEDIUM BUSINESSES AND INTERESTS THEREIN

Presentation by Trevor Vella at the Business Valuation / Forensic Accounting Conference 14 - 15 September 2006

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1 INTRODUCTION

- 1.1 The credibility of any valuation is enhanced if it is based, in a logical and supportable way, upon objectively verifiable data. The best evidence of value of an asset is the ruling market price of an identical commodity in a deep and well informed market. There is not such a market for SME's; still less for interests therein. A valuer in that circumstance will commonly look to markets in which "comparable" (at least to some degree) assets are traded, to glean valuation "benchmarks" – earnings multiples, dividend yields, interest rates etc. as a basis of comparison, making due allowance for factors which make the assets non-comparable. The process has been described by one author¹ as: What do I have? What do I want? How are they different? How do I get from one to the other? The use of "discounts" and "premiums" is part of this process.
- 1.2 There are a multiplicity of discounts and premiums which may be considered by the valuer. Reilly² identifies 23 types of discounts and five premiums in a list of "illustrative" adjustments, although many of these would not arise for consideration on a day to day basis. . The primary focus of this paper is on control premiums/ minority discounts and marketability discounts. These are a source of considerable debate, are subject to considerable subjectivity and can make a very significant difference to the valuation conclusion.
- 1.3 Part A of this paper deals with the application of discounts and premiums in the context of the valuation of whole SME's, and Part B deals with interests therein.

PART A: DISCOUNTS AND PREMIUMS IN THE CONTEXT OF VALUATION OF WHOLE SME'S

2 INTRODUCTION TO PART A

Standard of value

- 2.1 In any valuation exercise one needs to define what is meant by "value". In the context of the valuation of whole business entities the appropriate standard generally adopted is what is often called "**fair market value**", but sometimes "**market value**" (for income tax purposes) or, in terms of international Accounting Standards, "**fair value**": see the discussion at paragraph 7.3 below. Let us use the "market value" definition taken from the International Valuation Standards Committee ("**IVSC**")³:

1 Robert F Reilly, *Nonsystematic Business Security Valuation Discounts and Premiums*, Business Valuation Digest , Vol 12, Issue 1, February 2006, at pp 11-22

2 Ibid, p 20

3 International Valuation Standards Committee definition of "market value": see International Valuation Standard 1, para 3.1

“the estimated amount for which property should exchange at the date of valuation between a willing buyer and a willing seller in an arms' length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.”

2.2 There is generally no question:

- (i) that “fair market value”/“market value”/“fair value” (in the accounting standards sense) is the appropriate standard in the context of valuation of whole businesses or entities;
- (ii) that a “market” exists in relation to whole private companies or businesses. But it is not deep nor is it readily observable. In some cases listed companies will acquire private companies and some information is available but it may be incomplete. Such acquisitions form only a small part of the market.

The position is often different in the first respect and almost always different in the second when *interests* in SME's are being valued.

2.3 Valuations of SME's which are profitable trading operations are commonly effected by the application of a multiple to an earnings figure⁴. The multiple may be drawn from “comparable” listed companies or may be developed by the valuer by reference to other market indicators, sometimes by way of a “build up” from a risk free rate with allowance for a market premium and further adjustments to allow for relative risk, possibly, (but rarely, at least as evidenced in reports) applying the capital asset pricing model or a modified form thereof which might involve adjusting for size and company specific risk. If listed multiples are used as a base the issue arises as to:

- (i) whether or not it is appropriate to add a so-called “premium for control”; and
- (ii) whether the multiple, so adjusted by that premium if appropriate, should be reduced (discounted) because of “non-comparability “ factors.

“Premium for control”

2.4 It is generally understood that the share market (ie the stock exchange) reflects prices for small parcels of shares carrying no influence over the day to day running of the underlying business. It is common, but not invariable, that prices paid on a takeover are higher than the pre-announcement price. The difference is commonly referred to as a “**premium for control**” or “**control premium**”, the latter term defined by the IVSC in International Valuation Guidance Note 6: Business Valuation (“**the Guidance Note**”) as:

“The additional value inherent in the control interest that reflect the power of control, as contrasted to a minority interest”.

The term “control interest” is not defined in the Guidance Note. For the sake of completeness at this stage I reproduce the meaning ascribed by the IVSC to the defined terms used in the above definition:

“*Control*: The power to direct the management and policies of the business.”

4 The discounted cash flow approach is relatively rarely used. The net assets basis is more common for investment companies and loss making companies.

"Minority interest: Ownership position less than 50% of the voting interest in a business".

- 2.5 For reasons discussed below, it appears more appropriate to refer to the excess of the price paid in a takeover over the pre-announcement price as an **"acquisition premium"**. [that term is sometimes used to refer to the excess of the price paid over the price including a control premium]. It is submitted that the extent to which, if at all, this premium represents a price paid for mere control is a moot point. However, it is accepted wisdom that, in valuing a company using the "comparable company" approach, one adjusts the multiple to add a "control premium" and makes various other adjustments (generally discounts) for non-comparable features. An alternative approach is to use (without a premium for control) an (adjusted as otherwise appropriate) multiple taken from a contemporaneous takeover of a "comparable" company. Of course, it is particularly difficult in the Australia market to find any company which is closely comparable with the subject being valued, let alone one which has just been taken over.

3 CONTROL PREMIUMS IN THE CONTEXT OF WHOLE SME VALUATIONS

Advantages of control

- 3.1 The usually cited advantages of control are:

- (i) control the composition of the Board and management, and their compensation;
- (ii) determine and control the implementation of future strategies, including acquisition and disposal of assets;
- (iii) determine with whom the company will deal – suppliers, customers, etc; and
- (iv) declare dividends.

A reasonable investor will only pay for some real (in cash terms) advantage(s). It is acknowledged that the significance of non-monetary benefits – power, prestige, etc. – are real to some acquirers but they are difficult, if not impossible, to quantify. It is suggested that valuers would be unlikely to incorporate allowance for such factors in estimating a control premium.

- 3.2 Dividends will normally go to all shareholders so that control thereof is not necessarily an advantage. Why will an acquirer of control otherwise pay for these advantages? There may be three broad reasons:

- (i) the prospect for improved cash flows resulting from better management;
- (ii) the prospect of synergistic benefits through combining of controlled businesses;
- (iii) the prospect of paying to related parties, salaries and other benefits which are in excess of market amounts.

- 3.3 There may be no opportunities for the first and second of these. Even if such opportunities exist the benefits will be shared (at least to some extent in the case of synergistic benefits) with other shareholders. The opportunities for excessive salaries are constrained, albeit subject to practical and cost constraints, by the remedies available under the Corporations Law. These factors must be carefully assessed if the valuer is seeking to make an adjustment in respect of control benefits. Again we ask the question: a premium added to

what? Bear in mind that, if the valuation is based on “normalised earnings” after adding back an excess salary, the incremental value to accrue to the controlling shareholder is only the present value of the share of the excess earnings attributable to the minority interest. If the earnings valued are *after* the excess salary the adjustment is the value of the whole of the excess earnings:

Example 1			
Maintainable earnings after excess salary		800	800
Add back excess salary		200	
		1,000	800
Multiple		5	5
Value of company	On control basis	5,000	4,000
Controlling shareholders interest	70%	3,500	2,800
Value of excess salary to controlling shareholder	200 * 5		1,000
	200 * 30% (minority) * 5	300	
Value of controlling shares		3,800	3,800

Quantum of control premiums

3.4 Having now considered briefly the advantages of control, let us now turn to consider the proposition that a base multiple derived using one or more “comparable” listed companies should be adjusted by the application of a “control premium”. The approximate quantum of that premium is often taken to be in the order of 25% to 35%. Care must be taken to consider carefully what is the significance of such “control premiums”:

- (i) a very significant component of such premiums is typically attributable to perceived post-acquisition synergies between the acquirer and the target. It cannot be assumed that there are always opportunities for such synergies in the public company context. Still less can it be assumed that any prospective buyer of the whole of a private company would necessarily be a synergistic buyer or that it would necessarily pay a price reflecting those synergies, or any share of them. Bear in mind that the concept of “market value” excludes a “special purchaser” who will obtain synergistic benefits unless there are many such prospective buyers in the market⁵;
- (ii) clearly not every listed company is routinely taken over. Most are not. If every listed company on a control basis was worth 30% more than the share price why are not more companies acquired?;
- (iii) at least some takeovers are “failures” with anticipated benefits to shareholders not being realised – there is an overpayment. How should that be allowed for, or doesn't it matter?;
- (iv) the variation in control premiums paid is enormous and leads one to question the significance of any average. The following table shows "deal premiums" for all

5 See eg IVS2 , *Valuation Bases Other than Market Value* , para 3.11 , 6.6

transactions over the 1998 to 2005 financial years. The transactions were selected by including any transaction involving an Australian target or acquirer where pricing information was available. The deal premium is the acquisition price premium over the trading price 20 days before announcement of the deal.

ANALYSIS OF CONTROL PREMIUMS OVER TIME

Source: Bloomberg

Financial Year	Financial Year	No. of financial years	Including Negatives		Excluding Negatives	
			Average	Median	Average	Median
			%	%	%	%
2005	2006	1	29.45	25.00	40.76	32.47
2004	2006	2	21.44	17.30	27.57	20.86
2003	2006	3	20.14	15.62	27.86	17.99
2002	2006	4	19.46	15.59	27.40	18.09
2001	2006	5	20.78	16.20	28.29	19.55
2000	2006	6	20.90	16.46	28.33	20.12
1999	2006	7	19.64	16.36	27.44	20.08
1998	2006	8	20.37	16.57	27.32	19.89

Can it be maintained the “average” control premium can be applied generally? Which average? Note that the premia are calculated as regards equity; there is no consideration of gearing – see paragraph 3.8 below;

- (v) in some cases premiums are paid because of the perception of the buyer that the acquiree company is underperforming, whether because of poor management or some other factor(s). The buyer perceives that it can “revitalise” the company not through synergistic advantages but utilising the company’s own resources. Similar considerations arise where the buyer sees the possibility of breaking up the target or divesting surplus assets or businesses thus reducing the cost of the investment and improving return. If the starting point for the valuation is a multiple based on the prices paid for well managed companies without these opportunities why should a premium be added which reflects them?;
- (vi) published studies of premiums paid may ignore “negative” premiums eg the Mergerstat studies referred to in Pratt⁶. The medians and means are thus overstated. The difference is material – see the figures at paragraph 3.4 (v) above;
- (vii) it may be that the price paid in the deal is determined after extensive analysis of the target which reveals information not available to the market, which information, if made public, would itself have increased the price. The premium is to that extent, not related to control.

⁶ Pratt Reilly & Schweih, *Valuing a Business: The Analysis and Appraisal of Closely Held Companies*, 4th Edn. McGraw Hill, 2000 at pp353-9. See the paper by Pratt in Chapter 17 of the 2003 *Journal of Business Valuation*, particularly at pp 278-9, which talks about the significant reduction in the mean and median US control premia when negative premia are included in the calculations.

3.5 There appears to be strong view that listed company multiples generally reflects full “control” value. That is, that the market capitalisation of a company is the aggregate value of equity and not merely the sum of the “freely tradeable minority” values of all the parcels of shares, so that no control premium should be added. The International Private Equity and Venture Capital Valuation Guidelines⁷, for example, say:

“Whilst there is an argument that the market capitalisation of a quoted company reflects not the value of the company but merely the price at which “small parcels” of shares are exchanged, the presumption in these Guidelines is that market based multiples do correctly reflect the value of the company as a whole.”

3.6 This is an area where considerable contention exists. If there is a “true” premium for control (as opposed to a “synergy” value or better management value) then one must ask why the controlling shareholder demands a lower rate of return than the minority investor. A lower return is implicit in a higher multiple unless the difference arises because of different perceptions of earnings growth. Recall that a price earnings ratio is the inverse of a capitalisation rate:

$$PER = 1 / c$$

And the capitalisation rate is the difference between the return sought by the investor, d, and the growth rate, g.

$$PER = 1 / c = 1 / (d - g)$$

But growth is related to earnings (cash flow), not to the rate of return. There is a strong argument that the “control premium” relates to the buyer’s perception of increased prospective earnings and has little to do with “control” per se, except, of course, that control is needed to enable the buyer to implement the strategies to grow earnings. If existing management are making the best use of the company’s resources then earnings are optimised and all shareholders benefit. Why should one shareholder pay a premium to control a company in this circumstance?

3.7 The implications of these considerations for the valuation of SME's are perhaps obvious. The valuer should consider carefully whether any “premium for control” adjustment is warranted. Importantly one must always bear in mind the two components ‘r’ and ‘g’ in the formula above. In using any listed company multiple as a base the valuer must consider not only whether the required rate of return is the same but also whether the growth prospects are the same.

Complications with control premiums and capital structure

3.8 Another issue may be considered. Control premiums are measured by reference to prices paid for shares - equity. [As an aside, bear in mind that such multiples therefore must be applied to value equity – they cannot be applied in determining the enterprise – debt plus equity - value]. Substantial distortion can arise when applying a premium paid for company X in valuing company Y where the two companies have different capital structures.

Example 1: Alpha and Beta are identical but for their capital structures. Alpha was previously listed and trading at a price earnings multiple of 7 before the announcement of a takeover which has just been completed at a price which reflect a multiple of 9 (an implied equity control premium of 28.6%

		Alpha	Alpha	Beta	Beta
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7 Endorsed by the Australian Venture Capital Association (“AVCAL”)

Discounts & premiums and SME's

Earnings before interest and tax	A	100	100	100	100
Interest ⁸ at 8%		16		40	
		84		60	
Tax		25		18	
Earnings		59		42	
Multiple		9		9	
Equity value		531		378	
Debt		200		500	
Enterprise value	B	731	731	878	
Implied EBIT multiple	B/A		7.31		7.31
Implied equity control premium		28.57%			
Enterprise value					731
Implied enterprise control premium ⁹		19.25%		10.58%	
Debt					500
Equity value					231

The application of Alpha's equity control premium to value Beta gives the result that Beta's enterprise value is \$878 while Alpha's is \$731. But the companies are identical so how can this be so? There is an inconsistency because allowance is not made for differential gearing. The answer is to use an enterprise control premium or have regard to EBIT multiples, or notionally adjust the gearing of Beta before applying the multiple. Note again - the premiums shown in the table at paragraph 3.4(iv) above and in surveys generally are all calculated without regard to the different levels of gearing of the companies concerned.

4 DISCOUNTS IN VALUING WHOLE SME'S

4.1 Consider the following example:

Example 3: Virtuous Valuers have effected a valuation of Joe' corner store as follows:

Earnings (profit after tax and interest)after fair salary			80,000
Multiple			
Average of Woolworths, Coles, various others		8	
Premium for control	30%	2.4	
		10.4	
Discounts:			
Size and unlisted	30%		
Dependence on key personnel (Joe)	20%		
Other factors	30%	8	

8 It is acknowledged that the interest cost (rate) of debt would likely be higher but the principle of the example is unaffected.

9 Pre announcement enterprise value was \$200 debt plus 7 * 59 earnings = 413, a total of \$613. The enterprise premium is thus (731/ 613) -1 = 19.25%

Multiple applied			2.1
Value of equity			\$168,000

4.2 Note that the adjusted multiple is calculated as:

$$8 * (1 + 30%) * (1-80%) = 2.1 \quad \text{NOT} \quad 8 * (1 + 30\% - 80\%) = 4$$

on the basis that we first work out the value of the comparable company and then make adjustments to that value because of the non-comparability factors.

4.3 We have discussed the control premium question and, of course, query whether there are companies which are more “comparable”. But the initial question must be whether this exercise is meaningful at all. Does it really carry the credibility that the apparently rigorous “scientific” approach and resort to public data might suggest? It is submitted that Woolworths and Joe’s have so little in common that it is virtually meaningless to try and effect this sort of “interpolation” process. That being said, there is no question that the sorts of discount factors shown in the example do cause a reduction in value as compared to any company which does not exhibit them.

4.4 The effect of size on discount rates/capitalisation rates is well canvassed in the literature. In general, the perception is that smaller companies are riskier than larger companies and that a size premium should be added to the discount rate/capitalisation rate, or the relevant multiple reduced, to allow for this – see, for example, Pratt, op cit at pp.170-1.

4.5 Dependence on key personnel, suppliers, key clients/customers¹⁰ all increase risk to the buyer of the business. In some cases the risk can be mitigated and in fact turned into an advantage by the existence of, or entering into, contracts to bind the relevant employee/client/customer/supplier. The quantum of any discount must depend upon the circumstances of the case.

Marketability discounts in the context of 100% owner interests

4.6 Again, the concept of discount begs the question: discount from what? The concept of marketability is discussed at paragraph 10 below. In essence it means almost instantaneous realisability at a reasonably certain price. Small parcels of shares in most listed companies are marketable. 100% interests in listed companies are not marketable in this sense and neither are 100% interests in unlisted companies. It then becomes difficult to talk about a discount for marketability when valuing a whole SME by making a comparison with a listed company. There is no such thing as a “freely marketable” 100% interest to which comparison can be made.

4.7 In the listed company context the acquisition of control will often be accompanied by a reduction (often substantial) in the liquidity (marketability) of the investment. If marketability has value (see below) then increased control reduces that value. The “premium for control” must then comprise the sum of some positive elements reduced by this negative loss of marketability factor. If one can discover a premium paid in a truly comparable case then that will capture this element and no further adjustment is required.

10 For a study dealing with the effects of customer dependence see , eg, Peter Harbula, *Analysis of the Monoclient Discount Quantification and Fundamentals*, Business Valuation Review, Vol 24, No 4, Winter 2005, at pp166-172

- 4.8 In the author's experience it is rare to see an explicit marketability discount applied in the context of the valuation of a whole SME.

PART B: VALUATION OF INTERESTS IN SME'S

5 INTRODUCTION TO PART B

- 5.1 When valuing whole businesses and companies, it is assumed that the seller is able to pass complete control of the business or company to any prospective purchaser. In this segment of the paper we turn to consider the value of less than 100% interests in SME's.

- 5.2 Interests in SME's are often considered as falling into two categories viz, controlling interests and "minority interests". It is said that every minority interest attracts a "minority discount" (normally for the pro rate value of the shares based on the value of the whole company) because a minority interest lacks the advantages attributable to a controlling holding. Such categorisation is simplistic and potentially confusing.

- 5.3 At this point let us consider some more definitions from the IVSC:

"Discount for lack of control: An amount or percentage deducted from a pro rata share of the value of 100% of an equity interest in a business to reflect the absence of some or all of the powers of control."

"Majority interest: Ownership position greater than 50% of the voting interest in a business"

"Majority control: The degree of control provided by a majority position."

"Minority interest: Ownership position less than 50% of the voting interest in a business."

"Minority discount: A discount for lack of control applicable to a minority interest."

- 5.4 Use of the term "minority interest" might be seen to connote a situation where there exists a "majority interest", as defined above. But obviously that need not be the situation. No individual shareholder may control the company. Control may be exercised by a group of minority shareholders who customarily act in concert. Control may be exercised by a shareholder holding a significant proportion but less than 50% of the voting shares where no other shareholder holds a significant number of shares. In the listed company context it commonly happens that control is exercised with less than a 50% shareholding. Chapter 6 of the Corporations Law proceeds on the basis that a holding of 20% of the shares of a public (listed or unlisted) company will carry a at least a significant degree of control. In the common private company situation there is more often a holder of more than 50% of the shares but this is by no means invariable. Situations of "quasi partnerships" (and I use that term very broadly) between two, three or more persons or groups are not uncommon. What we are concerned with often, then, is not "control" or "no control" situations but rather but rather with the *degree*, if any, of control carried by the interest to be valued.

5.5 The following propositions are posited:

- (i) control is a continuum of degrees not an absolute – a holder of 100% of a company's shares has absolute control. Once there exist more than one shareholder control is diluted. Some examples [figures are percentages] follow. The “disability” attaching to lack of control attaching to block of shares will tend to vary according to the size of the holding, and the size of the other shareholder's holdings:

Company ->	A	B	C	D	E	F	G
Shareholders							
V	99	70	55	50	45	33	20
W	1	30	40	50	45	33	20
X			5		5	33	20
Y							20
Z							20

- (ii) the sharing of control is not merely a matter of the rights set out in the Constitution but, depending on the purpose of the valuation, must take account of the antecedent understandings between the parties;
- (iii) the family relationship of the parties and the expectations of shareholders may be relevant particularly in Family Law proceedings – while there may be no present control there may be an expectation of future control.

6 VALUATION OF (“COMPLETELY”) CONTROLLING INTERESTS

6.1 The worth of any parcel of shares can only be the present value of the future cash flows emanating from that holding, either by way of dividends, or on a sale or winding up. A controlling shareholder, by definition, can control the board of directors and thus control the day-to-day activities of the company and the payment of dividends. The holder of more than 75% of the shares can bring about a sale of the company's business or a winding up. For these reasons the value of a controlling shareholding is usually taken to be equal to the pro-rata worth of the whole company.

6.2 There are alternative views:

- (i) a discount should be applied because of the need to consider the interests of the other shareholders. The argument goes that I would rather have 100% of a company worth \$75 than 75% of a company worth \$100;
- (ii) a premium should be applied because of the ability to extract from the business more than a pro rata share of the benefits generated. Note that this premium is different conceptually from the premium for control considered above.

Again, it depends on the circumstances. However, it may reasonably be argued in most cases that (ii) offsets (i).

7 VALUATION OF OTHER INTERESTS IN SME'S

- 7.1 We now move on to the rather murky area of valuation practice – the valuation of interests which carry less than complete, or virtually complete, control. Here there is great scope for the application of judgement, for misunderstanding, legitimate disagreement and litigation.
- 7.2 Two complicating features have already been foreshadowed. First, what does “market value” mean when there may be no buyer, or in situations where, for example, it is not clear whether there are any buyers, or where there is only one potential buyer? Secondly, is “market value” the appropriate standard in any event?

Standard of Value

7.3 As with any valuation, the first step in seeking to establish the “value” of a non-controlling parcel of shares is to ascertain what standard of value is to apply. That is: what do we mean by “value”? The answer to that question may generally be determined based on the purpose of the valuation. In brief, there are three commonly referred to standards of value:

- (i) “**fair market value**”. This standard is discussed at paragraph 2.1 above. Difficulty arises where there is no market or only a very limited market for the shares being valued. One approach is to simply conclude that the shares then have no “value” – that view sits uncomfortably with many. An alternative approach is to assume the existence of a “notional” or “hypothetical” buyer. One then must ask what price that person will pay for the shares – but if one decides he or she will pay the “fair market value” there arises a difficulty with circularity of reasoning¹¹ which has bedevilled many of the decided cases since *Spencer*¹², probably the most often referred to case in valuation literature. The adoption of the “value to the owner” standard addresses this difficulty. On one view, the owner value is the fundamental standard of value – an asset can only have value *to someone*. Where a deep and active market exists the “market value” represents a price at which some or many persons have determined to exchange the asset for cash. The vendors presumably believe the asset is worth (to them) less than the cash price they receive; the buyers believe the worth (to them) is more. There are, or may be, many holders and prospective holders of the shares. Holders who do not sell believe the shares are worth at least as much as (but not necessarily the same as) the current “market price”. Prospective buyers who do not buy believe the shares are worth no more than the market price (and possibly a lot less);
- (ii) “**value to the owner**” – this standard is often referred to in Family Law proceedings relation to the valuation of non-controlling parcels of shares in family companies¹³. While there has been considerable discussion of the term its meaning remains obscure and there is often confusion surrounding whether or not it is a standard of value or a valuation methodology. In a general sense the term “value to owner” means the amount which the holder of an asset would pay rather than to be

11 Consider, for example, the following extract from the judgment of Spencer (at page 432):
“In my judgement the test of value of land is to be determined, not by enquiring what price a man desiring to sell could actually have obtained for it on a given day, *i.e.*, whether there was in fact on that day a willing buyer, but by enquiring “What would a man desiring to buy the land have had to pay for it on that day to a vendor willing to sell it for a *fair price* but not desirous to sell?” [Italics added]

12 *Spencer v. The Commonwealth* (1907) 5 CLR 418
13 See, for example, *In the Marriage of Harrison* (1995) FLC ¶92-618

deprived of the asset¹⁴. The concept applies also to a particularly identified prospective holder and refers to the amount that that person would give rather than fail to acquire the property;

Example 4: Lottie Lonely holds a "dividend access" share (no voting rights or rights on winding up, dividends discretionary, redeemable at \$1 at the option of the company) in Blueblood Holdings Pty limited which is controlled by her father in law. Dividends have been paid at the rate of \$20,000 per annum since Lottie's child, Lucretia, was born. Lottie is now separated from her former husband. She is reasonably confident that the dividends will continue for a further 10 years till Lucretia turns 18. What is the "value" of the shares?

- (iii) "fair value" –the term is commonly used in accounting standards¹⁵ to denote the same thing as "fair market value":

"fair value" means the amount for which an asset could be exchanged between knowledgeable willing parties in an arm's length transaction".

The term (or sometimes "*the* fair value") is sometimes used in company constitutions dealing with transfers of shares between shareholders, which may provide that such a value is to be determined by the auditor or some other person. There is generally no definition of the term "fair value" in constitutions containing such provisions. There appears to be no generally agreed meaning of the term in that context. It would seem that it is generally appropriate in determining "fair value" in this context to have regard, inter alia, to the following matters¹⁶:

- (a) the circumstances of the share acquisition;
- (b) the expectations of the holder as to the likely future benefits to be generated from the holding, provided those expectations were reasonably held; and
- (c) any expropriatory or forced element in the sale should not depress the price.

7.4 The term "fair value" is used in the Corporations Act in those provisions¹⁷ allowing for the compulsory acquisition of minority interests, usually where the prospective buyer holds 90% or more of the issued shares. The purchase is to be effected at a "fair value" to be determined by an independent expert. The basis of fixing the "fair value" is prescribed by sec 667C. In essence the valuer must calculate the value of the company, allocate that value between share classes and then allocate the value of each class pro rata among the securities in that class (without allowing a premium or applying a discount for particular securities in that class divide the value allocated). The valuer is also required to take account of the consideration (if any) paid for securities in that class within the previous 6 months. "Fair value" so defined is not what many valuers would ordinarily consider to be "fair market value".

7.5 Where it is established that the conduct of those in control of a private company has been oppressive to the minority shareholders the court *may* order that the controlling shareholder buy the minority shares. In such cases the price *may* be fixed as a pro-rata value of the net

14 In the context of valuation of shares in family the Court takes account of the family relationships between the shareholders and the circumstances and intentions of those family members who are in control.

15 See, for example, Australian Accounting Standards AASB 3 *Business Combinations*

16 See, for example, the decision in *Holt v Cox* 15 ACSR 313

17 See particularly sec 663B, 664C, 665B.

worth of the whole company¹⁸. However, that approach is not invariable¹⁹. It should be carefully borne in mind that the Court has a wide discretion in these kinds of cases and an order will not necessarily be made for compulsory purchase at pro rata value, or, indeed, for compulsory purchase at all. Further, it would be inappropriate to rely on the approach taken in one or more oppression cases where no oppression is alleged in the circumstances of the valuation.

- 7.6 The valuer must be conscious of the purpose of the valuation before embarking on the exercise and determine, based on that purpose, what standard of value is appropriate. For present purposes we shall focus on the methodologies applied in determining the fair market value of a minority parcel of shares.

8 RIGHTS OF MINORITY SHAREHOLDERS

- 8.1 Here is not the place for a dissertation on the rights of shareholders. However, the valuer of any shareholding must have some understanding of what such rights are, both in terms of the law generally and specifically in terms of the company's constitution and any shareholders agreement in force. Of course, in considering the price which a purchaser may pay, as opposed to the value to the present holder, the valuer needs to consider if all present rights held are alienable/assignable.
- 8.2 As well as being an item of property a "share" is a contract between shareholders inter se and between each shareholder and the company. The terms of that contract are set out in the company's constitution (specifically adopted or set out in the Corporations Act), except to the extent, if any, to which they are varied by a shareholders agreement. In certain cases there may be terms implied into the contract by a course of dealing or other circumstances.
- 8.3 In general, a minority shareholder has no right to inspect books and records²⁰. There is a right to ask to receive annual accounts. There is no right to participate in management, to employment, to dividends, to attend at the business premises or otherwise to be involved or even be aware of the company's affairs. While directors have duties to the company as a whole, the practical reality is that a minority shareholder often has little or no right to influence what the company does and whether or not it pays him anything. Additionally, the constitution of a proprietary company will commonly contain restrictions on transfer of shares.
- 8.4 While we here speak of "minority" shareholders, the rights we are talking about apply to all shareholders *qua* shareholders. The fact that the controlling shareholder has complete access to the company's records and otherwise exercises control prerogatives arises because of the ability to appoint directors and therefore management. It is they who have this access. Although the distinction may not often be practically relevant is important and it is well to bear it in mind.

18 See, for example: *Dynasty Pty Limited & Ors v Coombs* (1995) 13 ACLC, 1,290

19 See, for example, *Re Bagot Well Pastoral Company Pty Ltd; Shannon v Reid* (1993) 11 ACLC1; *Roberts v Walters Developments Pty Ltd & Ors* (1997) 15 ACLC

20 There is a limited right given by sec 247A of the Corporations Law on application to the Court.

9 THE DISCOUNTED RATEABLE VALUE APPROACH

9.1 When one is called on the value “minority interests” there is a very straightforward approach which is commonly applied and seemingly follows accepted practice in the United States and Canada. We will refer to it as the **Discounted Rateable Value** approach.

Rationale for the Discounted rateable value Approach

9.2 The minority shareholder faces two broad, but inter-related, types of disability viz. the inability to control the company and the (related) inability to readily market (or to market at all, in some cases) the shareholding. The valuer may consider applying one discount from the pro-rata value to take account of both these disabilities. Alternatively, it is possible to consider separately a “minority discount” and a “marketability discount”. Where they are applied separately the two discounts are not “cumulative”. If, for example, rates of 25% and 40% were used, the total discounted value will be:

$$P \times (1-25\%) \times (1-40\%) = 45\% P \quad \text{Not} \quad P \times (1 - (25\% + 40\%)) = 35\% P]$$

where P = pro-rata value.

The reason why a cumulative discount is not appropriate is that the first discount is generally based on comparison with listed equity markets (see below). After the first discount is applied we theoretically have the value of a minority parcel of shares which is freely and readily tradeable. The next step is to apply a discount to this minority value to allow for the fact that it is not. However, it all depends upon where you start and what is your reference point.

9.3 The approach is illustrated by the following example:

Example 5: Valorous Valuers Pty Limited have been asked to value the whole of, and a one-third interest in, Mixed Herbs Pty Limited which is a substantial business and closely comparable with three listed entities. The average price earnings multiple applicable to these comparable companies is seven. VV determine that given the fact that MH is unlisted and for various other reasons, the appropriate multiple should be reduced by a factor of one-third. The valuation proceeds as follows [the second column shows the calculation on the basis that the reduction factor of one – third is applied after the listed multiple is applied]:

Earnings	A	120,000		120,000
Multiple	B	4		6
Sum of freely tradeable non-controlling values	A * B	480,000		720,000
Control premium	c	25%		25%
		600,000		900,000
Adjustment factors	Para 9.4	0		33.3.%
Company value		600,000		600,000
Pro rata value of valued parcel	V _p	200,000		200,000
Minority discount	m	20%		20%
	V _m = V _p (1-m)	160,000		160,000
Marketability discount	Para 10	30%		30%
Value of interest		\$ 112,000		\$112,000
Minority discount	m = 1-(1/(c+1))	20%		20%
Control premium	c =(1/(1-m)) -1	25%		25%

- 9.4 We have considered briefly at paragraph 4.4 *et seq* above, the types of “adjustment factors” which should be considered, which are in effect, “discounts”. For those who may not be overly familiar with valuation practice the “control premium” and “minority discount” are generally taken to be related as shown in the example. We discuss below what these terms mean. It is accordingly not necessary to value the whole company on a control basis to obtain the minority valuation – we can simply start by applying the “minority” multiple.
- 9.5 The example illustrates again the very important starting principal in any discussion of premiums and discounts. That is, one can not think about premiums and discounts in isolation - there must be a base value to which, if they are applicable, they must be applied. This seems trite but it is crucial. In simple terms, a premium for control can only be applied to a valuation fixed by way of reference to some benchmark for non controlling interests. Conversely, a “minority discount” can only be applied to a value fixed by reference to a benchmark or methodology which yields market values of controlling interests. A marketability discount must be applied to a value fixed by reference to the value of a marketable asset.
- 9.6 In Example 5, the value is fixed by reference to multiples applying to “comparable companies” using a price earnings ratio [that is not the only method; one can use EBIT or EBITA or some other comparable factor]. The valuation using such multiples is a “non-controlling, freely marketable value”. To get to a control value we must [so the theory says] add a premium. To get a “non - freely marketable” value we must deduct a discount for lack of marketability. So, if I am considering the value of a minority parcel using this comparable multiple approach it is generally accepted that I do not need to consider a control premium / minority discount at all when using listed company multiples as a base. I simply start with a comparable company multiple which already reflects the minority discount. If I am using some other approach to value a 100% of an entity as a preliminary to valuing a minority interest I must consider what the result of the approach yields before applying any premiums or discounts.

10 **MARKETABILITY DISCOUNTS IN THE CONTEXT OF VALUATION OF MINORITY INTERESTS**

The United States Studies

- 10.1 US studies on marketability discounts in relation to minority parcels of shares in unlisted companies have generally focussed on two types of analyses. The first relates to studies of pricing of “letter stocks”, stocks identical to freely traded public company stocks except that there are restrictions in trading for a certain period. The second type of study relates to pricing in “pre-IPO” transactions, that is, dealings in shares in private companies which later became listed. The latter type of approach tends to be preferred because restricted stocks are certain to become tradeable while there is no certainty that a company will become listed.
- 10.2 There are two substantial ongoing studies on pre-IPO transactions conducted in the United States in relation to minority parcels. The first group of studies was conducted by John D Emory of Robert W Baird & Company. The studies found a mean price discount for the private transactions analysed (all occurring within five months of an initial public offering (“IPO”)) of 44% and a median of 43%, some 10% above those shown in the restricted stock studies²¹. The second group of studies, conducted by Willamette Management Associates, relate also to pre-IPO pricing with some differences in methodology. The transactions

21 See Pratt, Reilly & Schweih, “Valuing a Business: The Analysis and Appraisal of Closely Held Companies”, 4th Edn. McGraw Hill, 2000 at p407.

analysed occurred from 1 to 36 months before the IPO with adjustments made for in each case for general movements in stock prices over the period²².

10.3 Pratt et al conclude²³:

"The evidence from the Emory and Willamette Management Associate studies, taken together, is compelling. The studies covered hundreds of transactions over more than 20 years. Average differentials between private transaction prices and public market prices varied under different market conditions, ranging from about 40 percent to 63 percent, after eliminating the outliers.

This is very strong support for the hypothesis that the fair market values of non-controlling ownership interests in privately held businesses are greatly discounted from their publicly traded counterparts."

10.4 The notion that marketability discounts should of the order suggested by Pratt et al appears to have strong support in the US but it is not universally held. In an article published in the March 2001 issue of Business Valuation Review²⁴, John Kania reviews a study by Hertzal and Smith²⁵ dealing with the issue of unrestricted stock by firms by way of private placement. The issues were at a discount to the market price. Because the stock was freely marketable the discount had to be attributable to some factor other than lack of marketability. Kania concludes that the perceived "marketability discount" in the earlier restricted stock studies was attributable not only to lack of marketability but also to the cost of gathering information incurred by the investors, who were typically large sophisticated institutions, venture capitalists and investment firms. Kania also critiques the Emory studies, or one of them, and suggests that a large part of the sample reviewed comprised stock options given to management prior to an IPO in circumstances, he suggests, which may deflate the prices:

"While the SEC mandates that option exercise price be set at fair market value, it is difficult to know what the value is in the absence of a public market. Thus, with such price ambiguity and since there is no cash exchange, these conditions provide strong incentives for the stock option exercise price to be set below fair market value in order to increase management's financial holding in the companya stock option price below fair market value results in an exaggerated marketability discount."

10.5 Kania also reviews a study which argues that an IPO stock offer price is affected (inflated) by "new issue hype" which temporarily inflates the price and also increases the perceived marketability discount. Kania concludes overall that "*when the information cost discount for selling in the private placement market is separated out, the discount for lack of marketability is around 14%.*" Mr Kania does not comment on whether or not it is appropriate in valuing a minority parcel to make allowance, in any event, for this information cost discount.

10.6 Trout²⁶ comments that "*while the logic of [Kania's] arguments appear appropriate, the results do not correlate well with other market data not analysed by Kania, or by other economists*". Trout observes that buyers of securities can insure against price declines by purchasing put options on the underlying security. He suggests that that insurance characteristics of such options "*provide some information as to the minimum discount necessary for buyers to*

22 Ibid at pp408-410.

23 Ibid at p 411.

24 Business Valuation Review, Volume 20 No 1, March 2001 pp.11-15]

25 Hertzal M and R I Smith, *Market Discounts and Shareholder Gains for Placing Equity Privately*, Journal of Finance, June 1993, pp459-485

26 Robert R Trout "*Minimum Marketability Discounts*", Business Valuation Review Volume 22 No 3, September 2003 pp.124-6

purchase stock that is restricted as to resale for some time period, or is unmarketable in the short term.” He effects a study of what are called long term equity anticipation securities or “LEAPS” which offer price protection for up to two years and concludes that his findings suggest that “the minimum discount that one should assign for the lack of marketability of holding privately held stock is at least 24%.” Taking up Trout’s idea, and based on further analysis of LEAPS, Seaman²⁷ concludes that “discounts for lack of marketability of small minority interests in closely held companies under \$500 million in sales volume are likely to be at least 25%”.

10.7 Paulsen²⁸ suggests that the ascertainment of marketability discounts by reference to stock prices before and after an IPO “*may produce misleading results given the behaviour of underwriters who often support near term IPO prices and are prone to making overly optimistic earnings expectations*”. Such behaviour “*artificially raise the IPO price which yields exaggerated discounts*”.

10.8 As far as I am aware there are no similar studies in Australia or elsewhere outside the United States. In a leading text²⁹ published in the United Kingdom the author appears to suggest a discount lower than that implied by the US studies referred to at paragraph 10.3 above:

“Apart from the obvious fact that a large public unquoted company with many shareholders and regular, if infrequent, transactions in its shares will merit a much smaller discount than will the small private company with severe share transfer restrictions, the size of the [marketability] discount is not a matter of calculation, but more of convention, and even individual preference.

An informal survey of investment practice carried out by the author in 1981 indicated no pattern at all these discounts. Indeed there was considerable irrationality. Some investors did not even apply discounts for lack of marketability; others applied them selectively, and none agreed on a common level of discount. The most popular discount level amongst those who felt strongly on the matter seemed to be 25%, although for some institutions it was as high as 50%. The position was further clouded by the practice of some professional of including in this discount an allowance for other actors such as risk.”

10.9 The discounts above relate to non-controlling interests. They are discounts from the freely tradeable values of minority holdings. As discussed above, if one is starting from 100% control position, it may also be appropriate to consider a discount in relation to the minority position, ie a discount for lack of control, prior to considering a discount for lack of marketability.

Rationale for the marketability discount

10.10 Private company shares generally suffer from lack of marketability because there are few potential buyers and because the constitution will often contain restrictions of transfer. It is generally agreed that, all other things being equal, an investment is more valuable if it can be readily turned into cash. It seems intuitively obvious that, offered the choice between otherwise identical assets, an investor would prefer to hold one that could be liquidated virtually instantaneously. While there is ongoing debate as to the quantum of the appropriate marketability discount, most everyone agrees a discount is appropriate. There tends to be less discussion as to *why* the discount applies and why it should be so high. One reason

27 Ronald M Seaman, “*Minimum Marketabilty Discounts – 2nd Edition*”, Business Valuation Review, Volume 24 No 2, June 2005 at pp 58-64; “*A Minimum Marketabilty Discount*” Business Valuation Review, Volume 24 No 4, Winter 2005at pp 177-9

28 Jon Paulsen, “*Marketability Concerns*”, Business Valuation Review Vol 21, No 1, March 2001.

29 Christopher Glover, *The Valuation of Unquoted Companies*, 4th Edn , 2004, GEE Publishing Limited at page 188-9, see also at page 196

stated or implied is that the discount compensates the investor for being unable to liquidate the asset to prevent a foreseen loss. For example, Trout in the article cited above³⁰ says: *"The reason a marketability discount exists at all is because a buyer of a security that lacks marketability (such as stock in a privately held company) is subject to a potential loss of equity value during the time period when the stock cannot be sold."* But why should an investor be able to predict a loss and yet be able to sell to some other investor who "does not see it coming"?

- 10.11 Hatch³¹ discusses this issue and critiques the view that put options are of assistance in estimating marketability discounts. He contrasts the investor who is a believer in efficient markets³² with a "market timer" who "believes she can gather information pertinent to her investment which is not yet reflected in the price of the shares". The first investor "is not concerned about the ability to switch the risk of this investment and ...will not demand a DLOM... [because]. He does not think that the ability to sell the security on a moment's notice will provide him the ability to earn a superior return given the level of risk he assumes.". Hatch suggests that this investor may demand a discount because of the inability to change the risk of his investment – I hold shares; I decide I would prefer to hold Government bonds, but I can't switch readily. But that is a much different thing.

IPEVCV Guidelines

- 10.12 The International Private Equity and Venture Capital Valuation Guidelines define "Marketability discounts as:"*the consequence of the return Market Participants demand to compensate for the risk arising from the lack of marketability*". The term "Market Participants" is defined as: *"potential or actual willing buyers or sellers when neither is under any compulsion to buy or sell, both parties having knowledge of relevant facts and who have the ability to perform sufficient due diligence in order to be able to make investments decisions related to the enterprise"*. The term "marketability" is defined as *"the relative ease and promptness with which than instrument may be sold when desired. Marketability implies the existence of current buyer interest as well as selling interest"*
- 10.13 The IPEVCV Guidelines discuss the appropriate marketability discount and suggest that "A discount in the range of 10% to 30% (in steps of 5%) is generally used in practice, depending upon the particular circumstances." A critical factor in determining the quantum of the discount is seen to be the timing of Realisation, defined to mean "the sale, redemption or repayment of an Investment, in whole or in part; or the insolvency of an Investee Company, where no significant return to the Fund is envisaged." Importantly, the Guidelines make the point that:

"where a Realisation event is not foreseeable at all, perhaps because the Fund holds a minority equity stake and the majority shareholders are totally opposed to a Realisation, methodologies which involve an assessment often value of the business as a whole may not be appropriate."

Clearly, the Guidelines recognise the commercial reality that there may be no nexus between the value of the underlying business and the share investment of a minority holder if there is no power to influence realisation of the underlying value.

30 Trout op cit at p124

31 John A Hatch, *Put Options as Purchases of Liquidity*, Business Valuation Review Vol 24, No 2, June 2005, P53

32 In essence, the "efficient market hypothesis" postulates that all information relevant to a share's price is reflected in the price.

11 PROBLEMS WITH THE DISCOUNTED RATEABLE VALUE APPROACH

11.1 The issue of how much discount should be applied where the discounted rateable value approach is taken is a vexed issue. The view that one can simply adopt some sort of broad average based on the studies discussed above obviously has its difficulties. Essentially, the valuer must seek to address the factual circumstances as he sees them. Going back to the start of this paper we face the problem of relating the information we have (restricted stock studies, pre IPO date, Leaps etc) and must determine whether it can be related to the fact situation of the shares to be valued. It is submitted that the data in the various studies relates substantially to uninfluential holdings by persons who are mere passive investors. The situation we face in many aspects of day-to-day practice is much different. Many private companies have a strong "partnership" flavour and the shareholders are not merely passive investors waiting for return at the discretion of directors over whom they have no influence. Consider the following:

Example 6 [ignores tax]: Three years ago Arthur Penhaligon set up a company with his two brothers, Lancelot and Percy. They each contributed \$200,000 as share capital. The company borrowed \$700,000 and bought a property for \$1.3 million which is now worth \$1.9 million. Arthur is rather pleased with himself telling his wife Guinevere that their investment has doubled in value.

Sadly, Guinevere does not seem as happy as she might be. She tells Arthur she is leaving him for Percy. Arthur duly sees his solicitor who refers him to Merlin & Co, Business Valuers, to obtain a valuation of his shares. Merlin values the shares at \$160,000, calculated as the pro rata value of \$400,000 less a 60% minority and marketability discount. Arthur is a little puzzled that his investment is worth less than he outlaid, while the financial position of the investee company has dramatically improved.

He asks Merlin what his shares were worth on the day he bought them, to which Merlin replies they were worth \$80,000 (ie \$200,000 subscribed less 60%). Arthur asks whether it would have made any difference if he had lent the money to the company instead of subscribing for shares to which Merlin replies that he would value the loan now at \$200,000 and the shares at \$\$80,000 [(1-60%) of one third of the net worth of \$600,000], a total of \$280,000. Arthur is dismayed to think that he and his brothers have made such an unfortunate investment. What they thought was financial perspicacity was merely an illusion, although Arthur has a vague concern about what he perceives to be Merlin's seemingly magical ability to make assets disappear.

11.2 The method illustrated at Example 5 for valuing minority shareholding postulates that someone might pay for a minority interest an amount calculated by reference to the value of the whole of the underlying business entity. But that is by no means self evident and in fact may be quite wrong.

11.3 We must come back every time to the basic principal of the value of any financial asset as the present value of the cash flows to emanate therefrom. Where there is an observable deep and efficient market with the asset is traded then in general the market price may be taken as a reasonable representation of market value. If there is no market or market imperfections (lack of information, thin trading etc), then the valuer must form a view as to the present value of the prospective cash flows.

11.4 The second point to note relates to the concept of "value". The methodology looks purely at market value, or notional market value. It does not consider explicitly owner values or the particular relationships within a company.

11.5 It is by no means self evident that the value of a parcel of shares should have any necessary correlation with the underlying worth of the company's business/assets. That underlying worth

places a ceiling but not a floor on the cash flows which might accrue to the shareholder. It is tempting to forget this particularly when one is somehow minded to search for a "fair" (in the sense of the valuer's perception of fairness) value of the parcel.

12 ALTERNATIVE VALUATION METHODOLOGIES FOR MINORITY INTERESTS IN SME'S

12.1 Unless liquidation is contemplated, there are generally considered three broad approaches to the valuation of minority parcels in the context of seeking to ascertain "fair market value" of a minority parcel. The first is the discounted rateable value approach already discussed. The other two are:

- (i) discounting of future dividend streams, or, more commonly, the **capitalisation of maintainable dividends**. As discussed above the value of any asset is the discounted present value of the future cash flow stream to the investor. Leaving aside the possibility of a winding up, a shareholder can expect cash flow in two forms viz. dividends and the ultimate sale price. A share can have an infinite life. The proceeds of sale of the share must itself be a function of dividends receivable by the buyer from the first holder and the selling price expected to be received by that buyer on a sale to the next purchaser. Continuing that process indefinitely, the present value of the share can be seen as simply the value of the stream of future dividends. This approach is often suitable where the company concerned has a history and prospect of regular dividend payments. Allowance for lack of marketability would be made either in the discount rate/capitalisation rate or by some explicit discount to the preliminary calculation;
- (ii) by reference to **comparable dealings** in minority parcels of shares in the same company - in substantial private companies there sometimes exists an informal market for the shares. This might apply, for example, where employees are encouraged to hold shares to obtain access to a share of profits and the controlling shareholder acts to facilitate dealings in shares particularly by new and departing employees. It sometimes happens that investors buy substantial parcels of shares as part of a funding arrangement, including by way of a management buy out. The exact circumstances of these transactions must be carefully considered to determine whether they indeed represent dealings on an arms length basis. If the dealings are not contemporaneous allowance must be made for that fact.

12.2 In line with fundamental valuation methodology, there is really only one approach to valuing a minority interest and that is to consider simply what are the likely foreseeable cash flows to accrue to the holder. In certain cases the only likely cash flow is future dividends. In other cases other possibilities arise. The "discounted rateable value" is one approach to attempt to value all possible cash flows. However, it can lead the valuer into error if it is applied in a mechanical way without due consideration of what it is that the valuer is seeking to ascertain.

13 PROSPECTIVE CASH FLOWS APPROACH

13.1 In general, the value of a share *to the holder* may be measured by reference to the present value (having regard to the risks involved and the time value of money) of the cash which the shareholder may reasonably expect to derive from the holding. That cash may arise in the form of one or more of³³:

33 Another source of benefits which a shareholder may enjoy may be advantages accruing from shareholder agreements (express or implied) or relationships eg employment, directorship, benefit of related party dealings,

- (i) dividends;
- (ii) the proceeds of a sale of the shares:
 - (a) to an existing shareholder;
 - (b) to a non-shareholder acquiring only the holding of the shareholder;
 - (c) on the acquisition of the whole company, or a controlling interest (including the subject shares), by a third party;
- (iii) the proceeds of a winding up - in most cases, the prospect of winding up is remote and the minority shareholder will have no ability to bring about that outcome. If a winding up can be brought about by the minority holder, or if a winding up is imminent, then the minimum value of the shares will normally be the present value of the amount to be distributed on a winding up, taking account of realisation costs (including tax).

The basis of evaluating prospective dividends is considered above. The other elements of value are considered below.

13.2 In general, a prospective purchaser from the existing shareholder will have regard to the same parameters as those facing the vendor in assessing the worth of the shares. However, the prospective acquirer may be in a different position to the existing holder [for example, the purchaser may be a controlling shareholder, or the purchaser may be in a position to become a controlling shareholder] so that the prospective cash flows to that person may be different. For example, a controlling shareholder can generally bring about a winding up, while a minority shareholder generally can not. A third party (buying only the shares being valued) will generally be in the same position as the vendor and cannot realise a greater value than that potentially represented by the above streams. The third party buyer may be in a worse position than the vendor because, for example, the vendor cannot assign rights under a shareholder's agreement, because the vendor has equitable rights which only he /she can enforce³⁴, or because the vendor has expectations as to distributions of dividend or capital which are only likely to be fulfilled if he/she continues to hold the shares (a circumstance often arising in a Family Law context).

13.3 In these circumstances it is necessary to consider the owner values of the shares to the prospective buyer and seller. If the owner value to the vendor is more than that to any prospective buyer then it is unlikely a sale will occur. If "market value" is what one can sell the shares for then that is the buyer's owner value. The seller's owner value is only relevant to the question of whether or not a sale may occur. If the value to the prospective buyer is more than that to the prospective seller then the "market value" is the amount which would likely be agreed as the price between them assuming they were both minded to transact, which will depend upon their negotiating positions, the number of prospective buyers and sellers and the degree of willingness to deal.

Sale to another shareholder

"perks". These benefits may be seen to spring from the family or other relationship between the shareholders rather than being part of the legal rights flowing from the shares which are alienable on a transfer. See, for example the discussion in *Ramsay v Ramsay* (1997) FLC ¶92-742.

34 See, for example the factual circumstances in the "quasi-partnership" cases eg *Ebrahimi v Westbourne Galleries Ltd* [1972] 2 All ER 492, *In Re Wondoflex Textiles Ltd* (1951) VLR 458

13.4 The possibility of, and the likely amount to be realised on, the sale to another shareholder will or may be impacted by at least the following factors:

- (i) the proportion of shares issued which the parcel represents;
- (ii) the spread of other shareholders; and
- (iii) the identity of the other shareholders and the relationship between the shareholders.

The spread of other shareholders

13.5 As a broad proposition, all other things being equal, the value of a minority parcel of shares will be affected by the spread of other shareholders.

Example 7: Consider the following situation:

Shareholders	Alpha	Beta	Delta	Gamma	Epsilon	Omega
A	80	60	50	40	40	20
B	20	20	20	20	20	20
C		20	30	40	20	20
D					20	20
E						20
Total shares	100	100	100	100	100	100

Assume the value of each company is \$100,000, that the shareholders are unrelated in each case. Is the value of the 20% interest held by B the same in each case?

The owner values of the shares

13.6 The possibility that any other shareholder may wish to acquire will depend on, among other things, the owner value of the shares to that person as compared to the owner value to the holder.

Sale to a new shareholder

13.7 In the absence of a shareholders agreement a new shareholder acquiring the shares of an existing holder (ie rather than newly issued shares) will have no more rights than the existing holder. The value of the shares to the new holder may be less because of the existence of a shareholders agreement which won't be assigned or because of the relationship of the vendor to the other shareholders.

13.8 Where the new shareholder already holds shares, or is acquiring the block being valued together with other shares, and, as a result of the acquisition will obtain control, the shareholder may be prepared to pay more than the rateable value of the shares.

13.9 It may be that it is contemplated that the shares will become listed or that a trade sale may occur or that a substantial shareholder will be introduced to enable some sort of strategic alliance or underpin future growth. All these possibilities must be considered by the valuer in so far as they may impact the marketability, or future marketability, of the shares being valued.

Weighing up the various possible outcomes

13.10 The prospective cash flow approach involves considering the present value of cash flows on whichever outcomes have a significant probability of occurring and weighting the results based on likelihood of each outcome coming to pass. While this may appear to be an exercise calling for significant judgement and subjectivity it is preferable, it is submitted, to the mere blanket application of "average" discounts to a valuation base (the underlying company value) to which the share value may bear little relationship. The critical issue remains "what is the purpose of the valuation" and what standard am I applying? But whatever the purpose/standard, parcels of shares cannot be valued based on the mechanical application of discounts based on "surveys" or "studies" without any regard to the factual circumstances of those studies or the factual context of the shares to be valued.

14 CONCLUDING REMARKS

14.1 A flaw in any valuation methodology is to assume that a statistic produced as the result of a transaction at a particular price is the basis upon which the price was determined. A price earnings multiple, for example, is simply the price divided by earnings. The ruling price is not determined by the application of the multiple to the earnings. Similar issues arise with regard to statistics on marketability discounts – they are calculation based on the results of transactions – the price is unlikely to have been set based on the application of some average discount to the pro rata value of the relevant company. Rather, the purchaser has considered a whole range of factors including the possibility of listing or a trade sale of the whole entity, likely dividends, risk and the time value of money, to determine a price. In the case of premiums over ruling prices in takeovers, again the buyer has considered a range of factors. The buyer did not simply resign himself to paying 30% more than the market price because "that's the price you must pay". Thus, care must be taken not to blindly apply average premiums and discounts without some consideration of the underlying factual setting both as regards the studies from which some inference is to be drawn and as regards the comparability of the circumstances of the business/ interest to be valued.

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